

Bristol City Council

Bristol Local Plan Pre-Submission Publication Version

Stage 1: Habitats Regulations Assessment Screening Report

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This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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Ove Arup & Partners Limited
63 St Thomas Street
Bristol
BS1 6JZ
United Kingdom
arup.com



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1. Introduction

1.1 Overview

Bristol City Council (BCC) is preparing a new Local Plan, covering the period from 01 April 2022 to 31 March 2040, that will replace the currently adopted Plan which includes the Bristol Core Strategy (2011), Site Allocations and Development Management Policies Local Plan (2014) and the Bristol Central Area Plan (2015). The new Local Plan seeks to bring together existing adopted policies into one single development plan document, and seeks to deliver the following objectives:

- Set out an approach to inclusive and sustainable growth and development, by addressing the needs of everyone in all parts of the city;
- Enable delivery of at least 1,925 new homes a year in Bristol up to 2040 including affordable housing and homes to meet a range of needs;
- Aim to exceed this housing target, where new infrastructure can unlock additional potential; and
- Tackle the climate and ecological emergencies as needs for sustainable development are met.

Ove Arup & Partners Ltd ('Arup') was commissioned by Bristol City Council (BCC) to prepare a Stage 1 Screening Report as part of the Habitats Regulations Assessment (HRA) process, to assess the effects of the Local Plan on European designated sites (EDS) (Figure 1 and Figure 2). The purpose of this Stage 1 HRA Screening report is to understand whether the Local Plan could lead to any Likely Significant Effects (LSE) on EDS, and to understand the requirement for the need to undertake an appropriate assessment, in compliance with the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations) which are set out further below.

1.2 Structure of this Report

The structure of this Stage 1 Screening Report is outlined as below:

- **Section 2 – HRA Methodology:** A breakdown of the HRA methodology outlining the approach taken during this Screening Stage. This includes the setting out of a 'pre-screening check' of the policies of the plan.
- **Section 3 – Step One Determining the need for HRA:** A high-level overview of the requirements of the EU-derived Habitats Directive (Council Directive 92/43/EEC Article 6(3) and (4)) and Habitats Regulations.
- **Section 4 – Step Two Description of the Development Plan:** A summary of the BCC Local Plan, including potential impacts of the Local Plan on EDS.
- **Section 5 – Step Three Identify Effects on EDS:** This section will outline the EDS under consideration including their qualifying features, conservation objectives and key sensitivities.
- **Section 6 – Step Four Screening Assessment:** A section outlining the results of the screening stage. This assessment will consider whether LSEs will occur on EDS from the implementation of the Local Plan alone.
- **Section 7 – Screening of In-combination Effects:** This section will look at the in-combination effects of the Local Plan in relation to other plans and projects.
- **Section 8 – Conclusions:** A summary of the findings of this HRA Screening Report for Bristol City Council's Local Plan update.

1.3 Habitats Regulations Assessment Legislation

The ‘Conservation of Habitats and Species Regulations’ was first introduced in 2010 as a principal means for conserving the natural habitats of wild fauna and flora. Otherwise known as the ‘Habitats Regulations’, these Regulations seek to transpose the land and marine aspects of the EU-derived Habitats Directive (Council Directive 92/43/EEC¹ Article 6(3) and (4)) and certain elements of the EU-derived Wild Birds Directive (Directive 2009/147/EC).

For completeness, Article 6 (3) of the **Habitats Directive (1992)** states that:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in-combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.”

The current and applicable version of the Regulations is the Conservation of Habitats and Species Regulations (2017), as amended². The Habitats Regulations are domestic law and remain in place post-Brexit, unless and until the Government chooses to repeal or amend them. Indeed, whilst the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 made changes to the parts of the 2017 Regulations, the majority of these involved transferring functions from the European Commission (EC) to the appropriate authorities in England and Wales. The obligations of a ‘competent authority’ set out through the 2017 Regulations for the protection of sites or species were therefore not changed.

Regulation 63(1) of the Habitats Regulations sets out the competent authority’s obligations prior to consenting a plan or project which:

- (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in-combination with other plans or projects), and*
- (b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications of the plan or project for that site in view of that site’s conservation objectives.*

Whilst **Regulation 105(1)** of the Habitats Regulations specifically relates to land use plans³. It states that:

(1) Where a land use plan—

- a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in-combination with other plans or projects), and*
- b) is not directly connected with or necessary to the management of the site.*

*the plan-making authority for that plan must, before the plan is given effect, make an **appropriate assessment** of the implications for the site in view of that site’s conservation objectives’.*

*(2) The plan-making authority must for the purposes of the assessment **consult the appropriate nature conservation body** and have regard to any representations made by that body within such reasonable time as the authority specifies.*

*(3) The plan-making authority must also, if it considers it appropriate, take the **opinion of the general public**, and if it does so, it must take such steps for that purpose as it considers appropriate.*

*(4) In the light of the conclusions of the assessment, and subject to regulation 107, the plan-making authority must give effect to the land use plan only after having ascertained that it **will not adversely affect the integrity of the European site** or the European offshore marine site (as the case may be).*

¹ European Commission, (1992); ‘Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.’ Available at: <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0043:EN:HTML>

² The Conservation of Habitats and Species Regulations 2017 (2017) SI No. 2017/1012, as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579).

³ Supported by F.1.2 Outline of the procedural requirements for plan assessment, as per Footnote 2.

(5) A plan-making authority must provide such information as the appropriate authority may reasonably require for the purposes of the discharge by the appropriate authority of its obligations under this Chapter.

(6) This regulation does not apply in relation to a site which is—

- a) a European site by reason of regulation 8(1)(c), or*
- b) a European offshore marine site by reason of regulation 18(c) of the Offshore Marine Conservation Regulations (site protected in accordance with Article 5(4) of the Habitats Directive).*

Regulation 107 then furthers that if the competent plan-making authority is satisfied that, there being no alternative solutions, the land use plan must be given effect for imperative reasons of overriding public interest (IROPI), it may give effect to the land use plan notwithstanding those negative effects.

As part of the preparation of the new Bristol Local Plan, BCC as both ‘competent authority’ and ‘plan-making authority’ is therefore required by law to carry out an HRA.

In light of the conclusions of the assessment, the plan-making authority may then give the plan effect only after having ascertained that it will not adversely affect the integrity of the EDS or, where such adverse effects are likely to occur, and there are no alternative solutions, that there are imperative reasons of overriding public interest in the development going ahead, and that any necessary compensatory measures required to ensure that the overall coherence of EDS are protected and can be secured.

EDS include European Marine Sites (EMS), SACs and SPAs. SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and all migratory birds and their habitats. The Annex habitats and species, for which each site is selected, are the qualifying features for SACs and special conservation interests (SCI) for SPAs of each site. Conservation objectives for the site are defined for these qualifying features.

In addition, where a land use plan may have significant effects on any of the following sites protected through Government policy, i.e. proposed SACs, potential SPAs, Ramsar⁴ sites or areas secured as sites compensating for damage to an EDS, would also require HRA⁵.

⁴ Wetlands designated under the Convention on Wetlands of International Importance (Ramsar Sites).

⁵ Department for Environment, Food & Rural Affairs, Natural England, Welsh Government, and Natural Resources Wales (2021) Habitats regulations assessments: protecting a European site: <https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site>

2. Habitats Regulations Assessment Methodology

2.1 Overview

The HRA process is divided into the following four stages (Drawing 1), which are based on the European Commission Methodological Guidance on ‘Assessment of plans or and projects significantly affecting Natura 2000 sites’⁶.

This HRA Screening Report comprises only the first stage of this process, identifying LSE.

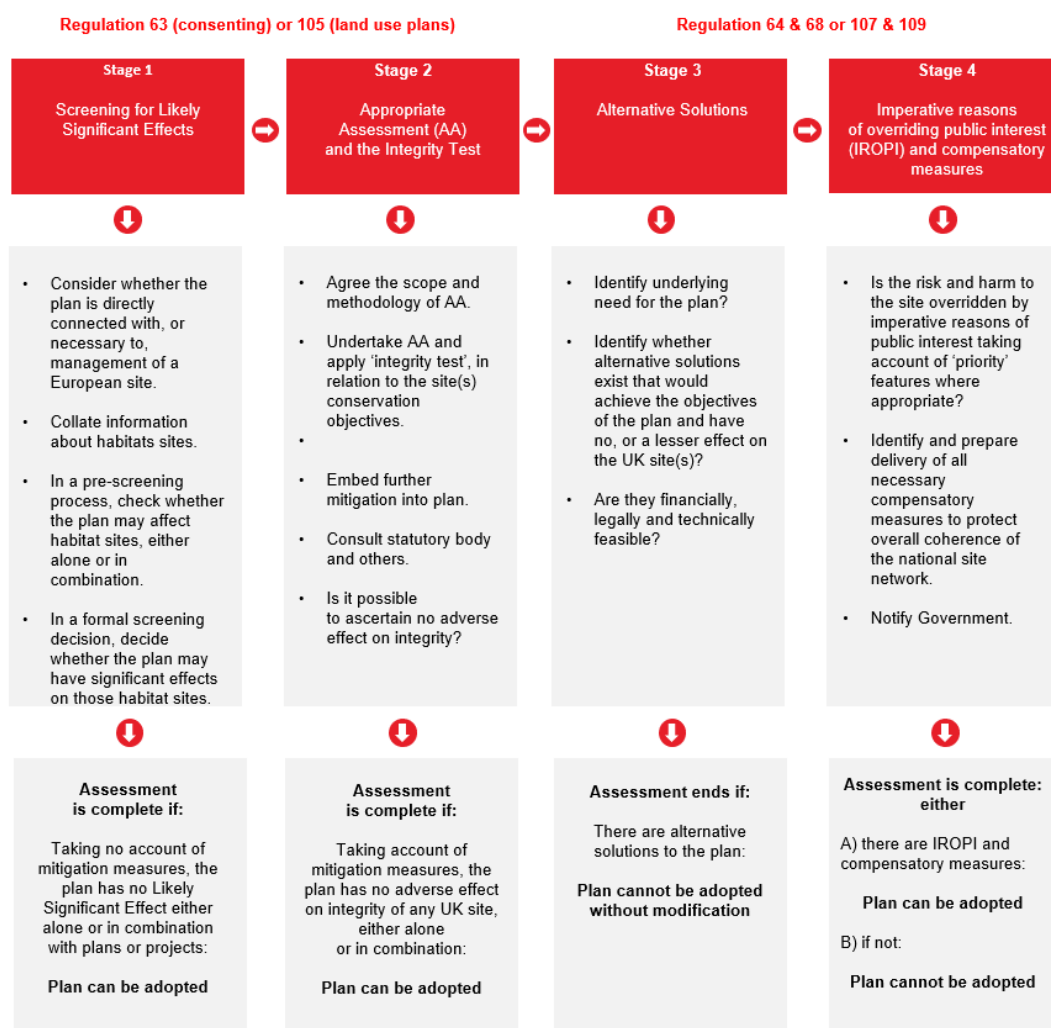
- **Stage 1 Screening:** An assessment of LSE of a plan on EDS, either alone or in-combination with other plans and projects.

This Report will come to a judgement about whether there is a need to undertake the subsequent Appropriate Assessment stage:

- **Stage 2 Appropriate Assessment:** Where it is not possible to rule out LSE during Stage 1, it is necessary to undertake an appropriate assessment as set out in Regulation 63 (1) and Regulation 105 (1) of the Habitats Regulations. This considers the implications of a plan in view of the EDS’s conservation objectives, either alone or in-combination with other plans and projects, taking into account mitigation measures (see People Over Wind, in Section 2.2 of this report). This provides the competent authority (i.e. BCC) with sufficient information to determine whether the plan has an adverse impact on the integrity of EDS, which is also referred to as the ‘integrity test’.
- **Stage 3 Assessment of Alternative Solutions:** Where adverse effects on integrity cannot be mitigated, it is necessary to consider alternative solutions that would not give rise to these effects. In accordance with Regulation 107 (1), the plan may only be given effect if there are no alternative solutions.
- **Stage 4 Assessment where no alternative solutions exist and where adverse impacts remain:** If no alternatives are identified during Stage 3, the plan may only be given effect where it can be demonstrated that there are imperative reasons for overriding public interest (IROPI) and compensatory measures. In this case, compensatory measures must be put in place to offset adverse effects on integrity.

⁶ European Commission, 2021. Commission Notice: Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Available at: https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf

Drawing 1. Overview of the Habitats Regulations for Land Use Plans (106) and Decision-Making for Projects (63)



Extract from The Habitats Regulations Assessment Handbook, www.dtapublications.co.uk © DTA Publications Limited (October 2018) all rights reserved.

2.2 Relevant Guidance and Case Law

Based upon European and domestic case law and guidance, following excerpts from the DTA Publications Handbook for HRA⁷, the following information is provided, which sets into context some of the processes adopted in this HRA.

- *People Over Wind C-323/17*: "...it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site". In summary, screening stage must not consider mitigation measures.
- *Waddenzee*: European Courts C-127/02. Ruling from the Raad van State. 7th September 2004. Where an LSE is a 'possible significant effect'; one whose occurrence cannot be excluded on the basis of objective information.
- *Bagmoor Wind Limited v The Scottish Ministers*, Court of Sessions (2012) CSIH 93: "If the absence of risk in the plan can only be demonstrated after a detailed investigation, or expert opinion, that is an indicator that a risk exists and the authority must move from preliminary examination to appropriate assessment".

⁷ Tyldesley, D., and Chapman, C., 2013. The Habitats Regulations Assessment Handbook July 2023 edition UK: DTA Publications Ltd, www.dtapublications.co.uk

- Sweetman and Others EU:C:2013:220: the definition of integrity of a site is defined such that it “entails the lasting preservation of the constitutive characteristics of the site concerned that are connected to the presence of a natural habitat type whose preservation was the objective justifying the designation of that site”.

2.3 Screening Methodology

Screening is used to identify whether the Local Plan, either alone or in-combination with other plans or projects, is likely to have a significant effect on EDS. This screening assessment follows European Commission (2001) Methodology Guidance (referenced below) which recommends that screening follows a four-step process as outlined below:

- **Step One:** Determine whether the Local Plan is directly connected with or necessary to the management of the site. If it is, then no further assessment is necessary.
- **Step Two:** Describe the Local Plan.
- **Step Three:** Identify the potential effects on the EDS. and other plans and projects that, ‘in-combination’, have the potential to have significant effects on an EDS.
- **Step Four:** Assess the significance of any effects on the EDS.

The Screening Report is structured following the source-pathway-receptor model, which dictates that in order for an effect to be established, then all three elements must be present and functioning. If one aspect of this chain is absent, then the potential effect is likely to be of little significance on the designated site.

2.4 Sources of Information Used

This assessment has been informed by the following guidance and policy documents:

- The Habitats Regulations Assessment Handbook, DTA Publications Ltd, April, 2021 (Tyldesley and Chapman, 2013);
- Tyldesley, D. and Chapman, C. 2022, Defra Nature Recovery Green Paper Supplement. The Habitats Regulations Journal, Issue 17b;
- Tyldesley, D. and Chapman, C. 2018. People Over Wind – some Implications of the Judgment. The Habitats Regulations Journal, Issue 10, pp. 19 – 23;
- MAGIC (Multi-Agency Geographic Information for the Countryside);
- Joint Nature Conservation Committee (JNCC); and
- Natural Resources Wales (NRW) Find Protected Areas of Land and Seas⁸.

2.5 Screening Assessment and Assumptions

In order to understand the potential implications for EDS from the Local Plan, it is necessary to identify those policies and/or sites that are located close to EDS or are linked by pathways such as hydrological connections. A distance of 15km was used to identify EDS that could be subject to LSE due to implementation of the Local Plan (Figure 2). This distance is in accordance with the HRA Screening assessment for the West of England Joint Spatial Plan Updated Habitats Regulations Assessment (2018) and is considered sufficient to ensure that all EDS, which could potentially be affected by development are identified and included for assessment. Consideration is also made for any potential pathways for impacts at a greater distance than 15km, e.g. through hydrological pathways.

⁸ National Resources Wales, (2023); ‘Find protected areas of land and sea.’ Available at: <https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land-and-seas/find-protected-areas-of-land-and-sea/?lang=en>

2.5.1 Likely Significant Effect

LSEs are embodied in Article 6(3) of the Habitats Directive and Regulation 63(1) of the Habitats Regulations. LSE are established based on the precautionary principle.

Based on European case law, in Waddenzee (as outlined in Section 2.2), an LSE is a ‘possible significant effect’; one whose occurrence cannot be excluded on the basis of objective information. For a LSE to be excluded on the basis of objective information, it is important to note that the probability of a significant effect does not have to be zero⁷.

A significant effect is any effect that would undermine the conservation objectives of an EDS. There must be a pathway for effect between the source and the EDS receptor, which could result in LSE on the EDS.

2.5.2 Identification of Plans or Projects considered for In-combination Effects

An ‘in-combination’ assessment is required in addition to assessing whether the project may have an effect on an EDS site on its own. The LSE of the Local Plan should be considered in-combination with other plans or projects that similarly may have an effect, but where on their own those effects would not be significant. The combined effects may therefore become significant.

Details of other plans and projects which are currently proposed or consented within the vicinity of the Local Plan were obtained to inform the in-combination assessment of the Local Plan.

2.5.3 Screening

This assessment considers whether there are any LSEs of the Local Plan on EDS, either alone or in-combination with other plans and projects. Every element of the Local Plan has been analysed and screened for LSEs.

Consideration has been given to whether any effects of the Local Plan, either alone or in-combination with other plans or projects undermine the conservation objectives for an EDS. Such effects are deemed significant and are screened in, thereby triggering the requirement for Appropriate Assessment (AA).

The screening stage is a preliminary examination. If significant effects cannot be ruled out without extensive investigation, the Local Plan is considered to have an LSE and requires further investigation through an AA.

Effects of the Local Plan have been identified through a review of the Local Plan in light of the sensitivities of the EDS, particularly the qualifying features and pressures and threats.

2.5.4 Assumptions and Limitations

It is recognised by the European and UK Courts and the European Commission that the assessment of a plan may not be as precise and detailed as that of the project at the planning application stage. Local Plans can vary in broad ambitions, alongside detailed site-specific proposals, and the BCC Pre-Publication Submission Draft is no different in that regard. For these reasons, the ‘precautionary principle’⁷ is applied, which means that LSE must be considered, based on best information available and the precision of the plan. This assessment will therefore need to be updated with increasing specificity to be applied in subsequent stages of the plan.

There is no timescale set out within the Habitats Regulations for undertaking the Screening process, to determine whether a plan should be subject to an ‘appropriate assessment’. This must, in accordance with Regulation 105(1), be undertaken ‘before the plan is given effect’.

Assessment of LSE was undertaken for each policy based broadly upon proximity of development areas to EDS. For each development area or allocation, consideration was given to how far pathways for effect could exist and still give rise to an LSE, in the absence of any mitigation. Appendix A.1 provides a summary of distances and references.

The practical effect of the People Over Wind ruling is that ‘mitigation measures’ cannot be taken into account in the formal screening decision. Developing mitigation measures will take place as the plan evolves, such that this will be achieved by ‘checking, testing and changing the plan’. The consideration of mitigation measures is only applicable as part of any appropriate assessment that might be required for the plan. Mitigation measures are therefore not considered as part of this screening report.

2.6 Pre-Screening Criteria

The Local Plan, containing site allocations and policies was supplied by BCC, for screening. It is considered that all aspects of the Local Plan will need to be considered for LSEs on EDS, including its overall strategy, objectives and policies as well as any more specific proposals. The objective of this stage, using the Waddenzee case, is to ‘screen out’ those plans and projects (including allocations) that can, without any detailed appraisal, be concluded to be unlikely to result in significant adverse effects upon EDS.

For context, the HRA Scoping Report (May 2021)⁹ prepared to support the Spatial Development Strategy (SDS) did not explicitly set out Screening Criteria, however the preceding Revised HRA Scoping Paper (November 2016)¹⁰ prepared in support of the Joint Spatial Plan (JSP) did consider characteristics of policies that can usually be ‘screened out’ (see Table 1 below).

Table 1. Characteristics of policies that can be screened out (Source: Joint Spatial Plan)

Criteria	Description
General statements of policy	The European Commission recognises that plans or plan components that are general statements of policy or political aspirations cannot have significant effects ¹¹ .
General design/ design criteria	A general ‘criteria-based’ policy expresses the tests or expectations of the plan-making body when it comes to consider particular proposals, or relate to design or other qualitative criteria which do not themselves lead to development (e.g. controls on building design).
External plan / projects	Plans or projects that are proposed by other plans and are referred to in the plan being assessed for completeness.
Environmental protection policies	Policies designed to protect the natural or built environment will not usually have significant or adverse effects.

A series of Screening Criteria have been determined utilising these previously accepted approaches and the DTA Publications Handbook for HRA (F.6.3). The in-combination assessment only applies to elements of the Local Plan that give rise to effects which are likely to not be significant alone (Category J, Table 2).

In order to provide justification for screening in policies or site allocations, a number of screening assumptions and buffers have been used to identify from a precautionary basis, which aspects of the Local Plan are screened in or out. Appendix A.1 outlines the details of the proposed buffers / Zone of Influence (ZoI) and are shown also on Figure 4, Figure 5, and Figure 6.

Table 2. Screening Criteria for Assessing the Local Plan Pre-Submission Publication Draft

Screening Category	Criteria	Description	Screening Outcome
A	General statement of policy / general aspiration	This includes policies where effects on an EDS cannot be identified because these are too general (i.e., it is not known where or how the proposal may be implemented or which sites may be affected). These may include the need for a broad quantum of housing or employment, without specific consideration as to where development is to be provided, unless the total quantity and nature of change is so great that, no matter where it was located, it could not be delivered without affecting an EDS.	Screened out
B	Policy listing general criteria for testing the acceptability / sustainability of proposals	These are likely to include policies which are designed to test the acceptability of development management applications for general sustainability credentials.	Screened out

⁹ West of England Combined Authority (2021). Habitats Regulations Assessment Scoping Report. West of England Spatial Development Strategy, May 2021. Accessed online: [HRA_Scoping_report_May_20211.pdf \(westofengland-ca.gov.uk\)](#)

¹⁰ West of England Combined Authority (2016). Habitats Regulations Assessment Revised Scoping Report. West of England Joint Spatial Plan. Accessed online: [SD10C_Habitat_Regulations_Assessment_HRA_West_of_England_Joint_Spatial_Plan_JSP_Revised_Scoping_Paper_November_2016.pdf \(westofengland-ca.gov.uk\)](#)

¹¹ European Commission (2000). Managing Natura 2000 sites: the provisions of Art. 6 of the ‘Habitats’ Directive 92/43/EEC April 2000 at 4.3.2

Screening Category	Criteria	Description	Screening Outcome
C	Proposal referred to but not proposed by the plan	<p>This may include proposals for specific projects which are identified in higher policy frameworks, such as nationally significant infrastructure projects. It may be necessary for the Local Plan to make reference to these projects, however these are not proposals made by the Local Plan.</p> <p>An exception to this is where agreement has been reached that the principle of the project is established within the Local Plan itself. Distinction needs to be made about whether these projects would proceed regardless of whether the Local Plan is adopted or without reference to it.</p> <p>Development proposed by the Local Plan-making body which will utilise the benefit of the major infrastructure improvements of other proposals should not be screened out at this stage.</p>	Screened out
D	General plan-wide environmental protection / site safeguarding policy	<p>These tend to include plan-wide policies for which an overarching obvious purpose is to protect the natural environment, or to conserve and enhance the natural, built and historic environment. These can be screened out on the basis that whilst these may have an incidental effect on protecting EDS, that is not the purpose of the policy.</p> <p>Should these policies contain caps or limited which would not have the effect of protecting EDS from significant effects must be screened in (i.e., 'planning permission will not be granted for development proposals which would be likely to have an adverse effect on SSSI or LWS').</p>	Screened out
E	Policies or proposals which steer change in such a way as to protect EDS from adverse effects	These types of policies or proposals will have the indirect or unintentional effect of steering change away from EDS, whose qualifying features may be affected by the change and can therefore be screened out.	Screened out
F	Policy that cannot lead to development or other change	Policies which do not in themselves lead to development or other change, for example, topic-specific criteria policies on design, layout or materials, can be screened out.	Screened out
G	Policy or proposal that could not have any conceivable effect on a site	<p>These are policies which make provision for change but which could have no conceivable effect on an EDS, because there is no causal connection or link between them and qualifying features of an EDS.</p> <p>Where a plan may affect an EDS, but effects are positive, this aspect of the plan can be screened out of the assessment.</p>	Screened out
H	Policy or proposal 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)	<p>Policies or proposals which make provision for change, and which could have no significant effect on an EDS either alone or in-combination with other aspects of the same plan, or in-combination with other plans and projects, can be screened out. These may include cases where there are some potential effects, but these would be plainly insignificant.</p> <p>An example may be where a plan provides for new development focused heavily within an existing urban area, for which it can ruled out that the SPA is so remote that there would be no effect at all, or effects would be imperceptible.</p>	Screened out
I	Policy or proposal with a likely significant effect on a site alone	<p>Whilst it is not possible to provide an exhaustive list of all the ways that a policy or proposal may have a significant effect on an EDS, there are several examples of ways which plans could have significant effects alone¹²:</p> <ul style="list-style-type: none"> The plan could directly affect an EDS because it provides for, or steers, or otherwise causes, a change on the EDS itself; The plan could indirectly affect an EDS e.g. because it provides for, or steers, or otherwise causes a quantity or type of change that causes effects linked to the site by impact routes, pathways or 	Screened in

¹² Advocate General Kokott in her Opinion in respect of Case C 6/04 European Commission. United Kingdom in the European Court of Justice 2005

Screening Category	Criteria	Description	Screening Outcome
		<p>mechanisms, creating biophysical changes in e.g. ecosystems, hydrology, air or water quality, or through increased disturbance;</p> <ul style="list-style-type: none"> Proposals for a magnitude of change that, no matter where it was located, it would be likely to have a significant effect: on an EDS; The plan makes provision for a type of change or variation in existing activity, generally, and may indicate a broad scale and / or one or more broad locations e.g. a particular part of the plan area, so a likelihood of a significant effect cannot be ruled out; The plan provides for ongoing management or maintenance activities which could affect an EDS; Options, policies or proposals that could block options or alternatives for the provision of other development or projects in the future, for example, by utilising land that would be needed to provide mitigation for another proposal that may otherwise lead to an adverse effect on an EDS, whose effects would have been avoided if the land had still been available; Options, policies or proposals the effects of which depend on how they are implemented in due course, for example, through the development or marine management processes. There is a more than theoretical possibility that if implemented in one or more particular ways, the proposal may have a significant effect on an EDS, and is not merely a general statement of policy; Any other proposals that would be vulnerable to failure under the Habitats Regulations at project assessment stage; to include them in the plan would be regarded by the European Commission as 'faulty planning'; and Any other proposal that may have an adverse effect on an EDS, which might try to pass the tests of the Habitats Regulations at project assessment stage by arguing that the plan provides the imperative reasons of overriding public interest to justify its consent despite a negative assessment. 	
J	Policy or proposal with an effect on a site but not likely to be significant alone, so need to check for likely significant effects in-combination	These include aspects of the Local Plan which would have some effect on a site, but the effect is unlikely to be significant in isolation. These must be checked for in-combination or cumulative effects, against K and L below.	Check categories K and L
K	Policy or proposal not likely to have a significant effect either alone or in-combination	Where an aspect of a Local Plan could have some effect on qualifying features of an EDS, but effects of that aspect of the Local Plan alone are unlikely to be significant, the effects of that aspect of the Local Plan must be checked for in-combination effects.	Screened in after the in-combination test
L	Policy or proposal likely to have a significant effect in-combination	<p>The 'in-combination' test, therefore, is about addressing cumulative effects. This should consider:</p> <ul style="list-style-type: none"> Can cumulative effects be eliminated from the assessment? What is the potential for cumulative effects? What is the type, timing and location of plans and projects? What is the approach to identifying, listing and gathering information about other plans and projects at appropriate stages? Can the effects of projects with potentially serious effects be excluded / is there a case to focus on the most influential plans or projects? Can the cumulative effects be considered to be significant? 	Screened in after the in-combination test
M	Bespoke area, site or case-specific policies or proposals intended to avoid or reduce harmful effects on an EDS		Screened in

2.7 In-Combination Plans and Projects

Both the EC Directive Article 6(3) and the Habitats Regulations require a competent plan-making authority to consider whether the Local Plan is likely to have significant effects, either individually or in-combination with other plans and project.

2.7.1 Summary of Guidance

The Methodological Guidance⁶ on Article 6(3) and (4) of the Habitats Directive and the DTA Publications Handbook for HRA considers:

- The assessment of ‘in-combination impacts’ is often less detailed at the Screening stage than in the appropriate assessment. This is because HRA is an iterative, multi-staged process, which should be applied at points throughout the plan-making process⁶.
- It is appropriate to consider plans and projects which are completed and those that are approved but uncompleted or proposed¹³. It may be appropriate to consider plans and projects which are already completed as a ‘second level’ of assessment.
- All types of plans or projects, regardless of any sector of activity, should be considered.
- It will be necessary for the list of proposed plans and projects to be considered ‘in-combination’ to be reviewed by Natural England and updated once it is clearer which policies are to be ‘screened out’.

The Methodological Guidance⁶ considers that there are six steps to assessment, which are adopted for the Bristol Local Plan, and as set out below (Section 2.7.3).

2.7.2 Comparator Examples

Assessment of ‘in-combination’ LSE within previous HRAs prepared for the West of England are only partially relevant to the Bristol HRA, given the difference in scale of plan area and need to avoid double-counting. Nevertheless, these provide a helpful starting point for accepted principles elsewhere.

In the West of England JSP HRA November 2018 Update, the review of ‘in-combination’ effects focussed on Local Plans for authorities adjacent to and within the West of England, as well as the West of England Joint Core Strategy and Joint Local Transport Plan, and Wessex Water’s Resource Management Plan. The findings of associated HRA work for these plans was reviewed. Nationally Significant Infrastructure Projects (NSIPs) within and in close proximity the West of England were considered for potential ‘in-combination’ effects on EDS.

The West of England SDS Scoping Report from May 2021 emphasised the importance of ‘in-combination’ assessment when a policy would otherwise be screened out because the individual contribution is otherwise in consequential. Again, given the scale of the plan area, there was focus on avoiding double-counting. In summary, ‘other plans and projects’ considered:

- Local Plans for constituent and adjacent local planning authorities, including those beyond the Severn Estuary in south Wales.
- Transport Plan documents for constituent and adjacent local planning authorities.
- Minerals and Waste Plans, again for constituent and adjacent local planning authorities.
- Water Resource Management Plans for utilities providers operating within the West of England area and adjacent to local planning authorities within this area.
- Coastal Plans for Severn Estuary, North Devon and Bristol Flood Strategy.
- Individual projects, including MetroWest Phase I Portishead Branch Line, Oldbury New Nuclear Power Station, Avon Power Station 950 MW output, Seabank 3 CCGT, The West Somerset Tidal Lagoon, Tidal Lagoon Newport, Tidal Lagoon Cardiff, Hinkley Point C Connection, Oldbury, Severn Barrage Barrier,

Poppy Dock Expansion, Environment Agency schemes and/or projects, and Renewable energy opportunities.

Also of relevance is the HRA prepared for Bath and North East Somerset (B&NES) Local Plan (Core Strategy / Placemaking Plan) Partial Update (August 2021) and accompanying Addendum (December 2021), which were prepared following the withdrawal of the JSP. It notes similar documents to the SDS and JSP, albeit for the geographically adjacent authorities / utility providers to the B&NES area.

The North Somerset Local Plan 2038 Preferred Options Consultation (Regulation 2018) from August 2022 anticipated that a HRA would be prepared as part of their next stage of plan-making.

South Gloucestershire prepared a HRA Statement in February 2018, which sets out the methodology for undertaking the Screening. There has been no update to their HRA since this stage.

2.7.3 Proposed approach for identification of ‘in-combination effects’

In accordance with the Methodological Guidance⁶ on Article 6(3) and (4) of the Habitats Directive 92/43/EEC (2021), the proposed approach for identification of ‘in-combination effects’ is set out below.

- 1) *Defining geographic boundaries and timeframe for assessment:* Based on the assessment set out above, it is assumed that the timeframe for assessment is the Plan Period, and the geographic boundaries are 15km from the Bristol City Council Local Authority District boundary.
- 2) *Identifying all projects and plans:* Using comparative topic areas to the preceding emerging Joint Plans within the area, proposed projects and plans for assessment through ‘in-combination’ effects are set out in Table 4 below.
- 3) *Impact identification:* The HRAs of relevant projects and plans will be considered to identify the types of impact that can affect the structure and functions of the site vulnerable to change.
- 4) *Pathway identification:* The HRAs of relevant projects and plans will be considered to identify the potential types of impact that can affect the structure and functions of the site vulnerable to change.
- 5) *Prediction:* Predicting the potential for any ‘in-combination’ effects is set out within Section 7 and Appendix A.4.
- 6) *Assessment:* Explaining whether or not the potential in-combination effects are likely to be significant. This is set out within Section 7.

3. Step One: The Need for Habitats Regulations Assessment Screening

3.1 Overview

In accordance with the Methodological Guidance⁶, the first stage of Screening is to ascertain whether a plan is connected directly to the management of a EDS. This step is then concluded by an initial review of whether the plan is likely to have significant effects on a EDS.

3.2 Role of the Bristol Local Plan in Managing a European Designated Site

To determine whether the Bristol Local Plan should be exempted, excluded or eliminated from further assessment, the following points are considered in line with the DTA Publications Handbook for HRA⁷:

- The Bristol Local Plan is not directly connected with or necessary to the management of an affected EDS for nature conservation purposes. The ‘Biodiversity and nature recovery’ chapter of the plan, however, sets out a number of policies that will support the conservation and enhancement of the natural environment including the integrity of EDS:
 - ‘Policy BG1: Green infrastructure and biodiversity in new development’ sets out that the integrity and connectivity of the Nature Recovery Network and wider network of green and blue infrastructure across the city will be maintained, protected, enhanced and restored. This policy is not directly connected to the management of EDS.
 - The international and national importance of the Severn Estuary and Avon Gorge is highlighted through ‘Policy BG2: Nature Conservation and Recovery’. This policy requires that development takes available opportunities to connect to or enhance the integrity of the Nature Recovery Network and wider ecological networks and promote the restoration of priority habitats and the recovery of priority species. It also sets out that internationally designated sites (including Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites) are subject to statutory protection from harmful development. This policy is not directly connected to the management of an EDS.
 - The requirement for new development to incorporate provision for nature resulting in biodiversity net gain is set out through ‘Policy BG3: Achieving Biodiversity Gains’. This policy is not directly connected to the management of an EDS.
- The Bristol Local Plan is a ‘land use’ plan, as set out in Regulation 105(1) of the Habitats Regulations 2017.
- As a result of the purpose, content and proposals within the Bristol Local Plan, it is not clear nor obvious that the Local Plan could not have any conceivable effect on any EDS, and more investigation through Screening is necessary.

The Bristol Local Plan cannot be exempted, excluded or eliminated from further assessment, noting it is not directly connected with or necessary to the management of an affected EDS for nature conservation purposes.

4. Step Two: Description of the Development Plan

4.1 Overview

Stage Two of the European Commission Methodological Guidance⁶ states that, in describing a project or plan, it will be necessary to identify all those elements of the project or plan which either alone or in combination with other projects or plans will have the potential to have effects on EDS. The following section therefore considers the background to the Bristol Local Plan and the emerging content of the Pre-Submission Publication Draft.

4.2 Background to the Bristol Local Plan

Current Development Plan

The current development plan for Bristol comprises a series of three documents covering the period until 2026: the Core Strategy (adopted June 2011), the Site Allocations and Development Management Policies (July 2014) and the Bristol Central Area Plan (adopted March 2015). The development plan also includes the Joint Waste Core Strategy (adopted March 2011).

Adoption of the Bristol Core Strategy (2011) was supported by the Core Strategy Habitats Regulations Assessment – Report (March 2010). This identified ten EDS as having potential to be impacted by the Core Strategy. Following the screening stage, it was determined that there was potential for adverse impacts on five of these sites and therefore an appropriate assessment was undertaken. Subsequent revisions to the Core Strategy ensured that there would be no adverse impacts on the integrity of EDS associated with the adoption of the plan.

Strategic Plan Making in the West of England

Work on the emerging Bristol Local Plan is contextualised by progress on strategic plan-making across the West of England. Drafting of the Bristol Local Plan was originally in conformity with the West of England JSP, then the SDS (Drawing 2).

In 2015, work began on the JSP, which was intended to represent a Spatial Plan that carried the full weight of a development plan across four West of England authorities. The role of the JSP was to set out how the quantum of development proposed will be sustainably accommodated and what infrastructure is required to support this; it was not intended to allocate new sites; however, it was required to identify new Strategic Development Locations (SDLs). New site-specific allocations and associated policy designations relevant to a local level were then progressed through constituent Local Plans in conformity with the JSP.

Following an interim letter published by Inspectors in September 2019, challenge was brought to the overall spatial strategy and consideration within the Sustainability Appraisal of reasonable alternatives for the SDLs identified. The JSP was formally withdrawn in April 2020.

In 2020, work then began on a statutory SDS, which was progressed by Bristol City Council, Bath and North East Somerset Council and South Gloucestershire Council. The Plan Period for the SDS was for 20 years between 2022 to 2042, again, with the intention to meet the need for homes and jobs in a clean and inclusive way across the West of England Combined Authority area¹⁴. Although several aspects of joint plan-making evidence were prepared across the Combined Authority area, no formal statutory consultation was undertaken on the draft plan. Early engagement on the 'Future of the Region' took place in November 2020, with views sought on nine questions on the priorities of the SDS.

Following a decision by Metro Mayor Dan Norris in 2022, work on the SDS was halted¹⁵.

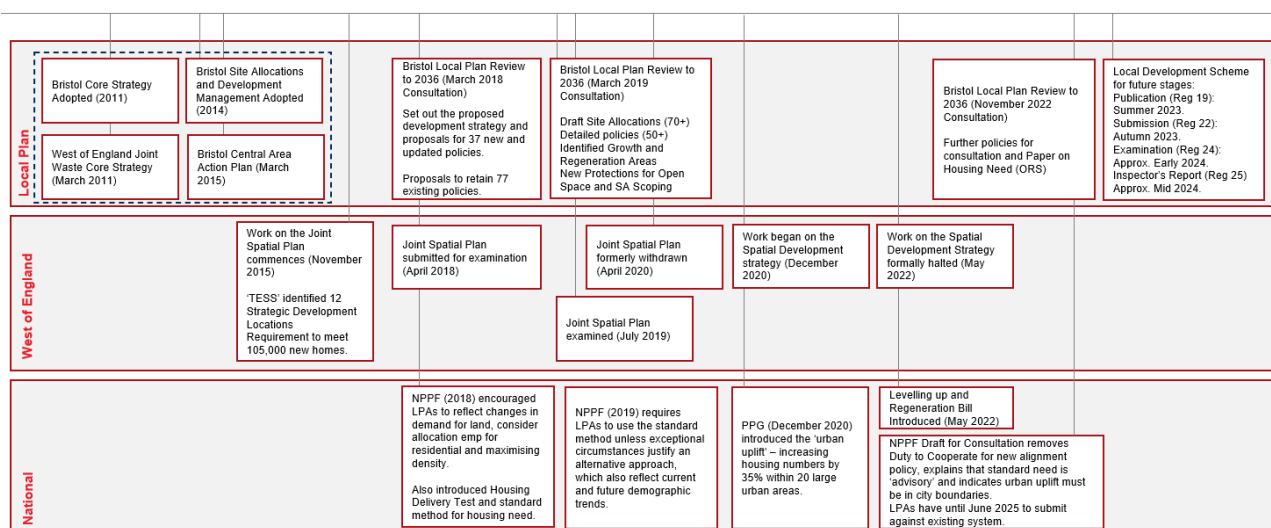
¹⁴ West of England Combined Authority Area (2022). Statement of Common Ground for Strategic Planning Version 3: January 2022. Accessed online: <https://www.westofengland-ca.gov.uk/wp-content/uploads/2022/01/Spatial-Development-Strategy-Statement-of-Common-Ground-Version-3.pdf>

¹⁵ West of England. Spatial Development Strategy website. Accessed online: <https://www.westofengland-ca.gov.uk/what-we-do/planning-housing/spatial-development-strategy/>

Although withdrawn, both the JSP and SDS were supported by HRA work. The West of England Joint Spatial Plan Updated Habitats Regulations Assessment (November 2018) provides a comprehensive baseline assessment, which set out: the list of EDS, qualifying features and conservation objectives; assessment of in-combination effects based on the plans and programmes that exist across the West of England; and a screening review of LSEs.

The HRA work undertaken for the SDS was at an early stage at the time the work on the strategy was halted. The work comprises a HRA Scoping Report (May 2021)¹⁶. The scoping report set out the HRA methodology; the EDS that would be considered through the HRA; the conservation objectives of those sites; the types of impacts that would be considered through the HRA; the sources of evidence to be considered; and a list of other plans and projects that would be taken forward as part of the assessment of in-combinations effects.

Drawing 2. Changes to Local Plan Programme (Source: Arup)



4.3 Bristol Local Plan Pre-Submission Publication Draft

4.3.1 Description of the Local Plan

The Local Plan Pre-Submission Publication Draft is formed of three main elements:

- Bristol Local Plan Review, Draft Policies and Development Allocations document (March 2019 Consultation Draft)¹⁷;
- Bristol Local Plan Review, Annex - Development Allocations (March 2019 Consultation Draft)¹⁸; and
- Further Consultation document (November 2022)¹⁹.

The draft policies and site allocations in the Local Plan Pre-Submission Publication Draft comprises:

- 69 Draft Development Site Allocations and 92 Site Allocations that were identified to be retained for allocation from the current Local Plan (as set out in the March 2019 Consultation Draft Plan);

¹⁶ West of England Combined Authority Area (2021) Spatial Development Strategy Habitats Regulations Assessment Scoping Report. Accessed online: https://www.westofengland-ca.gov.uk/wp-content/uploads/2021/10/HRA_Scoping_report_May_20211.pdf

¹⁷ Bristol City Council (2019). Bristol Local Plan Review, Draft Policies and Development Allocations. Accessed online: <https://www.bristol.gov.uk/files/documents/2275-local-plan-review-draft-policies-and-development-allocations>

¹⁸ Bristol City Council (2019). Bristol Local Plan Review, Annex - Draft Development Allocations. Accessed online: <https://www.bristol.gov.uk/files/documents/2278-local-plan-review-annex-draft-development-allocations>

¹⁹ Bristol City Council (2022). Bristol Local Plan Review, Draft Policies and Development Allocations. Accessed online: <https://www.bristol.gov.uk/files/documents/5446-bristol-local-plan-review-nov-22-further-consultation/file>

- 50 Draft Policies covering regeneration, housing, urban living, the economy, green infrastructure, development and transport and climate change, design and wellbeing (as set out in the March 2019 Consultation Draft Plan);
- 24 Draft Policies (as set out in the Further Consultation document (November 2022)) (please note that in the Further Consultation 2022 document, Policy H1, Draft Policies NCZ1 to NZC5 and Draft Policy DC A replaced policies in the March 2019 Consultation Draft Plan, it also withdrew site Yew Tree Farm that was previously proposed to be carried forward from the current Local Plan and retained for development in the March 2019 Consultation Draft Plan); and
- 26 Draft Policies and three Draft Development Site Allocations that were not presented in March 2019 Consultation Draft Plan or in the November 2022 Further Consultation document are also included in the Local Plan Pre-Submission Publication Draft. 17 of these 26 Draft Policies are updated versions of policies that are presented in the current Local Plan and are carried forward into the Local Plan Pre-Submission Publication Draft.

The Local Plan sets out the approach to development of the city over the plan period (01 April 2022 through to 31 March 2040), with the objectives of:

- Setting out an approach to inclusive and sustainable growth and development, addressing the needs of everyone in all parts of the city;
- Enabling of delivery of at least 1,925 new homes a year in Bristol up to 2040, including affordable housing and homes to meet a range of needs;
- Aiming to exceed the housing target where new infrastructure can unlock additional potential; and
- Tackling the climate and ecological emergencies as needs for sustainable development are met.

The Local Plan aims to:

- Establish a planning approach which sees development of new and affordable homes as a core objective in development decisions, significantly increasing the number of new and affordable homes;
- Actively respond to the climate and ecological emergencies whilst securing sustainable development;
- Enable the sustainable growth of the economy for everyone, with modern workplaces and digital infrastructure fit for the future;
- Promote urban living across the city with a focus on brownfield land – encouraging developments of homes with urban character, form and design in well-designed, connected, healthy and accessible neighbourhoods which achieve a liveable environment;
- Secure diverse and vibrant centres across the city which help to deliver the goal of a ‘15-minute city’;
- Take a plan-led approach to promoting areas with the potential to increase densities and make efficient use of under-used land; this includes transforming some areas of the city to create communities with new homes, workplaces and public open spaces;
- Allocate new sites for housing and mixed-use development and highlight sites with potential for housing development and ensure that the best use is made of existing development allocations;
- Encourage innovation in the design, construction, and location of diverse housing solutions; diversify the housing offer, promoting new building types and tenures such as build for rent, housing for older people and self-build and community-led housing;
- Manage the development of student housing to safeguard existing communities whilst supporting thriving universities by meeting student accommodation needs;
- Protect valued open spaces, promote food growing and increase the tree canopy to support a liveable, healthy city;

- Make sure new buildings protect the environment, achieving carbon net zero development at the earliest opportunity and adapting to the likely impact of climate change; and
- Tackle the challenges of air quality, health inequality and safeguarding environmental quality.

Policies which formed the basis of the Further Consultation document November 2022 are set out in Appendix A.2, whilst Site Allocations are set out in Appendix A.3.

4.3.2 Consultation Responses

Responses from Natural England have been received to the previous Consultation Stages of the Local Plan.

In their response to the March 2019 Consultation Draft Plan, Natural England set out the following in relation to HRA²⁰:

'We note the statement that HRA will be undertaken if the policies in the Plan are likely to affect European sites. We advise that an HRA will need to be undertaken. The HRA for the Joint Spatial Plan identified impacts on European sites arising from the delivery of housing across the West of England and through the Joint Spatial Plan, Bristol and the other UAs have committed to addressing these effects on designated sites through a strategic approach to mitigation measures. Reliance was placed on the 'lower tier plans' to secure appropriate mitigation. Work is underway to develop those strategic mitigation solutions and they will need to be considered in the HRA for the Local Plan and reflected in the Plan itself as appropriate. Some of the sites affected by an increase in recreational pressure are within or in close proximity to Bristol, for example, Avon Gorge Woodlands SAC and Severn Estuary SAC/SPA, and we would expect to see how those mitigation measures will be funded and delivered.'

This response also considered:

- In relation to Green Infrastructure, that *'a diverse and resilient network of green spaces and GI is also the most effective way of limiting pressure on sensitive nature conservation sites whether they be SNCIs or sites like Avon Gorge Woodlands SAC and Ashton Court SSSI'*; and,
- In relation to the Avonmouth Industrial Area and Bristol Port, which recognised the *'importance for wildlife of the area, including Hallen Marsh and the intention to provide large-scale habitat creation. There may also be public access and other GI benefits that could be delivered in the area'*.

In their response to the Further Consultation November 2022, Natural England set out the following in relation to HRA:

'Your Authority will need to undertake a Habitats Regulations Assessment (HRA) of the Plan, proceeding to an appropriate assessment where 'Likely Significant Effects' on Habitats Sites are identified. We provided further advice on HRA and Habitats Sites below but given the outcome of HRAs for higher tier plans (JSP, SDS) and neighbouring local plans (NS, SGC) it is likely that an appropriate assessment will be necessary, and it would therefore be sensible to begin the HRA process as soon as possible'.

It further:

'We strongly recommend that the HRA benefits from the necessary expertise to analyse the key issues likely to arise, including recreational/visitor pressure and air quality'.

'Given the course of similar assessments in the West of England it is possible/likely that the HRA will conclude that the Plan will have an LSE on Habitats sites such as Avon Gorge Woodlands SAC and the Severn Estuary SPA/Ramsar through increasing recreational pressure. This would mean that the HRA would need to progress to a more detailed analysis of effects and potential mitigation through an appropriate assessment. As both sites are cross boundary, mitigation would need to be part of Duty to Cooperate discussions. Tackled strategically, avoidance and mitigation for any effects identified may not be costly. They may focus on better visitor management but also could

²⁰ Bristol Local Plan Review (Natural England, 24 May 2019)

support the wider need for the investment in existing and new green spaces and networks within and around the city that support a range of policy goals across health, housing delivery, nature recovery, natural flood management, and adaptation to climate change.

‘Furthermore, the Plan identifies Avonmouth as the area with the greatest potential to develop onshore wind. The potential impacts of the development of onshore wind on the Severn Estuary SPA/Ramsar must be assessed through the HRA’.

Several sites are identified as being required to be assessed through HRA:

- Land at Elsbet Drive, Bishopsworth: *‘This site is approximately 2km to the east of a known lesser horseshoe maternity roost considered to be functionally linked with the North Somerset and Mendip Bats SAC. The potential impact of this site on the North Somerset and Mendip Bats SAC must be assessed through an HRA’.*
- Western Harbourside: *‘is close to the Avon Gorge Woodlands SAC, it will be important to assess the impact of new development in this area on the SAC in-combination with other development in proximity to the SAC. Impacts could arise from an in recreational pressure and air quality emissions from increased road traffic’.*

It should be noted that, at the same time as preparing the HRA, BCC is also preparing a ‘Sustainability Appraisal’ in line with the Strategic Environmental Assessment (SEA) Directive and Regulations. In accordance with the DTA Publications Handbook for HRA , the procedures and methods within these two processes have been considered together to enable processes to be undertaken as efficiently as possible.

5. Step Three: Identification of European Designated Sites and ‘In-Combination’ Plans and Projects

5.1 Overview

In order to identify those sites that could be potentially affected, it is necessary to describe the EDS in the context of why they have been designated, i.e. their qualifying features. Albeit covered further within Step Four, this section also considers the plans and projects which may be considered to have effects on EDS in combination with the Local Plan.

5.2 Identification of European Designated Sites

EDS were firstly identified within a likely ZoI of the Local Plan (Figure 1). The ZoI is taken as the Bristol Local Plan area and a 15 km buffer beyond this boundary (Figure 2), and as justified in Section 2.5.

Within 15km of the Local Plan boundary, there are seven SACs, two SPAs and one Ramsar site:

- Avon Gorge Woodlands SAC (within Local Plan boundary);
- Severn Estuary SAC (within Local Plan boundary);
- Severn Estuary SPA (within Local Plan boundary);
- Severn Estuary Ramsar (within Local Plan boundary);
- Chew Valley Lake SPA (4.4 km away);
- River Wye / Afon Gwy SAC (8.2 km away);
- North Somerset and Mendip Bats SAC (8.9 km away);
- Wye Valley Woodlands / Coetiroedd Dyffryn Gwy SAC (11 km away);
- Bath and Bradford-on-Avon Bats SAC (12.7 km away); and
- Wye Valley and Forest of Dean Bat Sites / Safleoedd Ystlumod Dyffryn Gwy a Fforest y Ddena SAC (13.6 km away).

Full details of the selected EDS are outlined in Table 3 and displayed in Figure 2.

Of these sites, the Welsh EDS have been screened out noting that there is not a pathway for effect to give rise to an LSE from the proposed Local Plan. These sites are: Wye Valley Woodlands / Coetiroedd Dyffryn Gwy SAC; and Wye Valley and Forest of Dean Bat Sites / Safleoedd Ystlumod Dyffryn Gwy a Fforest y Ddena SAC. Appendix A.1 further sets out that a ZoI of 7km is applicable to EDS in relation to recreational disturbance impacts, a ZoI of 500m is applicable in relation to the effects of non-physical disturbance (e.g. construction noise, vibration or lighting) and a ZoI of 200m is applicable in relation to localised effects from air pollution and increased traffic noise. Noting that these sites are at a greater distance than the distance at which effects could occur in relation to their qualifying features, their screening out is further justified. The Bath and Bradford-on-Avon Bats SAC Planning Guidance²¹ provides buffers of Core Areas around each of the Core Roosts. As these buffers do not overlap with the Local Plan area there is not considered to be a pathway for impacts to this SAC. Consequently, the Bath and Bradford-on-Avon Bats SAC is screened out from further consideration.

The remaining EDS are screened in for further consideration.

²¹ Wiltshire Council and Natural England, 2015. Bat Special Areas of Conservation (SAC) Planning Guidance for Wiltshire. Issue 3.0 (10 September 2015)

5.3 List of European Designated Sites, Qualifying Features, Conservation Objectives and Key Sensitivities

Table 3. European Designated Sites within (15km) and their qualifying features

European Designated Site (inc. distance from Plan boundary)	Qualifying Features	Conservation Objectives	Key Sensitivities
Avon Gorge Woodlands SAC ^{22,23,24} (within Local Plan boundary)	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> H9180. Tilio-Acerion forests of slopes, screes and ravines. <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> H6210. Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia). 	<p>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;</p> <ul style="list-style-type: none"> The extent and distribution of qualifying natural habitats; The structure and function (including typical species) of qualifying natural habitats, and; The supporting processes on which qualifying natural habitats rely. 	<p>Tilio-Acerion forests of slopes, screes and ravines:</p> <ul style="list-style-type: none"> Habitat loss; Impacts to tree roots from soil compaction, agricultural operations, other soil disturbances, chemicals; Changes in air quality; Habitat fragmentation; Invasive species including Buddleia, Rhododendron, Japanese knotweed <i>Reynoutria japonica</i> and Himalayan balsam <i>Impatiens glandulifera</i>; Deer <i>Cervidae</i> and grey squirrel <i>Sciurus carolinensis</i> damage is a potential issue affecting regeneration of the Leigh Woods side of the Gorge; Ash is a major component of the high forest structure. Ash Dieback <i>Chalara fraxinea</i> has the potential to dramatically affect the overall structure of the Avon Gorge woodland. <p>Semi-natural dry grasslands and scrubland facies on calcareous substrates:</p> <ul style="list-style-type: none"> Native shrubs and trees are considered a major threat to the open limestone grassland habitats present; Under-grazing of open areas resulting in pressure from scrub and invasive species; and

²² <https://publications.naturalengland.org.uk/publication/6740736611450880>

²³ <https://publications.naturalengland.org.uk/publication/6740736611450880>

²⁴ <https://publications.naturalengland.org.uk/publication/5021516609617920>

European Designated Site (inc. distance from Plan boundary)	Qualifying Features	Conservation Objectives	Key Sensitivities
			<ul style="list-style-type: none"> Pressure from public access and disturbance, in particular, inappropriate and illegal access. Potential implications of increased access include nitrogen deposition from dog fouling.
<p>Severn Estuary SAC^{25,26,27}</p> <p>(within Local Plan boundary)</p>	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 1130 Estuaries; 1140 Mudflats and sandflats not covered by seawater at low tide; and 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>). <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 1110 Sandbanks which are slightly covered by sea water all the time; and 1170 Reefs. <p>Annex II species that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 1095 Sea lamprey <i>Petromyzon marinus</i>; 1099 River lamprey <i>Lampetra fluviatilis</i>; and 1103 Twait shad <i>Alosa fallax</i>. 	<p>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;</p> <ul style="list-style-type: none"> The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats; The structure and function of the habitats of qualifying species; The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; The populations of qualifying species; and The distribution of qualifying species within the site. 	<ul style="list-style-type: none"> Public access and recreation (including third party activities) may have an impact on bird species sensitive to disturbance; Modification to water courses and barriers to Annex II migratory fish in the tributary rivers are preventing completion of the life cycle and potentially altering the hydrodynamics of the site; Impacts of planned development within and adjacent to the Estuary; Coastal squeeze, causing loss of habitat and having impacts on species dependent upon those habitats; Changes in management and use of grassland and saltmarsh habitat within and bordering the estuary; Changes in species distributions due to climate change and other artificial and natural modifications; Water pollution (diffuse and direct); Air pollution, particularly atmospheric nitrogen deposition; Cumulative impacts of marine extraction, dredging and associated waste; Recreational and commercial marine and estuarine fisheries;

²⁵ <https://sac.jncc.gov.uk/site/UK0013030>

²⁶ <https://publications.naturalengland.org.uk/publication/4590676519944192>

²⁷ <https://publications.naturalengland.org.uk/publication/4590676519944192>

European Designated Site (inc. distance from Plan boundary)	Qualifying Features	Conservation Objectives	Key Sensitivities
			<ul style="list-style-type: none"> Invasive non-native species including the Australian barnacle <i>Austrominius modestus</i>, Mitten crab <i>Eriocheir sinensis</i>, and the Pacific Oyster <i>Crassostrea gigas</i>; and Marine litter.
<p>Severn Estuary SPA²⁸ (within Local Plan boundary)</p>	<p>Bewick's swan <i>Cygnus colombianus bewickii</i> – The site regularly supports 3.9% of the wintering population in Great Britain (1991/2 - 1995/6 5-year peak mean).</p> <p>Gadwall <i>Anas strepera</i> – The site regularly supports 0.9% of the wintering population in North-western Europe (1991/2 -1995/6 5-year peak mean).</p> <p>White-fronted Goose <i>Anser albifrons</i> – The site regularly supports 0.4% of the wintering population in North-western Siberia and Northern Europe (1991/2 -1995/6 5-year peak mean).</p> <p>Dunlin <i>Calidris alpina</i> – The site regularly supports 3.3% of the wintering population from Northern Siberia, Europe and Western Africa (1991/2 -1995/6 5-year peak mean).</p> <p>Redshank <i>Tringa tetanus</i> – The site regularly supports 1.3% of the wintering population in the Eastern Atlantic (1991/2 -1995/6 5-year peak mean).</p> <p>Shelduck <i>Tadorna tadorna</i> – The site regularly supports 1.1% of the wintering population in North-western Europe (1991/2 -1995/6 5-year peak mean).</p> <p>Assemblage of wintering birds (regularly supports over 20,000 waterfowl) – Over winter the area regularly supports in excess of 84,000 waterfowl (5-year peak mean 01/04/1998 = 84317) including the above species: wigeon <i>Mareca penelope</i>, lapwing <i>Vanellus vanellus</i>, teal <i>Anas crecca</i>, mallard <i>Anas platyrhynchos</i>, shoveler <i>Anas clypeata</i>, pochard <i>Aythya ferina</i>, tufted duck <i>Aythya fuligula</i>, grey plover <i>Pluvialis squatarola</i> and whimbrel <i>Numenius phaeopus</i>.</p>	<p>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 Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats; The structure and function of the habitats of qualifying species; The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; and The populations of qualifying species; and The distribution of the qualifying species within the site. 	<ul style="list-style-type: none"> Public access and recreation (including third party activities) may have an impact on bird species sensitive to disturbance; Modification to water courses and barriers to Annex II migratory fish in the tributary rivers are preventing completion of the life cycle and potentially altering the hydrodynamics of the site; Impacts of planned development within and adjacent to the Estuary; Coastal squeeze, causing loss of habitat and having impacts on species dependent upon those habitats; Changes in management and use of grassland and saltmarsh habitat within and bordering the estuary; Changes in species distributions due to climate change and other artificial and natural modifications; Water pollution (diffuse and direct); Air pollution, particularly atmospheric nitrogen deposition; Cumulative impacts of marine extraction, dredging and associated waste; Recreational and commercial marine and estuarine fisheries;

²⁸ <https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9015022.pdf>

European Designated Site (inc. distance from Plan boundary)	Qualifying Features	Conservation Objectives	Key Sensitivities
			<ul style="list-style-type: none"> Invasive non-native species including the Australian barnacle <i>Austrominius modestus</i>, Mitten crab <i>Eriocheir sinensis</i>, and the Pacific Oyster <i>Crassostrea gigas</i>; and Marine litter.
Severn Estuary Ramsar Site ²⁹ (within Local Plan boundary)	<p>Sites containing representative, rare or unique natural and near-natural wetland types with the biogeographic region (Criterion 1):</p> <ul style="list-style-type: none"> Sandbanks which are slightly covered by sea water all the time; Estuaries; Mudflats and sandflats not covered by seawater at low tide; and Atlantic salt meadows. <p>Sites supporting populations of plants and/or animals important for maintaining the biological diversity of the biogeographic region (Criterion 3) - Unusual estuarine communities of reduced diversity and high productivity.</p> <p>Sites supporting plant or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions (Criterion 4) - This site is important for the run of migratory fish between the sea/estuaries and freshwater rivers. Species include salmon, sea trout, sea lamprey, river lamprey, allis shad, twaite shad and eel. It is also of particular importance for migratory birds during spring and autumn.</p> <p>Sites regularly supporting in excess of 20,000 waterfowl (Criterion 5) - 70,919 waterfowl (5-year peak mean 1998/9 – 2002/2003).</p> <p>Sites regularly supporting 1% of the individuals in a population of one species or subspecies of waterfowl (Criterion 6):</p> <ul style="list-style-type: none"> Bewick's Swan – 2.8% of the winter population in Great Britain (5-year peak mean 1998/9 – 2002/2003); 	The conservation objective for the qualifying features of the Severn Estuary Ramsar Site is to maintain the feature in favourable condition.	<p>The Information Sheet on Ramsar Sites²⁹ identifies the following pressures and threats to the Severn Estuary Ramsar site:</p> <ul style="list-style-type: none"> Dredging; Erosion; and Recreational / tourism disturbance. <p>Given overlapping qualifying features with Severn Estuary SPA and SAC, the key sensitivities of those sites are also assumed applicable here.</p>

²⁹ <https://jncc.gov.uk/jncc-assets/RIS/UK11081.pdf>

European Designated Site (inc. distance from Plan boundary)	Qualifying Features	Conservation Objectives	Key Sensitivities
	<ul style="list-style-type: none"> White-fronted goose – 35.8% of the winter population in Great Britain (5-year peak mean 1998/9 – 2002/2003); Shelduck – 1% of the winter population (5-year peak mean 1998/9 – 2002/2003); Gadwall – 1.4% of the winter population in Great Britain (5-year peak mean 1998/9 – 2002/2003); Dunlin – 1.8% of the winter population (5-year peak mean 1998/9 – 2002/2003); and Redshank – 1% of the winter population (5-year peak mean 1998/9 – 2002/2003). <p>Sites containing an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks depend (Criterion 8) - Over 110 species of fish have been recorded within the whole estuarine and river system. Salmon, sea trout, sea lamprey, river lamprey, allis shad, twaite shad and eel use the estuary as a key migration route to their spawning grounds in the many tributaries of the Severn. The site is also an important feeding and nursery ground for many fish species, particularly allis and twaite shad which feed on shrimps within the estuary.</p>		
Chew Valley Lake SPA (4.4km) ^{30,31,32}	Northern shoveler <i>Anas clypeata</i> - Over winter the area regularly supports (North-western/Central Europe) 1.3% of the population 5 year peak mean 1991/92-1995/96.	<p>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;</p> <ul style="list-style-type: none"> The extent and distribution of the habitats of the qualifying features; 	<ul style="list-style-type: none"> Hydrological changes affected both by annual changes in rainfall and the functioning of the reservoir; and Pressure from public access and disturbance including recreational activities including fishing for trout and pike, sailing, and walking.

³⁰ <https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9010041.pdf>

³¹ <https://publications.naturalengland.org.uk/publication/5276555349590016>

³² <https://publications.naturalengland.org.uk/publication/4517832196882432>

European Designated Site (inc. distance from Plan boundary)	Qualifying Features	Conservation Objectives	Key Sensitivities
		<ul style="list-style-type: none"> 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. 	
River Wye / Afon Gwy SAC ^{33,34,35} (8.2km)	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 3260 Water courses of plain to montane levels with the <i>Ranunculon fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation. <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <p>7140 Transition mires and quaking bogs.</p> <p>Annex II species that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 1092 White-clawed (or Atlantic stream) crayfish <i>Austropotamobius pallipes</i>; 1095 Sea lamprey <i>Petromyzon marinus</i>; 1096 Brook lamprey <i>Lampetra planeri</i>; 1099 River lamprey <i>Lampetra fluviatilis</i>; 1103 Twaite shad <i>Alosa fallax</i>; 1106 Atlantic salmon <i>Salmo salar</i>; 1163 Bullhead <i>Cottus gobio</i>; and 	<p>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:</p> <ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Water pollution – point sources of concern are largely localised. E.g. mining waste, raised metals concentrations and phosphates; Physical modification on character and hydromorphology, largely through small-scale local development; Invasive species – Signal crayfish <i>Pacifastacus leniusculus</i>, Himalayan Balsam <i>Impatiens glandulifera</i>, Japanese Knotweed <i>Reynoutria japonica</i>, Giant Hogweed <i>Heracleum mantegazzianum</i> and hybrids are present throughout the catchment; Hydrological changes – through urban drainage and new development; Forestry and woodland management; Fisheries – bank and vegetation management and fish stocking; Water abstraction;

³³ <https://publications.naturalengland.org.uk/publication/5178575871279104>

³⁴ <https://publications.naturalengland.org.uk/publication/6096799802589184>

³⁵ <https://sac.jncc.gov.uk/site/UK0012642>

European Designated Site (inc. distance from Plan boundary)	Qualifying Features	Conservation Objectives	Key Sensitivities
	<ul style="list-style-type: none"> 1355 Otter <i>Lutra lutra</i>. <p>Annex II species present as a qualifying feature, but not a primary reason for site selection:</p> <ul style="list-style-type: none"> 1102 Allis shad <i>Alosa alosa</i>. 	<p>habitats and habitats of qualifying species rely;</p> <ul style="list-style-type: none"> The populations of qualifying species; and The distribution of qualifying species within the site. 	<ul style="list-style-type: none"> Public access and disturbance – including canoeists, anglers and dog walkers; Air pollution – Nitrogen deposition currently exceeds the critical loads associated with the transition mire habitat; Inappropriate scrub control – effecting the structure and composition of transitional mire and quaking bog; Under-grazing – affecting the structure and composition of the transitional mire and quaking bog; and Transportation and service corridors – particularly Network Rail assets.
North Somerset and Mendip Bats SAC ^{36, 37, 38} (8.9km)	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites); and 9180 Tilio-Acerion forests of slopes, screes and ravines * Priority feature. <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 8310 Caves not open to the public. <p>Annex II species that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 1303 Lesser horseshoe bat <i>Rhinolophus hipposideros</i>; and 1304 Greater horseshoe bat <i>Rhinolophus ferrumequinum</i>. 	<p>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;</p> <ul style="list-style-type: none"> 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; 	<ul style="list-style-type: none"> Under-grazing of species rich grassland relied on by foraging bats. Development on the land between the sites that make up SAC could have an impact on bats through loss of foraging habitat, loss of minor roost sites, and disruption of flightpaths (the latter particularly through light pollution). Excessive sycamore growth may be threatening the species composition of important ravine woodland. Ash dieback.

³⁶ <https://sac.jncc.gov.uk/site/UK0030052>

³⁷ <https://publications.naturalengland.org.uk/publication/6252034999189504>

³⁸ <https://publications.naturalengland.org.uk/publication/6226153064890368>

European Designated Site (inc. distance from Plan boundary)	Qualifying Features	Conservation Objectives	Key Sensitivities
		<ul style="list-style-type: none"> The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; The populations of qualifying species; The distribution of qualifying species within the site. 	
Wye Valley Woodlands / Coetiroedd Dyffryn Gwy SAC ^{39,40,41} (11km)	<p>Annex I habitats that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> 9130 Asperulo-Fagetum beech forests; 9180 Tilio-Acerion forests of slopes, screes and ravines * Priority feature; and 91J0 <i>Taxus baccata</i> woods of the British Isles * Priority feature. <p>Annex II species present as a qualifying feature, but not a primary reason for site selection:</p> <ul style="list-style-type: none"> 1303 Lesser horseshoe bat <i>Rhinolophus hipposideros</i>. 	<p>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:</p> <ul style="list-style-type: none"> 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; 	<ul style="list-style-type: none"> Deer – Increasing population resulting in an excessive level of browsing, adversely affecting natural species regeneration; Forestry and woodland management – abandonment of coppicing creating a closed canopy; Invasive species - Himalayan balsam <i>Impatiens glandulifera</i>, periwinkle <i>Vinca</i>, Japanese knotweed <i>Reynoutria japonica</i> and cherry laurel <i>Prunus laurocerasus</i>; Habitat connectivity – to other areas of semi-natural woodland in the area; Species decline relating to habitat loss– largely plant species associated with the Tilio-Acerion forest; Air pollution -high atmospheric nitrogen deposition; Disease – ash dieback and sudden oak death; and

³⁹ <https://sac.jncc.gov.uk/site/UK0012727>

⁴⁰ <https://publications.naturalengland.org.uk/publication/6331090281168896>

⁴¹ <https://publications.naturalengland.org.uk/publication/4735117343850496>

European Designated Site (inc. distance from Plan boundary)	Qualifying Features	Conservation Objectives	Key Sensitivities
		<ul style="list-style-type: none"> The populations of qualifying species; and The distribution of qualifying species within the site. 	<ul style="list-style-type: none"> Public access/disturbance – erosion and damage to ground flora as well as potential disturbance to underground bat roosts.
Bath and Bradford on Avon Bats SAC ^{42, 43, 44} (12.7km)	Annex II species that are a primary reason for selection of this site: <ul style="list-style-type: none"> 1304 Greater horseshoe bat <i>Rhinolophus ferrumequinum</i>; and 1323 Bechstein's bat <i>Myotis bechsteinii</i>. 	<p>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;</p> <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Fragmented land ownership and lapses in management around the fringes of Bath; Direct impacts from third parties including vandalism and recreational pursuits undertaken in proximity to roosting bats; A lack of knowledge surrounding both the location and extent of the Bechstein's population, as well as how it utilises the wider landscape; Public access and disturbance; Mine instability; and Lack of protection for undesignated sites within proximity to the SAC which support populations of SAC bats.
Wye Valley and Forest of Dean Bat Sites / Safleoedd Ystlumod Dyffryn Gwy a	Annex II species that are a primary reason for selection of this site: <ul style="list-style-type: none"> 1303 Lesser horseshoe bat <i>Rhinolophus hipposideros</i>; and 1304 Greater horseshoe bat <i>Rhinolophus ferrumequinum</i>. 	<p>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</p>	<ul style="list-style-type: none"> Physical modification – resulting from structural deterioration, repair and renovation of caves, buildings, tunnels and mines; Public access/disturbance – creating a risk of disturbance to hibernating bats; and

⁴² <https://sac.jncc.gov.uk/site/UK0012584>

⁴³ <https://publications.naturalengland.org.uk/publication/6279810384920576>

⁴⁴ <https://publications.naturalengland.org.uk/publication/4564119772463104>

European Designated Site (inc. distance from Plan boundary)	Qualifying Features	Conservation Objectives	Key Sensitivities
Fforest y Ddena SAC ^{45, 46, 47} (13.6km)		<p>of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Habitat connectivity – breeding females and young can be particularly affected by changes in agricultural management within 4km.

⁴⁵ <https://publications.naturalengland.org.uk/publication/4907653293670400>

⁴⁶ <https://publications.naturalengland.org.uk/publication/6102625057505280>

⁴⁷ <https://sac.jncc.gov.uk/site/UK0014794>

5.4 Threats and Pressures to European Designated Sites

Based on Sections 5.2 and 5.3, the below states the threats and pressures identified on qualifying features of EDS from the Local Plan.

Under Article 17 of the Habitats Directive, member states are obliged to identify threats and pressures to qualifying features using a standard set of criteria. A threat is defined as an “*Activity expected to have an impact on a species/habitat type in the future*”, and a pressure is defined as an “*Activity impacting a species/habitat type during the reporting cycle*”.

Threats and pressures thought to be most relevant to the Local Plan, in the context of the qualifying features, are considered to be:

- Agriculture and forestry;
- Biological resource other than agriculture & forestry;
- Climate change;
- Disturbance due to human activities, e.g. recreational impact;
- Industrial operations and development;
- Invasive and introduced species;
- Energy production, including renewable sources, e.g. wind turbines;
- Waste services, including water management;
- Transportation and service infrastructure; and
- Urbanisation, residential and other commercial development.

5.5 List of In-Combination Plans and Projects

Both the EC Directive Article 6(3) and the Habitats Regulations require a competent plan-making authority to consider whether the Local Plan is likely to have significant effects, either individually or in-combination with other plans and project. The following section seeks to consider which ‘other plans and projects’ should be considered in the context of the Bristol Local Plan HRA.

Using the guidance and comparative examples mentioned previously (Section 2.7), adopted, emerging, approved and completed projects and plans sourced for the assessment of ‘in-combination’ effects are summarised within Table 4 below. Projects were identified through the Planning Inspectorate website using a 15km buffer to the Bristol Local Plan Area. Appendix A.4 provides a list of the plans and projects considered initially for in-combination effects. Those plans or projects not leading to a pathway for effect, i.e. no source, have been screened out from further in-combination consideration.

Table 4. Projects / Plan identified for ‘in-combination’ effects

Topic	Geography	Document	Adopted / Emerging	HRA Available
Local Plan	South Gloucestershire	Local Plan: Core Strategy (2013) Policies, Sites and Places Plan (2017)	Adopted	Yes ⁴⁸
		Local Plan Phase 2 Consultation – Urban, Rural and Key Issues	Emerging	No

⁴⁸ South Gloucestershire (2016). South Gloucestershire Local Plan, 2016 Sustainability Appraisal Report. Proposed Submissions: Policies, Sites and Places Plan. June, 2016. Accessed online: https://consultations.southglos.gov.uk/gf2.ti/f/762210/23419621.1/PDF/-/SD4_PSP_2016_Sustainability_Appraisal_Report_including_HRA_and_EIA.pdf

Topic	Geography	Document	Adopted / Emerging	HRA Available
	Bath and North East Somerset	Local Plan: Core Strategy (2014) Placemaking Plan (2017) Local Plan 2011-2029 Partial Update (2023)	Adopted	Yes ⁴⁹
		Local Plan 2022 to 2042: Launch Document	Emerging	No
	North Somerset	Council Local Plan: Core Strategy (2017) Sites and Policies Plan Part 1: Development Management Policies (2016) Sites and Policies Plan Part 2: Site Allocations Plan (2018).	Adopted	Yes ^{50 51 52}
		Preferred Options Consultation (2022)	Emerging	No
Transport Plan	West of England	Travelwest Joint Local Transport Plan 4 (2020 – 2036) ⁵³	Adopted	Yes ⁵⁴
		Travelwest West of England Local Cycling and Walking Infrastructure Plan 2020-2036 ⁵⁵	Adopted	Yes ⁵⁴
Minerals and Waste Plans	West of England	Joint Waste Core Strategy (2011)	Adopted	No
Water Resource Management Plans	Bristol Water	Water Resources Management Plan (2019) Bristol Water Drought Plan (2022)	Approved	Yes ^{56 57}
	Wessex Water	Water Resources Management Plan (2019) Wessex Water Drought Plan (2022) Drainage and Wastewater Management Plan (2023)	Approved	Yes ⁵⁸
	Severn Valley River Basin District	Severn River Basin Management Plan (2022)	Approved	Yes ⁵⁹
Coastal and Flood Risk Plans	Severn Estuary Coastal Group	Severn Estuary Shoreline Management Plan (SMP2) (2017) Severn Estuary Flood Risk Management Strategy (2013) Severn Estuary Strategy (2017)	Completed	Yes ⁶⁰
		Bristol Avon Flood Strategy (2021)	Emerging	No
	Bristol City Council	Bristol One City Plan (fourth iteration) (2023)	Completed	No

⁴⁹ Bath and North East Somerset Council (2021). Bath and North East Somerset Local Plan (Core Strategy / Placemaking Plan) 2011-2029, Partial Update. Draft Plan (Reg 19) Consultation 2021. The Habitats Regulations Assessment of the B&NES Local Plan Partial Update (Pre-Submission version). Accessed online: <https://beta.bathnes.gov.uk/sites/default/files/CD-SD008%20B%26NES%20LPPU%20HRA.pdf>

⁵⁰ <https://n-somerset.gov.uk/sites/default/files/2020-03/SD%202012%20habitat%20regulation%20assessment.pdf>

⁵¹ https://n-somerset.gov.uk/sites/default/files/2020-03/sd07%20habitat%20regulations%20assessment%20screening%20report%20june%202015_1.pdf

⁵² <https://n-somerset.gov.uk/sites/default/files/2020-03/SD22%20habitat%20regulations%20assessment.pdf>

⁵³ <https://travelwest.info/app/uploads/2020/05/JLTP4-Adopted-Joint-Local-Transport-Plan-4.pdf>

⁵⁴ https://www.westofengland-ca.gov.uk/wp-content/uploads/2021/10/JLTP4-C0156_ClearLead_WoE-LTP-HRA-Report_2.pdf

⁵⁵ LCWIP-West-of-England-Local-Cycling-and-Walking-Infrastructure-Plan-2020-2036-VJan21.pdf (travelwest.info)

⁵⁶ <https://f.hubspotusercontent30.net/hubfs/7850638/Site%20Assets/Offline%20docs/Bristol-Water-Final-WRMP-2019-August-2019-REDACTED.pdf>

⁵⁷ <https://7850638.fs1.hubspotusercontent-na1.net/hubfs/7850638/BW%20Final%20DP%202022%20HRA%20Report%20-%20Final%20REDACTED.pdf>

⁵⁸ <https://wwcorp-cms-pp.ytlukltd.co.uk/media/bm4lqybt/wrmp24-habitats-regulations-assessment.pdf>

⁵⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1112562/Severn_river_basin_management_plan_2022_HRA.pdf

⁶⁰ <https://severnestuariescoastalgroup.org.uk/wp-content/uploads/sites/4/2023/07/appendixpartbfinaldec2010-160323163656.pdf>

Topic	Geography	Document	Adopted / Emerging	HRA Available
		Bristol Local Flood Risk Management Strategy 2023	Completed	No
		West of England Climate Emergency Plan 2020	Adopted	No
Other	West of England	West of England Climate and Ecological Strategy and Action Plan 2023	Completed	No
		West of England Joint Green Infrastructure Strategy 2020-2030	Adopted	No
		Bristol City Council Climate Emergency Action Plan (2022 - 2025)	Adopted	No
	Bristol City Council	Bristol City Council Ecological Emergency Action Plan 2021 – 2025 (2021)	Adopted	No
		Bristol Biodiversity Action Plan. Bristol Biodiversity Partnership (2008)	Adopted	No
Projects	South Gloucestershire	Seabank 3 combined cycle gas turbines (CCGTs) The 1,140MW Seabank Power Station is a flexible gas-fired plant located in Hallen Marsh, Bristol. The station was built in two modules with 'Seabank 1' (755MW) opening in 2000 and 'Seabank 2' (385MW) opening in 2001. SSE has previously proposed to extend the plant with two additional CCGTs in a project known as Seabank 3. In late 2014 a decision was taken to pause the development of this project. This situation remains unchanged.	Development paused	No
		Avon Power Station 950 MW output Planning for the new gas fired power station comprising high efficiency combined cycle gas turbines of up to 1500MW, with additional fast response generators (peaking plant) providing a combined capacity of up to 1800MW was started in 2010. In 2018, Scottish Power, the company that had been planning to build Avon Power Station, sold its remaining gas-fired power stations and announced it was switching to 100% wind power. This situation remains unchanged.	Development paused	No
	Bristol City and North Somerset	Portishead Branch Line - MetroWest Phase 1 Rebuilding of the disused branch line between Portishead and Pill in North Somerset and reintroduction of passenger train services to Bristol and beyond.	Development Consent Order granted in November 2022.	Yes ⁶¹
	Bristol City and North Somerset	Hinkley Point C Connection Project Construction of a 400kV overhead electric line from West Somerset to Seabank, Avonmouth.	Development Consent Order granted in January 2016.	Yes ⁶²

⁶¹ <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR040011/TR040011-000472-6.25%20ES%20Volume%204%20Appendix%209.12%20Report%20to%20inform%20Habitats%20Regulations%20Assessment.pdf>

⁶² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/291300/LIT_7887_b828d6.pdf

Topic	Geography	Document	Adopted / Emerging	HRA Available
	Bristol City and South Gloucester	Avonmouth Severnside Enterprise Area Ecology Mitigation and Flood Defence Project to provide 17 km of upgraded flood defence and create 80 ha compensatory wetland marsh at Northwick and Hallen Marsh.	Construction ongoing	Yes ⁶³

⁶³ https://developments.southglos.gov.uk/online-applications/files/A2EE91650981AE23E3C9726749949656/pdf/PT18_2505_R3F-HABITATS_DIRECTIVE_-_SUPPORTING_FOR_APPENDIX_11-5802543.pdf

6. Step Four: Likely Significant Effects on European Designated Sites

6.1 Overview

As set out within the Methodological Guidance⁶, the following section sets out the potential effects and the likelihood and significance of those effects on EDS. Step Four is therefore based on the following:

- Consideration for potential effects of Local Plan policies or allocations on EDS; and
- The results of the initial screening exercise (as per Section 2.6) showing those individual policies and grouped allocations which are screened in for further assessment.

6.2 Potential Effects of the Local Plan

The identified threats and pressures from the Local Plan (Section 5.4) can be summarised into five main effects upon EDS. Potential effects of the Local Plan are summarised in Table 5. These effects are based in part upon the ZoI for potential pathways for effect (Appendix A.1), are used to determine the likelihood for significant effects; they are broadly kept similar to preceding HRAs for consistency.

Each of these potential effects from the Local Plan are assessed against the EDS to determine whether the Plan alone could give rise to an LSE noting the sites' conservation objectives, pathways for effect and with consideration for a precautionary approach.

Table 5. Summary of potential effects on EDS within the scope of this HRA

Effects on EDS	Description of Effects
Habitat loss / physical damage	Direct loss as a result of the Local Plan, including habitats within EDS and also on functionally linked land. Habitat loss includes the effects of fragmentation and severance as well.
Non-physical disturbance	An increase or addition of disturbance to qualifying features from sources such as noise, vibration and lighting, leading to potential impacts on the extent and/or function or qualifying features of EDS.
Changes to hydrological regime / water levels and quality	An increase in demand for water abstraction and wastewater generation resulting from the growth proposed in the Local Plan. Direct impacts on the hydrology or water quality of an area due to land-use change. These could potentially result in changes in quantity and quality of water quality at EDS.
Air pollution	A decrease in air quality associated with increases in traffic (and also industrial and commercial developments), as a result of the Local Plan; leading to impacts on the site's structure, function and to supporting processes.
Recreational disturbance	An increase or addition of disturbance to qualifying features, e.g. through recreation, as a result of the Local Plan. Leading to potential impacts on the extent and/or function or qualifying features of EDS.

6.2.1 Habitat Loss / Physical Damage

None of the proposed allocations in the Local Plan are directly within an EDS. Equally, it is considered unlikely that any future development proposals or policies within the Local Plan would result in development in the EDS; however, it is unknown whether Policy FR3 Bristol Avon Flood Strategy could involve works directly within an EDS. **Therefore, an LSE cannot be excluded on the basis of objective information, in relation to potential habitat loss and/or damage within an EDS (notably Severn Estuary SAC, SPA and Ramsar site, and/or Avon Gorge Woodlands SAC).**

There is also the possibility that proposed allocation sites may result in the loss of functionally linked land, which support qualifying features of the EDS. Functionally linked land may be located at some distance from the EDS, particularly with respect to the Severn Estuary SPA and Ramsar Site and in relation to bird species.

As outlined in Appendix A.1, there are a range of typical distances that wintering waterbirds will travel from their SPA to forage. Functionally linked land also supports bat species, and, as also outlined in Appendix

A.1, qualifying bat species use land surrounding SACs to forage, commute and use for seasonal migration into the wider landscape. North Somerset and Mendip Bats SAC guidance⁶⁴ provides further information on the strategies adopted for consideration in assessment.

Another effect as a result of habitat loss is that of habitat severance. Habitat severance can arise in relation to the fragmentation and creation of physical barriers to the movement of mobile species across the landscape, e.g. bats. Severance of habitat used by bats to forage and commute within the EDS and in the wider area can have a significant impact on the population of qualifying bat species. Appendix A.1 states the distances with which impacts on EDS are considered in relation to ZoI for qualifying bat species.

Associated with the loss of any functionally linked land is the specific consideration for the fragmentation of habitats; the loss of which hinders the movement of qualifying species. Project-level survey and assessment work would be required to establish the importance of an area to support qualifying features outside of an EDS.

As sea levels rise, the Severn Estuary coastal habitats are subject to ‘coastal squeeze’, whereby coastal defences prevent intertidal habitats from migrating landwards and they are therefore subsumed by the rising seas. Other documents provide an overarching strategy for the management of coastal defences and habitats in the Severn Estuary (Table 4), meaning that effects associated with coastal squeeze are most likely to act in-combination with the Local Plan.

Therefore, with consideration for loss of functionally linked land, in relation to qualifying bird features, an LSE cannot be excluded at this stage. In relation to bats and functionally linked land, noting that policy and allocation provisions may have the potential to affect qualifying bat features of the North Somerset and Mendip Bats SAC, an LSE cannot be excluded either.

6.2.2 Non-physical Disturbance

Disturbance effects can arise through noise, vibration and light e.g., construction-related development and operational activities. A precautionary buffer of 500m buffer is assumed to apply to all EDS, in order to account for the potential for any LSE from non-physical disturbance (Appendix A.1). Noting the potential for development within this buffer, owing to the proposed policies and allocations, there is a potential pathway for effect from non-physical disturbance. Without detailed information on the construction impacts and in the absence of mitigation, **an LSE cannot be excluded for Avon Gorge Woodlands SAC and Severn Estuary SAC, SPA and Ramsar site on the basis of objective information. It is also not possible to exclude LSE for non-physical disturbance from development and operational activities in relation to North Somerset and Mendip Bats SAC.**

Considering the distances that birds might travel to use functionally linked land, the 500m buffer is applied in addition to the distances specified in Appendix A.1. Chew Valley Lake SPA is located 4.4km from the Local Plan boundary and noting the impact risk zone for northern shoveler (Appendix A.4), **this SPA can be excluded from the potential for LSE from non-physical disturbance effects.**

6.2.3 Changes to Hydrological Regime / Water Levels and Quality

There is expected to be an increase in demand for water abstraction and wastewater generation resulting from the growth proposed in the Local Plan. This could potentially result in changes in hydrology and water quality at EDS. Depending on the qualifying features and particular vulnerabilities of the EDS, there could be a likely significant effect, for example due to changes in environmental or biotic conditions, water chemistry and the extent and distribution of preferred habitat conditions.

- The Severn River SAC, SPA and Ramsar site is directly hydrologically connected to the Local Plan area due to its location, but also through clean water abstraction (north of the county area) and wastewater discharge (directly and via tributaries which receive treated effluent). Changes in water quantity and quality through increased demand for water supply and increased wastewater discharges, which result in the degradation of habitats, are therefore considered an issue. Further, direct impacts of development as a result of policies or allocated sites are also considered an issue.

⁶⁴ North Somerset Council, 2018. North Somerset and Mendip Bats SAC Guidance on Development: Supplementary Planning Document.

- Chew Valley Lake SPA is indirectly hydrologically connected the Local Plan area due to abstraction to provide clean water supplies. Changes in water quantity through increased demand for water supply, which result in the degradation of habitats, are therefore considered an issue.
- The Avon Gorge Woodlands SAC is directly hydrologically connected to the River Avon under particular conditions (e.g. high tides, peak flows), which forms part of the Local Plan area. Changes in water levels during stormflows and high tide scenarios may be exacerbated by downstream impacts resulting from flood risk management schemes within the City of Bristol. This may result in the degradation of habitats due to saline intrusion and is therefore considered an issue.

Water supply pressures for the Local Plan area and any projected growth of the Local Plan are incorporated and managed via Bristol Water's Water Resources Management Plan⁶⁵, which is subject to environmental assessment (including HRA), and therefore, supply augmentation measures could be implemented to avoid LSE associated with excess abstraction from the Severn Estuary and Chew Valley Lake. As for water quality, nutrient neutrality was raised as a potential impact with a pathway linking to the Severn Estuary during the West of England Combined Authority's Joint Spatial Strategy HRA Scoping Report (2021)⁶⁶. Consultation on that document with the Environment Agency and Natural England confirmed that it is unlikely that this impact pathway will require further consideration due to the Severn Estuary WFD Status being 'Good' for nitrogen (the limiting nutrient). Further consultation on this HRA Scoping Report is planned to re-confirm that this is still the case having assessed any LSE of policies and plans (alone and in-combination) at the scale of the forthcoming Local Plan.

Any direct hydrological impacts on the Severn Estuary associated with land-take and development from new Local Plan policies or allocated sites are not anticipated due to the proximity. However, LSE cannot be ruled out regarding allocated site impacts on the River Avon and Frome, which are hydrologically connected to the Severn Estuary, until an appropriate assessment is undertaken. LSE to Avon Gorge and Woodlands SAC from changes to the River Avon's hydrological dynamics (e.g. flood peak dissipation) cannot be ruled out at this stage either. To summarise, until additional consultation and an appropriate assessment is undertaken to rule out any LSE on these hydrologically connected waterbodies, **there is a potential for LSE on the Severn Estuary SAC, SPA and Ramsar site, Chew Valley Lake SPA, and Avon Gorge Woodlands SAC.**

6.2.4 Air Pollution

Traffic generated air pollution reductions can impact on vegetation communities and habitats⁶⁷. In relation to EDS, this is most applicable to those which have qualifying features supported or featuring plant, soil and water habitats. Deposition of pollutants to the ground and vegetation can change the chemical condition of the soil, and then subsequently (or directly) alter plant health and productivity.

Roads within 200m of a designated site have the potential to contribute towards nitrogen deposition rates within EDS. Pollutant concentrations drop off rapidly from the road and beyond 200m any impact is considered negligible⁶⁸. Where increases in traffic volume are predicted, this 200m buffer needs to be applied to relevant roads to understand the potential impact on EDS.

Relevant roads would be considered as outlined in the West of England Combined Authority's Joint Spatial Plan Updated HRA 2018, and in line with highways guidance⁶⁸:

- Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more; or
- Heavy duty vehicle (HDV) flows will change by 200 AADT or more; or
- Daily average speed will change by 10 km/hr or more; or
- Peak hour speed will change by 20 km/hr or more; or

⁶⁵ [Water Resources \(bristolwater.co.uk\)](https://www.bristolwater.co.uk)

⁶⁶ [HRA_Scoping_report_May_20211.pdf \(westofengland-ca.gov.uk\)](https://www.westofengland-ca.gov.uk)

⁶⁷ Bobbink, R., Hornung, M., & Roelofs, J. G. M. (1998). The effects of air-borne nitrogen pollutants on species diversity in natural and semi-natural European vegetation. *Journal of Ecology*, 86(5), 717–738. <https://doi.org/doi:10.1046/j.1365-2745.1998.8650717>.

⁶⁸ Highways Agency (2007) Design Manual for Roads and Bridges: Volume 11, Section 3, Part 1.

- Road alignment will change by 5 m or more.

As outlined in the West of England Combined Authority's Joint Spatial Strategy HRA Scoping Report (2021), all relevant roads within 200m of relevant EDS would need to be assessed. Previous reporting indicated that the following roads below would need consideration:

- A4 and A369, past Avon Gorge Woodlands SAC;
- A368, near Chew Valley SPA;
- A38, near North Somerset and Mendip Bats SAC; and
- M5, M48, A403, near Severn Estuary SAC, SPA and Ramsar site.

Of these sites, North Somerset and Mendip Bats SAC and Chew Valley Lake SPA do not list air quality as a key sensitivity. Consequently, **LSE relating to air pollution are considered in relation to Avon Gorge Woodlands SAC, and Severn Estuary SAC, SPA and Ramsar site.**

The only other source of air pollution impacts would be from any proposed allocation or policy generating developments leading to an emission source. Any source of emission would need to be assessed as part of an air quality assessment undertaken for the planning process for individual developments, where relevant.

6.2.5 Recreational Disturbance

Disturbance of qualifying features through recreational pressure could result in displacement, e.g. for birds or bats, erosion and/or trampling of soils, plants and habitats, and associated impacts such as fire/vandalism. Increases in population, such as through increases in housing allocations, are likely to result in correlated increases in recreational visits at EDS, either alone or in-combination. The proposed residential development policies and allocations will generate a potential increase in recreational activity within EDS over the Local Plan lifespan. Given the increase in recreational activity, **LSE relating to recreational disturbance are considered in relation to Avon Gorge Woodlands SAC, Chew Valley Lake SPA and Severn Estuary SAC, SPA and Ramsar site.**

6.3 Screened-in Policies and Allocations

6.3.1 Policies

The main pathway for effect is likely to be from the impact of residential development and the recreational disturbance that may increase on EDS.

Table 6 below identifies the policies that have been screened into this assessment, due to the potential for significant effects alone, in line with the criteria set out in 2.6 and using the ZoI from Appendix A.1. If there was any uncertainty as to whether the policy could give rise to an LSE, the policy was screened in on a precautionary basis. During appropriate assessment, further detail would be needed to exclude the possibility of an adverse effect on the integrity of EDS.

Most of the policies have been screened out as they relate to policy changes which have no direct or indirect impact on EDS. Some policies, however, have been screened in – in the absence of mitigation – noting that they may constitute new sources of potential effects or alter existing sources by generating new pathways for effect. Whilst these policies are not certain to give rise to an LSE, for many there is uncertainty and in line with the precautionary principle, LSE cannot be excluded. Full results of screening for policies are outlined in Appendix A.2.

The main pathway for effect is likely to be from the impact of residential development and the recreational disturbance that may increase on EDS.

Table 6. Screened-in policies with Likely Significant Effects Alone.

Policy	Rationale
DS1: Bristol City Centre	Mixed use including residential development. Policy sets out that Bristol City Centre's role as a regional focus at the centre of a global city will be promoted and strengthened. Development that this location will include mixed uses for offices,

Policy	Rationale
	residential, retail, leisure, tourism, entertainment and arts and cultural facilities. No level of development is specified and no reference is made to specific allocated sites but policy would promote residential, mixed use and tourism development within the Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI. It could also result in increased levels of traffic along the A4 with potential for air pollution in relation to the Avon Gorge Woodlands SAC, which lies within 200m of this road.
DS2: Bristol Temple Quarter	Mixed use including residential development. Policy sets out Bristol Temple Quarter to be developed for a wide range of uses in a new city quarter. No level of development is specified and no reference is made to specific allocated sites, but policy would promote residential, mixed use and tourism development within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI.
DS3: St. Philip's Marsh	Mixed use including residential development. Policy sets out St. Philip's Marsh to be developed for mixed use, including the provision new homes in a regenerated city quarter. No level of development is specified and no reference is made to specific allocated sites, but policy would promote a mix of uses including residential development within Avon Gorge Woodlands SAC ZoI.
DS4: Western Harbour	Mixed use including residential development. Policy sets out the Western Harbour to be developed as a new city quarter with a diversity of land uses providing opportunities for new homes, workspace, leisure and services. The policy does not identify any specific site allocations but sets out that development will include at least 2,500 new homes as well as up to 500 student bedspaces. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI. Potential habitat fragmentation and disturbance impacts associated with North Somerset and Mendip Bats SAC also. There is also potential for increased traffic along the A4 to result with impacts relating to air pollution associated with the Avon Gorge Woodlands SAC.
DS5: Frome Gateway	Mixed use including residential development. Policy sets out the Frome Gateway to be developed as a new mixed-use neighbourhood. The policy does not identify any specific site allocations but sets out that development will include at least 1,000 new homes as well as up to 500 student bedspaces. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI.
DS6: Lawrence Hill	Mixed use including residential development. Policy sets out the Lawrence Hill area to be developed for a mix of residential, workspace and community uses. The policy does not identify any specific site allocations but sets out that development has potential for at least 2,500 homes. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI.
DS7: Central Fishponds	Mixed use including residential development. Policy sets out Central Fishponds to be developed for a mix of residential, workspace and community uses. The policy does not identify any specific site allocations but sets out that development will include at least 1,500 new homes. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI.
DS8: Central Bedminster	Mixed use including residential development. Policy sets out Central Bedminster to be developed for a mix of residential, workspace and community uses. The policy does not identify any specific site allocations but sets out that development will include at least 2,500 new homes as well as up to 1,000 student bedspaces. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI
DS9: Brislington	Mixed use including residential development. Policy sets out Brislington to be developed for a mix of residential, workspace and community uses. The policy does not identify any specific site allocations but sets out that development will include at least 350 new homes. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI.
DS10: Changes to the Green Belt in South Bristol	Residential development. Uncertain effects in relation to recreation; Land at Ashton Gate lies within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI. Land at Bedminster Down, Land adjacent to Elsbet Drive and Highridge and Land at Bath Road, Brislington lie wholly or partly within Avon Gorge Woodlands SAC ZoI. Uncertain effects in relation to bats with regards to off-site physical damage/ loss and non-physical disturbance through loss of foraging habitat and disruption to flight paths, and noise disturbance. Land at Elsbet Drive, Bishopsworth is also within 2km of a known lesser

Policy	Rationale
	horseshoe maternity roost considered to be functionally linked with the North Somerset and Mendip Bats SAC.
DS11: Development allocations – southwest Bristol	Residential development. Uncertain effects in relation to recreation; both development allocations set out are within Avon Gorge Woodlands SAC ZoI and Land west of Silbury Road, Ashton Vale is within Severn Estuary SPA, SAC and Ramsar site ZoI. Uncertain effects in relation to bats with regards to off-site physical damage/ loss and non-physical disturbance through loss of foraging habitat and disruption to flight paths, and noise disturbance. Land at Elsbet Drive, Bishopsworth is also within 2km of a known lesser horseshoe maternity roost considered to be functionally linked with the North Somerset and Mendip Bats SAC.
DS12: New neighbourhood – Bath Road, Brislington	Residential development. Policy sets out residential development allocation for removal from the Green Belt. Residential development partly within Avon Gorge Woodlands SAC ZoI.
DS13: Lockleaze	Residential development. Policy sets out Lockleaze to be developed for a mix of new homes. Does not identify specific site allocations but sets out the area for at least 1,200 new homes within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI.
DS14: Central Southmead	Residential development. Policy sets out Central Southmead to be developed for a mix of affordable homes, private housing and community use. Does not identify specific site allocations but sets out the area for at least 300 new homes within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI.
H1: Delivery of new homes	Policy sets the overall level of housing development for the city. An annual average minimum of 1,925 new homes is to be delivered by 2040. Potential for effects relating to disturbance, recreation, air pollution and water pollution depending on specific location of new development provided for by the policy. Policy sets out a magnitude of change that, no matter where it was located, it would be likely to have a significant effect on an EDS.
H5: Self-build and community-led housing	Residential development. Uncertain effects in relation to recreation; all six sites allocated through the policy for self-build, custom homebuilding and other community-led approaches lie within Avon Gorge Woodlands SAC ZoI.
E4: Industry and Distribution Areas	Policy retains the Industry and Distribution Areas and Maritime Industry Areas for industrial and warehouse uses. These are also identified through Appendix A of the plan. Ashton Vale Road, Ashton lies along the A3029 which leads to the A4 and passes within 200m of the Avon Gorge Woodlands SAC and the Severn Estuary SAC, SPA and Ramsar site. There is potential for increased commuting along this route to the site. Uncertain effects in relation to air pollution.
E5: Avonmouth Industrial Area and Bristol Port	Policy retains existing industrial areas for development and redevelopment for industrial, distribution, energy and port related uses and allocates sites for development of industrial and distribution uses at locations within 200m of Severn Estuary SPA, SAC and Ramsar site with potential for increased levels of traffic along the A403. There is potential for resultant effects relating to air pollution and disturbance.
T2: Transport infrastructure improvements	Uncertain effects in relation to disturbance. Policy sets out that land will be safeguarded to deliver a number of transport improvements. This includes rail links at Chittening Industrial Estate that would be within 500m of the Severn Estuary SPA, SAC and Ramsar site.
NZC5: Renewable energy development	Policy encourages the development of new renewable energy capacity and energy storage across the city, particularly in the Avonmouth Industrial and Bristol Port area. The Avonmouth Industrial and Bristol Port area is adjacent to the Severn Estuary SPA, SAC and Ramsar site. Uncertain effects in relation to disturbance to waterbirds.
FR3: Bristol Avon Flood Strategy	Policy requiring that flood risk from the River Avon will be addressed on a strategic basis consistent with the Bristol Avon Flood Strategy. The strategy aims, in part, to facilitate future flood defences. This could result in flood defence infrastructure within 500m of Avon Gorge Woodlands SAC and the Severn Estuary SPA, SAC and Ramsar site with potential for disturbance as a result.
SA1: Site allocations	Policy setting out retained development allocations for the Local Plan. The individual sites identified for allocation through the Local Plan have been subject to screening. Potential effects relating to disturbance and habitat degradation in relation to Avon Gorge Woodlands SAC.
BCAPSA1-SA6 Site allocations	Policy setting out retained development allocations for the Local Plan specifically in Harbourside, West End, St Michael's, Old City, St. Paul's & Stokes Croft and Redcliffe.

Policy	Rationale
	The individual sites identified for allocation through the Local Plan have been subject to screening. Potential effects relating to disturbance, habitat degradation and potential loss of functionally linked land and/or commuting habitat in relation to Seven Estuary SPA, SAC and Ramsar site, North Somerset and Mendip Bats SAC and Avon Gorge Woodlands SAC.
DA1: Proposed development allocations	Policy setting out the new proposed development allocations for the Local Plan. The individual sites identified for allocation through the Local Plan have been subject to screening. Potential effects relating to disturbance, habitat degradation and potential loss of functionally linked land and/or commuting habitat in relation to Seven Estuary SPA, SAC and Ramsar site, North Somerset and Mendip Bats SAC and Avon Gorge Woodlands SAC.

6.3.2 Site Allocations

This section includes a review of the site allocations featured in the new Local Plan update, screening the allocations for their risk of LSE to EDS alone. The full list of sites allocated for development can be found in Appendix A.3 and the location of the allocated sites are displayed in Figure 3

All site allocations have been screened in for appropriate assessment due to them having the potential for an LSE alone due to the type of development they are promoting and the proximity to EDS in terms of the agreed buffers associated with impacts (see Section 2.5). It is important to note that the risk of effects is dependent on how any particular development is implemented at the project stage. However, allocations both individually and collectively may contribute to an LSE, in the absence of objective information and detailed assessment on each part of the source-pathway-receptor model. Below outlines the justification for screening in all allocated sites for appropriate assessment.

Residential and residential-led mixed use (including green belt release)

Impacts from this type of development can occur not only from the short-term construction of said development but also the long-lasting change of land-use and activities operating. The effects grouped and outlined in Table 5 can be considered ‘urban effects’ (e.g. lighting and noise disturbance, increase in air pollution, invasive species, cat predation, unsanctioned waste disposal, crime, tourism pressure, increase in impermeable surface footprint etc), which can contribute to the risk of LSE to EDS via an impact pathway. In this case, the impact pathways for all of the allocated sites has been established, and, in the absence of detail around mitigation and the potential for new sources of effect to arise, therefore, all allocated sites have been screened-in as having a potential LSE to one or more of the EDS identified in Section 5.3.

This list of allocations (Appendix A.3) includes new proposed allocations and any chosen to be retained from the current Local Plan, including current green belt sites which are proposed to be released for residential and residential-led mixed use. At this stage, **these allocations are not certain to give rise to an LSE, for many there is uncertainty yet in line with the precautionary principle LSE cannot be excluded.**

Employment sites

Employment sites, split into industry and distribution areas, Avonmouth Site Allocations and maritime industry, have a select type of impacts (similar to ‘urban effects’), with added risks due to direct pollution to air, water or ground (e.g. chemicals, thermal, radioactivity), traffic and waste management. As above, these allocations are deemed to have an impact pathway for LSE to one or more EDS based on the buffers set out in Section 2.5. Therefore, in the absence of details around mitigation and the potential for new sources of effect to arise, **all allocated sites have been screened-in as having a potential LSE to one or more of the EDS identified in Section 5.3.**

6.3.3 Summary of Potential Likely Significant Effects on European Designated Sites.

The outcome of this screening assessment on each EDS is shown in Table 7. The results are based upon the identified source-pathway-receptor model, using the available information from the policies and site allocations proposed within the Local Plan. Table 7 below shows the potential for LSE from the Local Plan alone, without consideration for in-combination effects.

No differentiation is given to the likelihood of an LSE and any uncertainty is to be addressed at appropriate assessment, with consideration for further information and with the application of any mitigation measures.

Table 7. Screening conclusion of European Designated Sites

European Designated Site	Distance from Local Plan Boundary	Potential Effects				
		Habitat Loss / Physical Damage	Non-physical Disturbance	Changes to Hydrological Regime / Water Levels and Quality	Air Pollution	Recreational Disturbance
Avon Gorge Woodlands SAC	Within Local Plan Boundary	LSE	LSE	LSE	LSE	LSE
Severn Estuary SAC	Within Local Plan Boundary	LSE	LSE	LSE	LSE	LSE
Severn Estuary SPA	Within Local Plan Boundary	LSE	LSE	LSE	LSE	LSE
Severn Estuary Ramsar	Within Local Plan Boundary	LSE	LSE	LSE	LSE	LSE
Chew Valley Lake SPA	4.4 km	No LSE	No LSE	LSE	No LSE	LSE
North Somerset and Mendip Bats SAC	8.9 km	LSE	LSE	No LSE	No LSE	No LSE

7. Screening of ‘In-combination’ Effects

Sections 6.2 and 6.3 consider the requirement for an assessment of the potential for LSE from the Local Plan alone. As well as considering whether the allocations and/or policies proposed may result in an LSE, a requirement of the HRA process is to also consider whether the Local Plan is likely to have an in-combination effect with other plans and projects.

At this stage, without the inclusion of mitigation and a detailed assessment of in-combination effects, any other plans or projects must be considered as to whether they could impact an EDS with the Bristol Local Plan and change the conclusion of no LSE alone to an LSE in-combination.

Those projects or plans screened in for consideration of LSE in-combination are assessed further in Appendix A.5, where supporting information including a summary of in-combination effects is provided. The outcome of this exercise is to understand if any effect on EDS could give rise to an LSE, if an LSE is not already considered through alone assessment (Section 6).

Table 7 in Section 6 shows that no LSE were identified for Chew Valley Lake SPA and North Somerset and Mendip Bat SAC for certain potential effects and therefore these sites are the focus of this section. From Appendix A.5, in-combination effects could potentially arise on Chew Valley Lake SPA via: changes to water levels in relation water abstraction across plan areas, leading to habitat loss and/or degradation; and recreational impacts in relation to increased housing allocations and visitor pressure. The appendix also shows that in-combination effects could potential arise on North Somerset and Mendip Bats SAC from a number of plans and projects. These effects have been identified in relation to the potential for loss of functionally linked land required for foraging and commuting bats, and/or non-physical disturbance from development.

The outcome of this in-combination process is the change of no LSE to LSE for Chew Valley Lake SPA for habitat loss / physical damage (Table 8). LSEs have already been identified for North Somerset and Mendip Bats SAC in relation to habitat loss / physical damage and non-physical disturbance when considering the Local Plan in isolation. Therefore, the in-combination process does not result in any change to the LSE reported for this EDS.

Table 8. Summary of in-combination effects on European Designated Sites

European Designated Site	Distance from Local Plan Boundary	Potential Effects					
		Habitat Loss / Physical Damage		Non-physical Disturbance	Changes to Hydrological Regime / Water Levels and Quality	Air Pollution	Recreational Disturbance
Avon Gorge Woodlands SAC	Within Local Plan Boundary	LSE		LSE	LSE	LSE	LSE
Severn Estuary SAC	Within Local Plan Boundary	LSE		LSE	LSE	LSE	LSE
Severn Estuary SPA	Within Local Plan Boundary	LSE		LSE	LSE	LSE	LSE
Severn Estuary Ramsar	Within Local Plan Boundary	LSE		LSE	LSE	LSE	LSE
Chew Valley Lake SPA	4.4 km	No LSE	In - combination: LSE	No LSE	LSE	No LSE	LSE

European Designated Site	Distance from Local Plan Boundary	Potential Effects				
		Habitat Loss / Physical Damage	Non-physical Disturbance	Changes to Hydrological Regime / Water Levels and Quality	Air Pollution	Recreational Disturbance
North Somerset and Mendip Bats SAC	8.9 km	LSE	LSE	No LSE	No LSE	No LSE

8. Conclusions

This section outlines a summary of the findings of this HRA Screening Report for the Bristol Local Plan Pre-Submission Publication Version of the Local Plan.

8.1 Local Plan Policies

The Local Plan policies proposed and screened in for appropriate assessment due to their potential for LSE on EDS alone can be seen in Table 6. This consists of 24 policies which promote the development of residential and mixed-use sites, industry and distribution areas, and maritime industry areas; set targets and strategies for housing levels, transport improvements, renewable energy development and flood risk management; and propose site allocations across the Local Plan area.

It has been determined that these 24 policies have the potential to have LSE on one or more EDS due to their geography in terms of the ZoI set out in Appendix A.1. An appropriate assessment will need to be undertaken to consider additional detail of the policies and any mitigation proposed to determine if any LSE from the policies will undermine the integrity of an EDS' conservation objectives, and therefore, be subject to the derogations process.

8.2 Local Plan Site Allocations

The new and retained Local Plan site allocations proposed and screened in for appropriate assessment due to their potential LSE on EDS alone can be seen in Appendix A.3. All 248 allocated sites promote development across the Local Plan area, including: residential and residential-led mixed use development (including green belt release of three sites for this use); industry and distribution areas; maritime industry areas; and Avonmouth Site Allocations.

It has been determined that these 248 site allocations have the potential to have LSE on EDS due to their geography and the types of impact anticipated from the activities that may arise through the delivery of the sites to their allocated use. As there are impact pathways to one or more EDS, an appropriate assessment needs to be undertaken to consider additional detail of the allocations and any mitigation proposed to determine if any assumed LSE will undermine the integrity of an EDS' conservation objectives, and therefore, be subject to the derogations process.

8.3 Effects relating to EDS

Considering the policies and site allocations proposed in the Local Plan alone, LSE are identified in relation to the following EDS:

- Avon Gorge Woodlands SAC;
- Severn Estuary SAC;
- Severn Estuary SPA;
- Severn Estuary Ramsar;
- Chew Valley Lake SPA; and
- North Somerset and Mendip Bats SAC.

Table 7 in Section 6 shows the potential for LSE from the Local Plan alone, grouped by effect type.

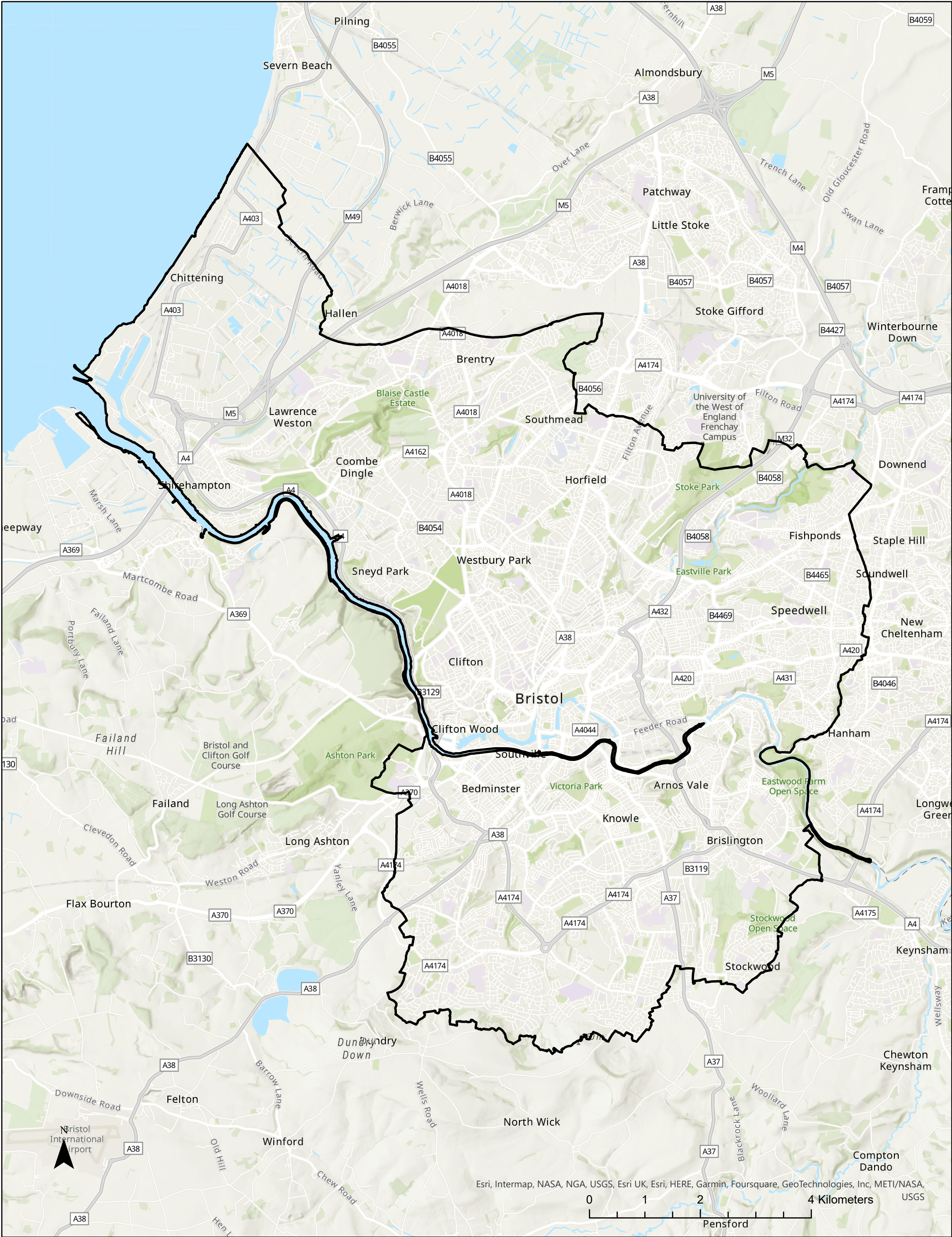
8.4 Likely Significant Effects In-Combination

Regarding in-combination effects of the Local Plan with other plans or projects, it is not possible to rule out the risk of potential LSE on some EDS in-combination. Therefore, of the 38 plans and projects identified with for potential in-combination effects using the method outlined in Section 5, 31 have been screened-in for further assessment due to pathways (direct or indirect) for LSE on EDS within the Local Plan area.

It was identified that LSE could occur on Chew Valley Lake SPA in-combination with other plans or projects. This conclusion does not change the alone screening assessment for other EDS. In-combination effects will need to be assessed at appropriate assessment, with further detail and consideration of mitigation.

Figures

Figure 1. Local Plan Boundary



Legend

 City of Bristol LPA Boundary

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East West Building, 1 Tollhouse Hill,
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T +44 0115 948 4711
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Draft	24/07/23	JB	AC	DG
Rev	Date	By	Chkd	Appd

Project Title

Bristol City Council HRA

Drawing Title

Local Plan Boundary

Scale at A3

1:60,000

Role

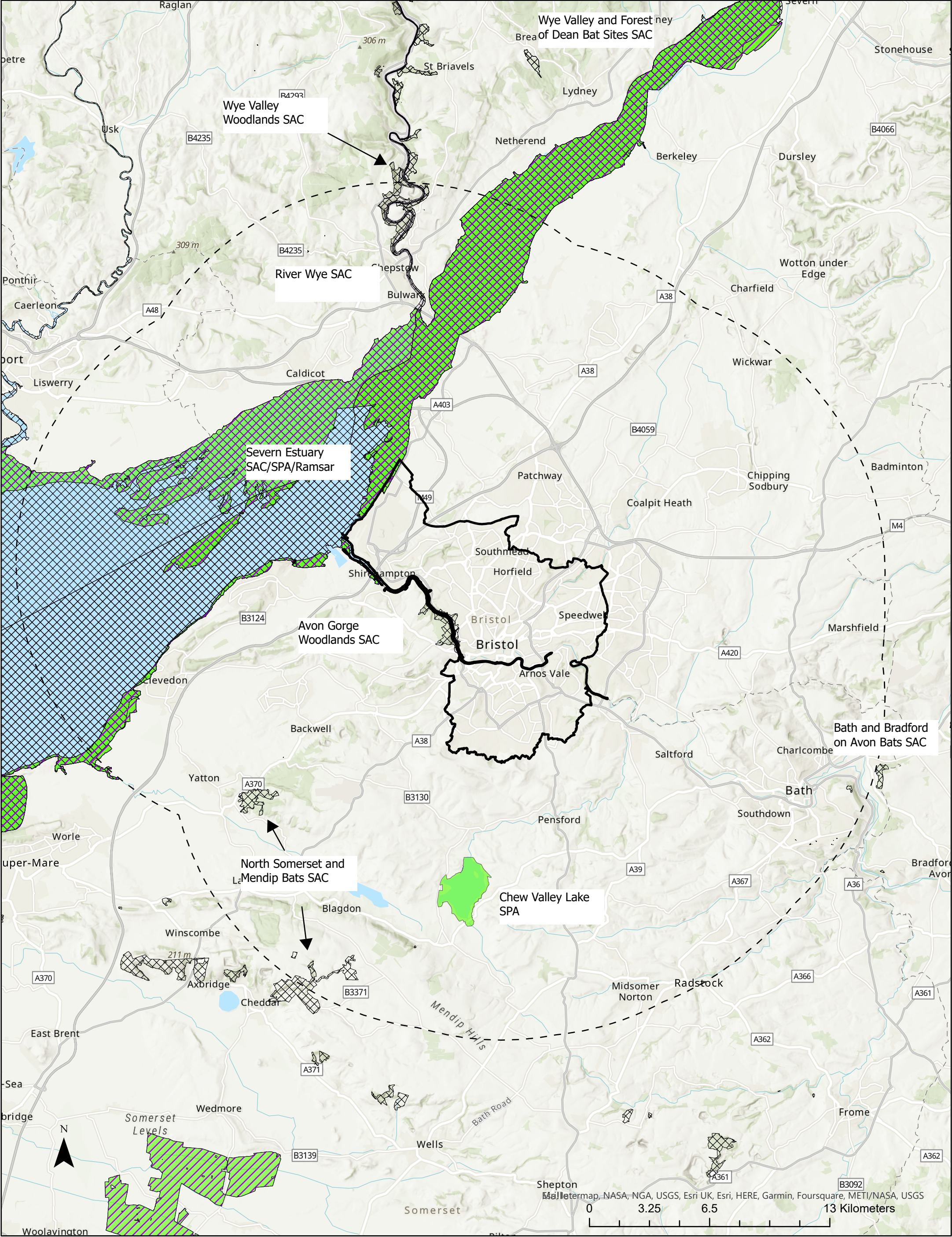
Suitability

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Drawing Number

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Figure 2. European Designated Sites Map



Legend

- City of Bristol LPA Boundary
- LPA Boundary 15km Buffer
- Ramsar Sites
- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)

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T +44 0115 948 4711
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Drawing Title

European Designated
Sites

Scale at A3

1:180,000

Role

Suitability

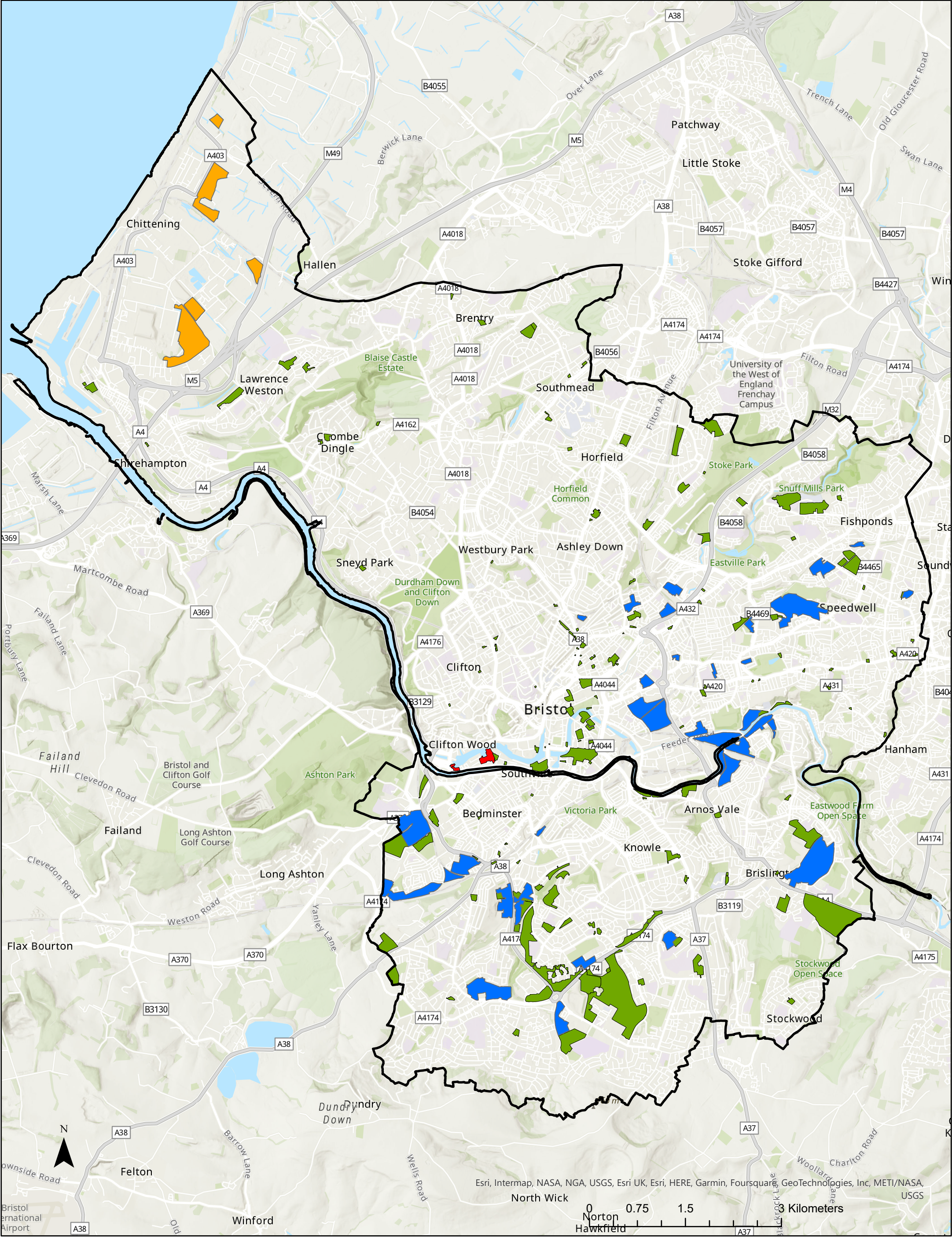
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Figure 3. Local Plan Site Plan Allocations



Legend

- City of Bristol LPA Boundary
- Maritime Industry Areas
- Industry and Distribution Areas
- Avonmouth Site Allocations
- Residential and Mixed-use

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Site Allocations

Scale at A3

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Role

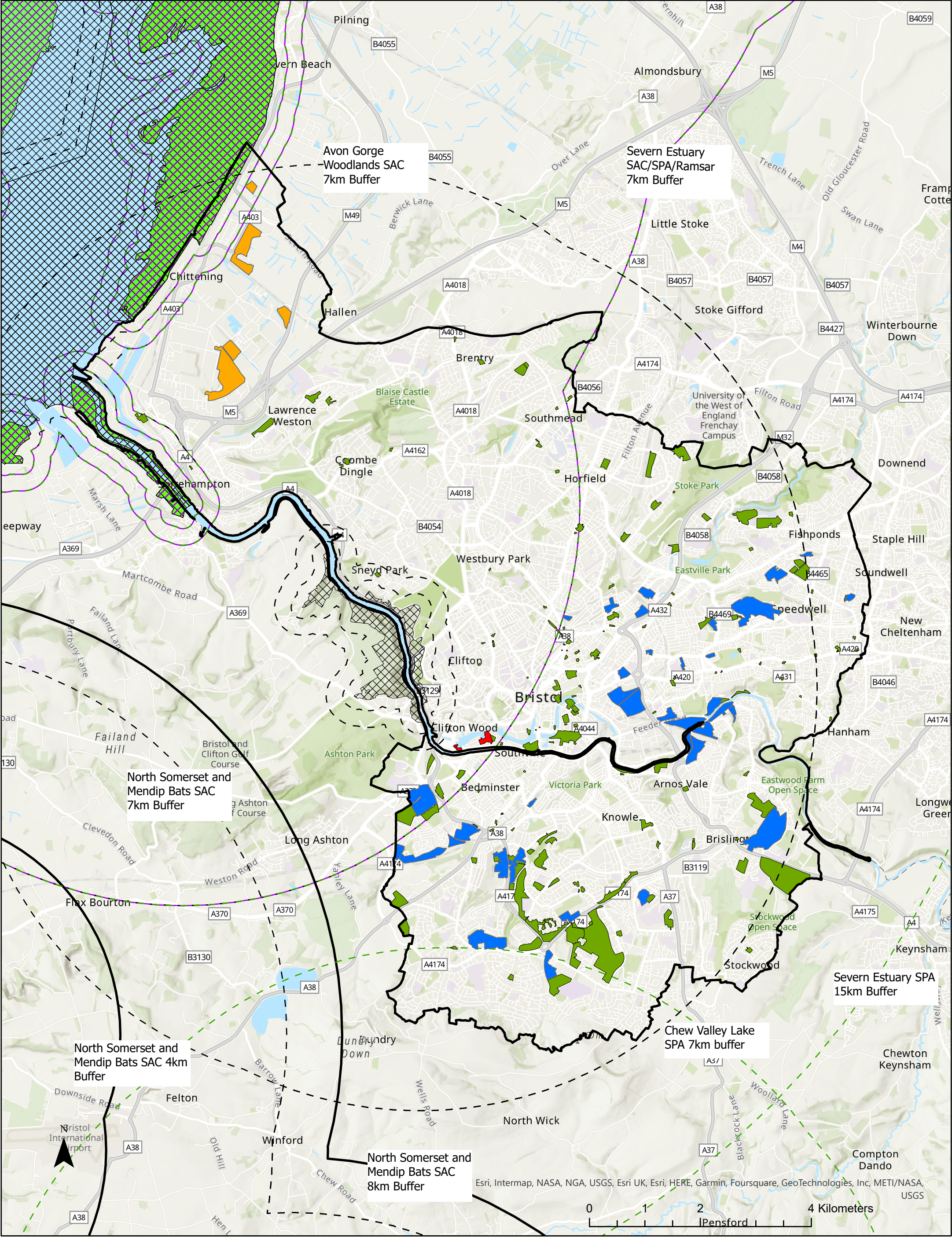
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Figure 4. Map of Zones of Influence for Potential Impacts to Qualifying Features



- Legend**
- City of Bristol LPA Boundary
 - Maritime Industry Areas
 - Industry and Distribution Areas
 - Avonmouth Site Allocations
 - Residential and Mixed-use
 - Ramsar Sites

- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- SPA Buffers
- North Somerset and Mendip Bats SAC Buffers
- SAC Buffers
- Ramsar Buffers

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East West Building, 1 Tollhouse Hill,
Nottingham, NG1 5AT
T +44 0115 948 4711
www.arup.com

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Project Title
Bristol City Council HRA

Drawing Title
**Zones of Influence for
Potential Impacts to
Qualifying Features**

Scale at A3
1:60,000

Role

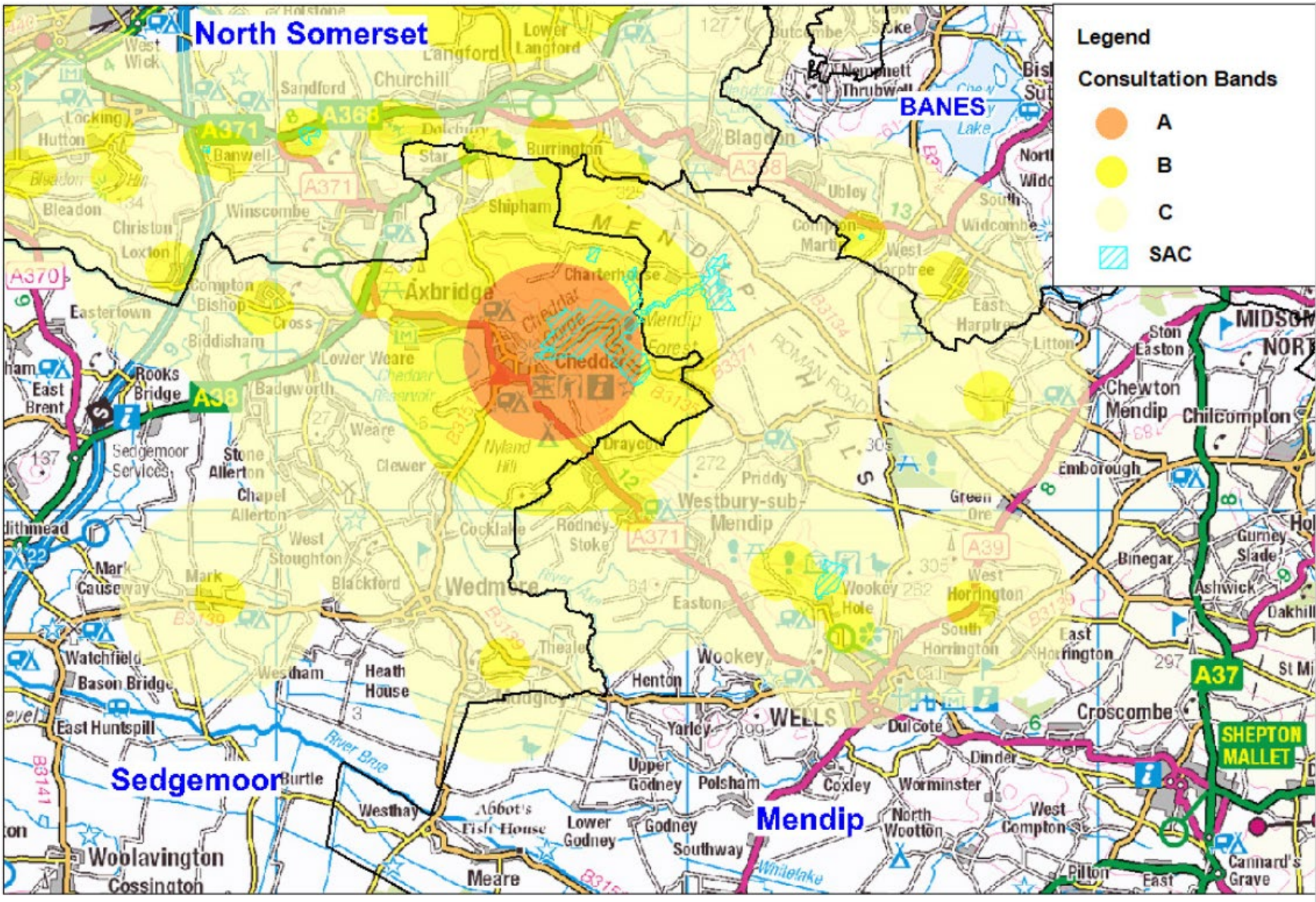
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Figure 5. North Somerset and Mendip Bats SAC Consultation Zones



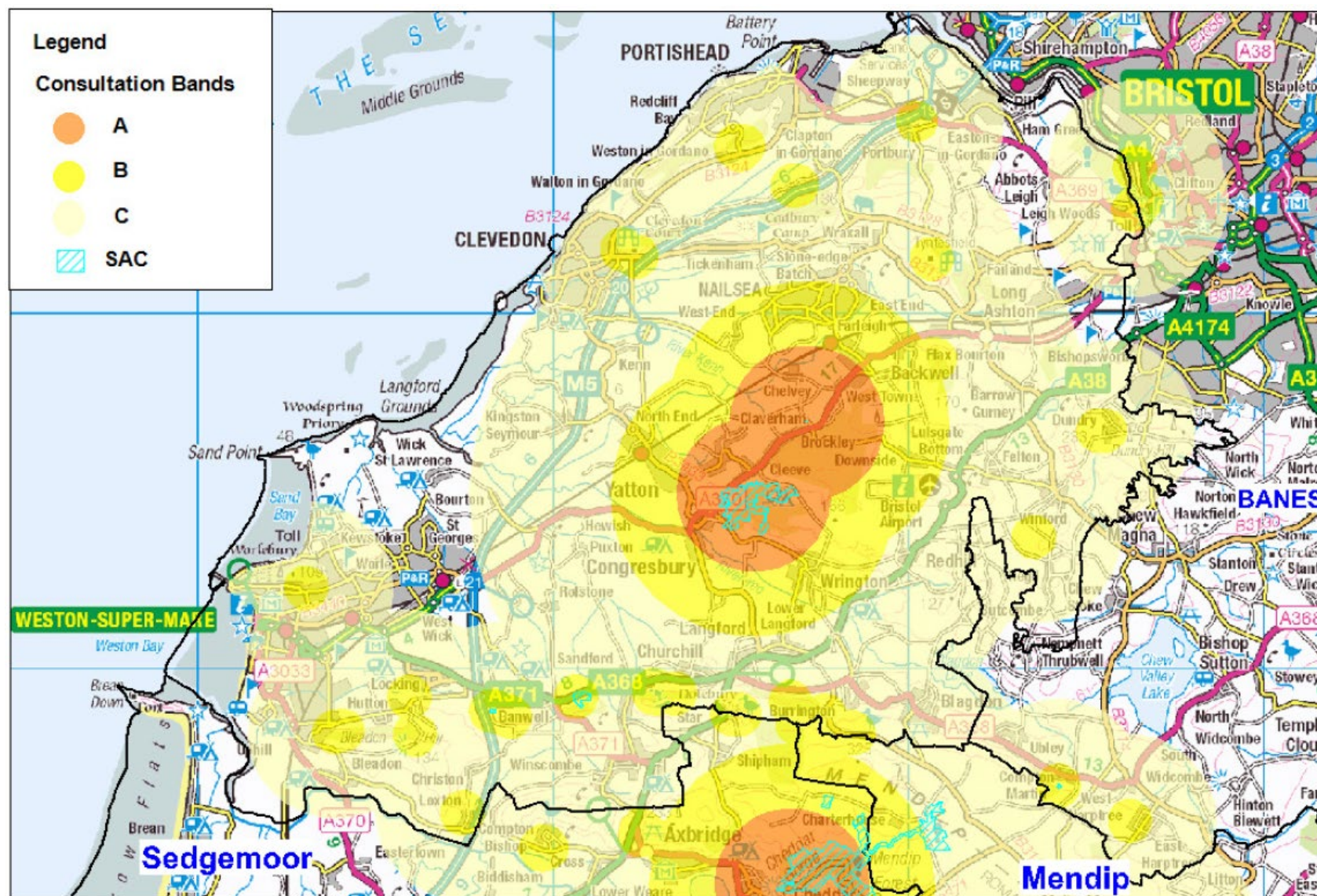
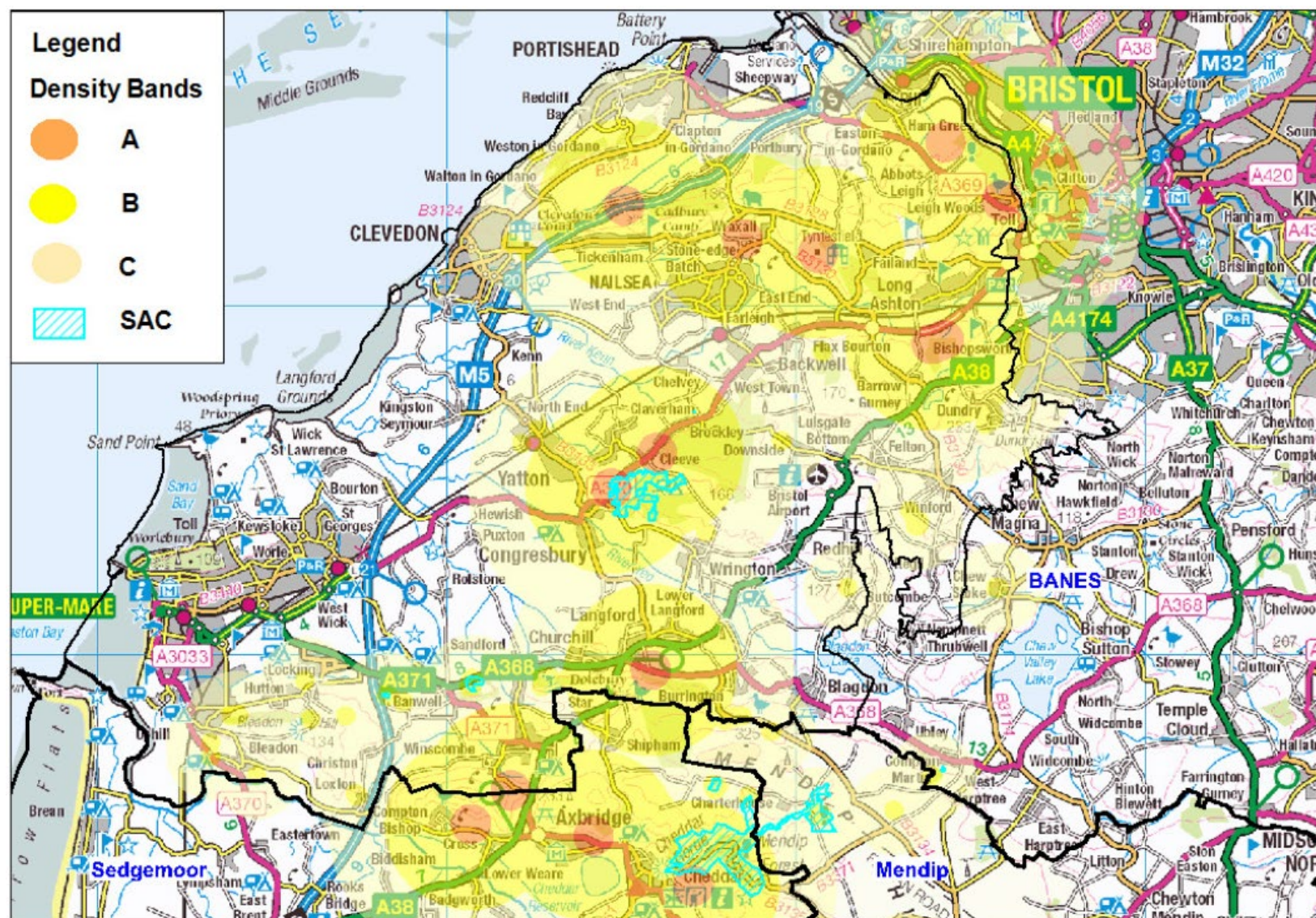
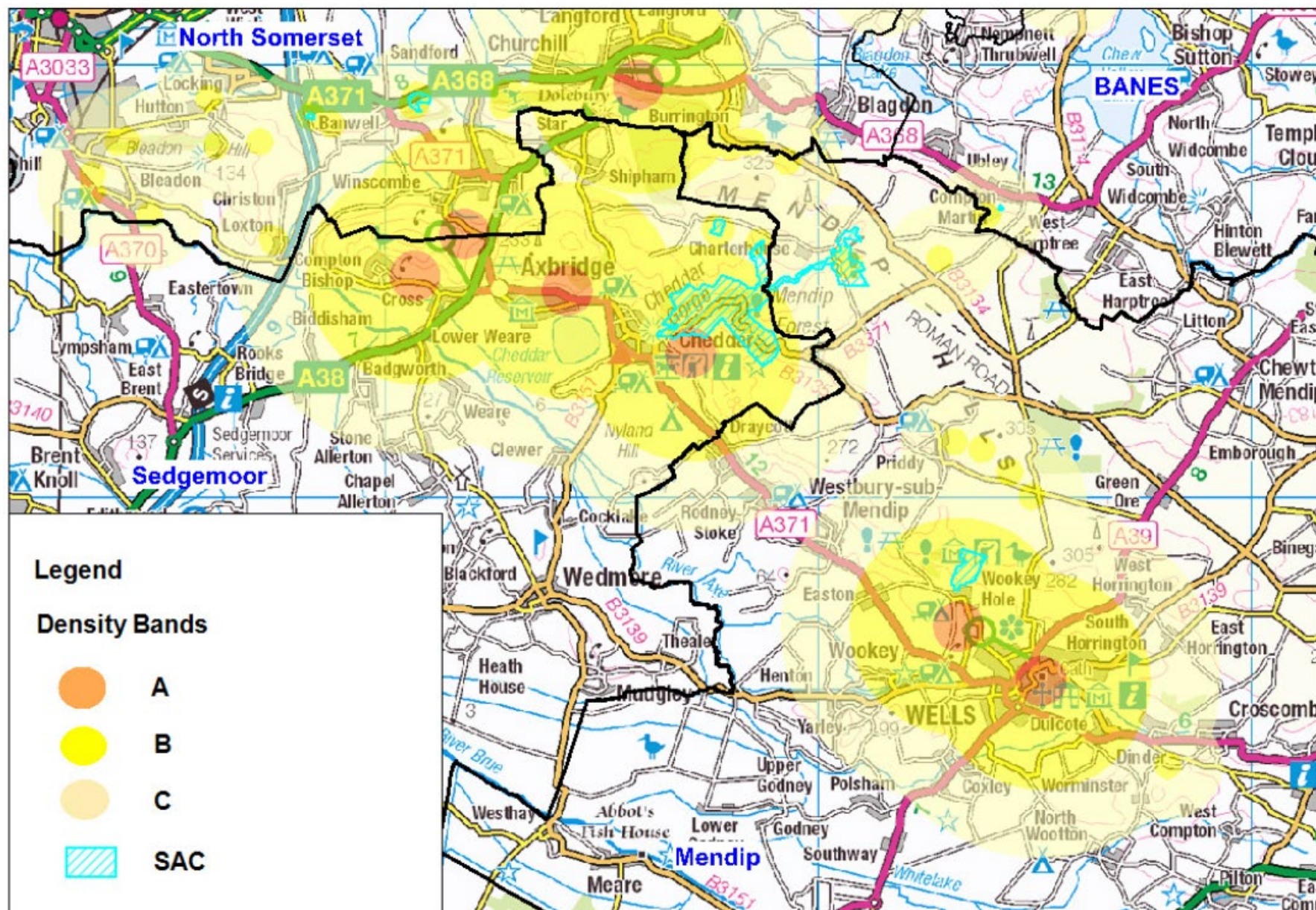


Figure 6. North Somerset and Mendip Bats SAC Lesser Horseshoe Bats Density Bands.





Appendix A

A.1 Zones of Influence for Potential Impacts to Qualifying Features

Receptor		Zone of Influence Distances	Reference
Impact Risk Zones for designated bird features and in relation to foraging distances	Wintering birds (except wintering waders and grazing wildfowl; wigeon and geese)	Up to 500m	West of England Combined Authority's Joint Spatial Strategy HRA Scoping Report (2021) Natural England (2019). Impact Risk Zones Guidance Summary Sites of Special Scientific Interest Notified for Birds. Version 1.1
	Dabbling ducks such as teal, mallard and gadwall	Home ranges could extend beyond site boundaries at coastal sites, but less likely to do so at inland water bodies.	
	Wintering white-fronted goose, greylag goose, Bewick's swan, whooper swan & wintering bean goose	Maximum foraging distance is 10km.	
	Wintering lapwing and golden plover	Maximum foraging distance is 15-20km. Golden plover can forage up to 15km from a roost site within a protected site. Lapwing can also forage similar distances. Both species use lowland farmland in winter and it is difficult to distinguish between designated populations and those present within the wider environment. Developments affecting functionally linked land more than 10km from the site are unlikely to impact significantly on designated populations.	
Bat roosts		Up to 8km, in relation to the potential presence of horseshoe bats.	North Somerset Council, 2018. North Somerset and Mendip Bats SAC Guidance on Development: Supplementary Planning Document.
		Up to 4km, in relation to fragmentation and severance of habitat used by bats	As previously agreed with Natural England and as per the West of England Joint Spatial Plan Updated Habitats Regulations Assessment 2018.
All applicable features of EDS, in relation to risk of localised effect of air pollution from increased traffic use		Up to 200m	West of England Combined Authority's Joint Spatial Strategy HRA Scoping Report 2021

Receptor	Zone of Influence Distances	Reference
		Highways Agency (2007) Design Manual for Roads and Bridges: Volume 11, Section 3, Part 1.
All applicable features of EDS, in relation to effect of non-physical disturbance, e.g. construction noise, vibration and lighting.	Up to 500m	West of England Joint Spatial Plan Updated Habitats Regulations Assessment 2018.
All applicable features of EDS, in relation to risk of recreational disturbance	Up to 7km	West of England Combined Authority's Joint Spatial Strategy HRA Scoping Report 2021

A.2 Screening of Policies

Title	Policy	Rationale	Assessment Category	Screened In / Out?
Foreword		General statement on Local Plan.	A	Screened out
About the Local Plan Review	What is the local plan and why is it being reviewed	General statement on Local Plan.	A	Screened out
	Preparation process	General statement on Local Plan.	A	Screened out
	Response to consultation and engagement	General statement on Local Plan.	A	Screened out
	About the publication version	General statement on Local Plan.	A	Screened out
	How can I make representations	General statement on Local Plan.	A	Screened out
	What will happen to my representations	General statement on Local Plan.	A	Screened out
	Next stages	General statement on Local Plan.	A	Screened out
Vision – Building a Better Bristol	Vision and aims	The vision and aims describe the overarching approach which sets the tone for policies. They will not result in new development by themselves.	A	Screened out
Publication draft Local Plan Policies	How the policies are structured	Policy relates to general statement on Local Plan.	A	Screened out
1 Development Strategy				
Central Bristol	DS1: Bristol City Centre	Uncertain effects in relation to recreation and air pollution. Policy sets out that Bristol City Centre's role as a regional focus at the centre of a global city will be promoted and strengthened. Development at this location will include mixed uses for offices, residential, retail, leisure, tourism, entertainment and arts and cultural facilities. No level of development is specified and no reference is made to specific allocated sites, but policy would promote residential, mixed use and tourism development within the Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI. It could also result in increased levels of traffic along the A4 with potential for air pollution in relation to the Avon Gorge Woodlands SAC, which lies within 200m of this road.	I	Screened in
	DS2: Bristol Temple Quarter	Uncertain effects in relation to recreation. Policy sets out Bristol Temple Quarter to be developed for a wide range of uses in a new city quarter. No level of development is specified and no reference is made to specific allocated sites, but policy would	I	Screened in

Title	Policy	Rationale	Assessment Category	Screened In / Out?
		promote residential, mixed use and tourism development within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI.		
	DS3: St. Philip's Marsh	Uncertain effects in relation to recreation. Policy sets out St. Philip's Marsh to be developed for mixed use, including the provision new homes in a regenerated city quarter. No level of development is specified and no reference is made to specific allocated sites but policy would promote a mix of uses including residential development within Avon Gorge Woodlands SAC ZoI.	I	Screened in
	DS4: Western Harbour	Uncertain effects in relation to recreation and air pollution. Policy sets out the Western Harbour to be developed as a new city quarter with a diversity of land uses providing opportunities for new homes, workspace, leisure and services. The policy does not identify any specific site allocations but sets out that development will include at least 2,500 new homes as well as up to 500 student bedspaces. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI. Potential habitat fragmentation and disturbance impacts associated with North Somerset and Mendip Bats SAC also. There is also potential for increased traffic along the A4 to result with impacts relating to air pollution associated with the Avon Gorge Woodlands SAC.	I	Screened in
	DS5: Frome Gateway	Uncertain effects in relation to recreation. Policy sets out the Frome Gateway to be developed as a new mixed-use neighbourhood. The policy does not identify any specific site allocations but sets out that development will include at least 1,000 new homes as well as up to 500 student bedspaces. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI.	I	Screened in
East Bristol	DS6: Lawrence Hill	Uncertain effects in relation to recreation. Policy sets out the Lawrence Hill area to be developed for a mix of residential, workspace and community uses. The policy does not identify any specific site allocations but sets out that development has potential for at least 2,500 homes. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI.	I	Screened in
	DS7: Central Fishponds	Uncertain effects in relation to recreation. Policy sets out Central Fishponds to be developed for a mix of residential, workspace and community uses. The policy does not identify any specific site allocations but sets out that development will include at least 1,500 new homes. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI.	I	Screened in
South Bristol	DS8: Central Bedminster	Uncertain effects in relation to recreation. Policy sets out Central Bedminster to be developed for a mix of residential, workspace and community uses. The policy does not identify any specific site allocations but sets out that development will include at least 2,500 new homes as well as up to 1,000 student bedspaces. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI.	I	Screened in

Title	Policy	Rationale	Assessment Category	Screened In / Out?
	DS9: Brislington	Uncertain effects in relation to recreation. Policy sets out Brislington to be developed for a mix of residential, workspace and community uses. The policy does not identify any specific site allocations but sets out that development will include at least 350 new homes. The policy supports new mixed-use development including residential within Avon Gorge Woodlands SAC ZoI.	I	Screened in
	Hengrove and Knowle West	Sites set out in the Hengrove and Whitchurch Park Neighbourhood Development and Knowle West Regeneration Framework referred to but not allocated by the plan.	C	Screened out
	DS10: Changes to the Green Belt in South Bristol	Uncertain effects in relation to recreation. Uncertain effects in relation to bats with regards to off-site physical damage/ loss and non-physical disturbance through loss of foraging habitat and disruption to flight paths, and noise disturbance. Policy sets out residential development allocations for removal from the Green Belt. Land at Ashton Gate lies within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI. Land at Bedminster Down, Land adjacent to Elsberty Drive, Bishopsworth and Land at Bath Road, Brislington lie wholly or partly within Avon Gorge Woodlands SAC ZoI. Land at Elsberty Drive, Bishopsworth is also within 2km of a known lesser horseshoe maternity roost considered to be functionally linked with the North Somerset and Mendip Bats SAC.	I	Screened in
	DS11: Development allocations – southwest Bristol (Silbury Rd and Elsberty Drive)	Uncertain effects in relation to recreation. Uncertain effects in relation to bats with regards to off-site physical damage/ loss and non-physical disturbance through loss of foraging habitat and disruption to flight paths, and noise disturbance. Policy sets out residential development allocations for removal from the Green Belt. Both residential development allocations set out are within Avon Gorge Woodlands SAC ZoI and Land west of Silbury Road, Ashton Vale is within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI. Land at Elsberty Drive, Bishopsworth is also within 2km of a known lesser horseshoe maternity roost considered to be functionally linked with the North Somerset and Mendip Bats SAC.	I	Screened in
	DS12: New neighbourhood – Bath Road, Brislington	Uncertain effects in relation to recreation Policy sets out residential development allocation for removal from the Green Belt. Residential development partly within Avon Gorge Woodlands SAC ZoI.	I	Screened in
North Bristol	DS13: Lockleaze	Uncertain effects in relation to recreation. Policy sets out Lockleaze to be developed for a mix of new homes. Does not identify specific site allocations but sets out the area for at least 1,200 new homes within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI.	I	Screened in
	DS14: Central Southmead	Uncertain effects in relation to recreation.	I	Screened in

Title	Policy	Rationale	Assessment Category	Screened In / Out?
		Policy sets out Central Southmead to be developed for a mix of affordable homes, private housing and community use. Does not identify specific site allocations but sets out the area for at least 300 new homes within Avon Gorge Woodlands SAC ZoI and Severn Estuary SPA, SAC and Ramsar site ZoI.		
	Lawrence Weston	Sites set out in the Lawrence Weston Neighbourhood Development Plan referred to but not allocated by the plan.	C	Screened out
2 Infrastructure, Developer Contributions and Social Value				
	IDC1: Development contributions and CIL	Sets out how the provision and delivery of infrastructure will be supported within the city. Policy that cannot lead to development or other change.	F	Screened out
	SV1: Social value	Sets out how development should support social inclusion and deliver social value through the preparation of an appropriate strategy. Policy that cannot lead to development or other change.	F	Screened out
3 Urban Living: Making the best use of the city's land				
	UL1: Effective and efficient use of land	Seeks to promote more efficient land use and identifies areas for higher levels of density. Policy that cannot lead to development or other change.	F	Screened out
	UL2: Residential densities	Policy sets the minimum level of acceptable density for the city and specific areas of the city. Policy that cannot lead to development or other change.	F	Screened out
4 Housing				
	H1: Delivery of new homes	Potential for effects relating to disturbance, recreation, air pollution and water pollution depending on specific location of new development provided for by the policy. Policy sets the overall level of housing development for the city. An annual average minimum of 1,925 new homes is to be delivered by 2040. Policy sets out a magnitude of change that, no matter where it was located, it would be likely to have a significant effect on an EDS.	I	Screened in
	AH1: Affordable housing provision	Policy sets the requirement for affordable housing that will contribute to the overall level of housing delivered in the city. Policy that cannot lead to development or other change.	F	Screened out
	H2: Preventing the loss of residential accommodation	Policy sets the approach to preventing losses of existing homes and would not lead to new development. Policy listing general criteria for testing the acceptability / sustainability of proposals.	B	Screened out
	H3: Making the best use of site allocations	Policy sets the approach to protecting allocations for housing and mixed-use development. Policy listing general criteria for testing the acceptability / sustainability of proposals.	B	Screened out
	H4: Housing type and mix	Policy sets the approach in relation to achieving an appropriate housing mix.	B	Screened out

Title	Policy	Rationale	Assessment Category	Screened In / Out?
		Policy listing general criteria for testing the acceptability / sustainability of proposals.		
	H5: Self-build and community-led housing	Uncertain effects in relation to recreation. Of the four sites allocated through the policy for self-build, custom homebuilding and other community-led approaches, only the site at Cousins Lane, St. George does not lie within Avon Gorge Woodlands SAC ZoI.	I	Screened in
	H6: Homes in multiple occupation and other shared housing	Policy listing general criteria for testing the acceptability / sustainability of proposals for homes in multiple occupation.	B	Screened out
	H7: Managing the development of purpose-built student accommodation	Policy listing general criteria for testing the acceptability / sustainability of proposals. Policy refers to existing allocations and allocations set out through other policies in the plan.	B	Screened out
	H8: Older peoples' and other specialist needs housing	Policy listing general criteria for testing the acceptability / sustainability of proposals for older people's and specialist needs housing.	B	Screened out
	BTR1: Build to Rent housing	Policy listing general criteria for testing the acceptability / sustainability of proposals for Build to Rent housing.	B	Screened out
	H9: Accessible homes	Policy listing general criteria for testing the acceptability / sustainability of proposals for accessible housing.	B	Screened out
	H10: Planning for traveller sites	Policy listing general criteria for testing the acceptability / sustainability of proposals for travellers sites.	B	Screened out
	Boat dwellers	General statement on Local Plan.	A	Screened out
	Vehicle dwellers	General statement on Local Plan.	A	Screened out
5 Economy				
	E1: Inclusive economic development	Policy listing general criteria for testing the acceptability / sustainability of proposals to ensure that development proposals contribute to enabling access to employment.	B	Screened out
	E2: Economic development strategy	Policy mainly refers to allocations set out through other policies in the plan (i.e. Policy E5 sets out the employment allocations at Avonmouth industrial area). The site set out for allocation for employment development at Glenfrome Road, Eastville lies within the Avon Gorge Woodlands SAC ZoI but given that it is not allocated for residential development, the potential for recreational pressures to result is not identified.	C, G	Screened out
	E2A: New workspace within mixed-use development	Policy listing general criteria for testing the acceptability / sustainability of proposals for redevelopment of sites and premises currently or recently used for business, industry or distribution in relation the provision for new workspaces.	B	Screened out

Title	Policy	Rationale	Assessment Category	Screened In / Out?
	E3: Location of office development	Policy refers to support for office development at various locations of the city as set out through other policies in the plan.	C	Screened out
	E4: Industry and Distribution Areas	Uncertain effects in relation to air pollution. Policy retains the Industry and Distribution Areas and Maritime Industry Areas for industrial and warehouse uses. These are also identified through Appendix A of the plan. Ashton Vale Road, Ashton lies along the A3029 which leads to the A4 and passes within 200m of the Avon Gorge SAC and the Severn Estuary SPA, SAC and Ramsar site. There is potential for increased commuting along this route to the site.	I	Screened in
	E5: Avonmouth Industrial Area and Bristol Port	Policy retains existing industrial areas for development and redevelopment for industrial, distribution, energy and port related uses and allocates sites for development of industrial and distribution uses at locations within 200m of Severn Estuary SPA, SAC and Ramsar site with potential for increased levels of traffic along the A403. There is potential for resultant effects relating to air pollution and disturbance.	I	Screened in
	E6A: Affordable workspace	Policy listing general criteria for testing the acceptability / sustainability of proposals for the provision of new affordable workspace and proposals that would result in the loss of affordable workspace.	B	Screened out
	E8: Digital connectivity and inclusion	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to supporting digital connectivity.	B	Screened out
6 Shopping, services and the evening economy				
	SSE1: Supporting Bristol's centres – network and hierarchy	Policy that cannot lead to development or other change. Sets out the centre network and hierarchy and seeks to support their vitality, viability and diversity. It will not directly result in development.	F	Screened out
	SEE2: Development in Bristol's centres	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to the acceptability of development in the city's centres.	B	Screened out
	SSE3: Supporting Bristol's evening and night-time economy	Policy listing general criteria for testing the acceptability / sustainability of proposals for hospitality, evening and night-time economy, culture and leisure uses.	B	Screened out
	SSE4: Town centre first approach to development	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to the adopting a sequential approach to main town centre uses in the city.	B	Screened out
	SEE5: Temporary uses in centres	Policy listing general criteria for testing the acceptability / sustainability of proposals for the temporary use of vacant buildings or sites within centres.	B	Screened out
	SEE6: Retaining and enhancing markets	Policy listing general criteria for testing the acceptability / sustainability of proposals for street or open markets.	B	Screened out
	SSE7: Provision of public toilets	Policy that cannot lead to development or other change. Requires that major developments open to the public should provide and secure the future management of toilets and changing facilities.	F	Screened out

Title	Policy	Rationale	Assessment Category	Screened In / Out?
	SSE8: Public houses	Policy listing general criteria for testing the acceptability / sustainability of proposals relating to the loss of public houses.	B	Screened out
7 Green Infrastructure				
	GI1: Local Green Space	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to potential loss of Local Green Space.	B	Screened out
	GI2: Reserved Open Space	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to potential loss of Reserved Open Space.	B	Screened out
	GI3: Incidental Open Spaces	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to loss of Incidental Open Space.	B	Screened out
	GI4: Stapleton Allotments and Holdings – Food Growing Local Green Space	Policy that cannot lead to development or other change. Protects Stapleton allotments and holdings as Local Green Space.	F	Screened out
	GI A: Open space for recreation	Policy listing general criteria for testing the acceptability / sustainability of proposals to ensure that open space for recreation is provided to meet a minimum quality, access and quantity.	B	Screened out
Biodiversity and nature recovery	BG1: Green infrastructure and biodiversity in new development	General plan-wide environmental protection / site safeguarding policy. Supports the incorporation of multifunctional green infrastructure at new developments.	D	Screened out
	Pollinating species tint box	General statement on Local Plan.	A	Screened out
	BG2: Nature conservation	General plan-wide environmental protection / site safeguarding policy. Seeks to protect habitats, species or features which contribute to nature conservation as new development occurs.	D	Screened out
	BG3: Achieving biodiversity gains	General plan-wide environmental protection / site safeguarding policy. Requires developments to achieve biodiversity gain.	D	Screened out
	BG4: Trees	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to the provision of new and removal of existing trees at a development site.	B	Screened out
	BG5: Biodiversity and access to Bristol's waterways	Policy listing general criteria for testing the acceptability / sustainability of proposals that are adjacent to, or contain, waterways.	B	Screened out
	BG6: Development of private gardens	Policy listing general criteria for testing the acceptability / sustainability of proposals for development of private gardens.	B	Screened out
	BG7: The St. Paul's Green Link	Policy listing general criteria for testing the acceptability / sustainability of proposals potentially affecting a proposed green link.	B	Screened out

Title	Policy	Rationale	Assessment Category	Screened In / Out?
8 Transport				
	T1: Development and transport principles	Policy that cannot lead to development or other change. Policy seeks to minimise the need to travel and maximise opportunities for walking, cycling and the use of public transport.	F	Screened out
	T2: Transport infrastructure improvements	Uncertain effects in relation to disturbance. Policy sets out that land will be safeguarded to deliver a number of transport improvements. This includes rail links at Chittening Industrial Estate that would be within 500m of the Severn Estuary SPA, SAC and Ramsar site.	I	Screened in
	T3A Transport development management	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to transport impacts.	B	Screened out
	T4A Parking, servicing and the provision of infrastructure for electric vehicles	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to parking provision and the incorporation of infrastructure for the charging of electric or other ultra-low emission vehicles.	B	Screened out
	T5 Public rights of way	Policy that cannot lead to development or other change. Policy seeks to protect and enhance the function and amenity of public rights of way.	F	Screened out
	T6 Active travel routes	Policy that cannot lead to development or other change. Policy seeks to protect the function and amenity and make improvements to existing Active Travel Routes.	F	Screened out
9 Community Facilities				
	CF1: Community facilities	Policy that cannot lead to development or other change. Policy seeks to protect community facilities.	F	Screened out
10 Net zero and climate				
	NZC1: Climate change, sustainable design and construction	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to mitigating and adapting to climate change.	B	Screened out
	NZC2: Towards zero carbon development: Operational carbon	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to energy use.	B	Screened out
	NZC3: Towards zero carbon development: Embodied and whole-life carbon	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to minimising embodied carbon.	B	Screened out
	NZC4: Adaptation to a changing climate	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to minimising climate change risks.	B	Screened out

Title	Policy	Rationale	Assessment Category	Screened In / Out?
	NZC5: Renewable energy development	Policy encourages the development of new renewable energy capacity and energy storage across the city, particularly in the Avonmouth Industrial and Bristol Port area. The Avonmouth Industrial and Bristol Port area is adjacent to the Severn Estuary EDS. Uncertain effects in relation to disturbance to waterbirds.	I	Screened in
	FR1: Flood risk and water management	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to the application of the sequential approach to flood risk management and minimising flood risk in areas at risk of flooding.	B	Screened out
	FR2: Flood risk and regeneration	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to the city centre regeneration areas and the application of the flood risk sequential test.	B	Screened out
	FR3: Bristol Avon Flood Strategy	Uncertain effects in relation to Policy requiring that flood risk from the River Avon will be addressed on a strategic basis consistent with the Bristol Avon Flood Strategy. The strategy aims in part to facilitate future flood defences. This could result in flood defence infrastructure within 500m of Avon Gorge Woodlands SAC and the Severn Estuary SPA, SAC and Ramsar site with potential for disturbance as a result. It is unknown whether this policy would involve direct works within an EDS.	I	Screened in
11 Design and Conservation				
	DC A: Delivering well-designed, inclusive places	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to design.	B	Screened out
	DC1: Liveability in residential development	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to the creation of a liveable environment including in terms of the provision of appropriate internal space and private outdoor space.	B	Screened out
	DC2: Tall buildings	Policy listing general criteria for testing the acceptability / sustainability of proposals for tall buildings.	B	Screened out
	DC3: Alteration of existing buildings	Policy listing general criteria for testing the acceptability / sustainability of proposals for alterations to existing buildings.	B	Screened out
	DC4: Recycling and refuse provision in new development	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to provisions for the storage of recycling and refuse.	B	Screened out
	CHE1: Conservation and the historic environment	General plan-wide environmental protection / site safeguarding policy relating to the historic environment.	D	Screened out
	DC B: Advertisements	Policy listing general criteria for testing the acceptability / sustainability of proposals for advertisements.	B	Screened out
12 Health, wellbeing and food sustainability				
	HW1: Pollution control and water quality – agent of change	General plan-wide environmental protection / site safeguarding policy relating to pollution and water quality.	D	Screened out

Title	Policy	Rationale	Assessment Category	Screened In / Out?
	HW1A: Noise	General plan-wide environmental protection / site safeguarding policy relating to noise pollution.	D	Screened out
	HW1B: Contaminated land	General plan-wide environmental protection / site safeguarding policy relating to contaminated land.	D	Screened out
	HW2: Air quality	General plan-wide environmental protection / site safeguarding policy relating to air pollution.	D	Screened out
	HW2B: Health impacts of development	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to supporting improved health in the city and requiring the preparation of a Health Impact Assessment for larger proposals.	D	Screened out
	HW3: Takeaways	Policy listing general criteria for testing the acceptability / sustainability of proposals for takeaways and their potential health impacts.	B	Screened out
13 Utilities and Minerals				
	UM1: Telecommunications	Policy listing general criteria for testing the acceptability / sustainability of proposals for telecommunications equipment and installations.	B	Screened out
	UM2: Unstable land	General plan-wide environmental protection / site safeguarding policy relating to unstable land.	B	Screened out
	UM3: Minerals Safeguarding Areas	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to the requirement to prevent the sterilisation of minerals within Minerals Safeguarding Areas.	B	Screened out
	UM4: Sewage treatment works	Policy or proposal that could not have any conceivable effect on a site.	I	Screened in
14 Development allocations				
	SA1: Site allocations	Policy setting out retained development allocations for the Local Plan. The individual sites identified for allocation through the Local Plan have been subject to screening. Potential effects relating to disturbance and habitat degradation in relation to Avon Gorge Woodlands SAC.	I	Screened in
	BCAPSA1-SA6 Site allocations	Policy setting out retained development allocations for the Local Plan specifically in Harbourside, West End, St Michael's, Old City, St. Paul's & Stokes Croft and Redcliffe. The individual sites identified for allocation through the Local Plan have been subject to screening. Potential effects relating to disturbance, habitat degradation and potential loss of functionally linked land and/or commuting habitat in relation to Seven Estuary sites, North Somerset and Mendip Bats SAC and Avon Gorge Woodlands SAC.	I	Screened in
	DA1: Proposed development allocations	Policy setting out the new proposed development allocations for the Local Plan. The individual sites identified for allocation through the Local Plan have been subject to screening. Potential effects relating to disturbance, habitat degradation and potential loss of functionally linked land and/or commuting habitat in relation to Seven Estuary sites, North Somerset and Mendip Bats SAC and Avon Gorge Woodlands SAC.	I	Screened in

Title	Policy	Rationale	Assessment Category	Screened In / Out?
Appendices				
	Local design guidance	Associated with Policy DC A. Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to design.	B	Screened out
	Standard of open space for recreation	Policy listing general criteria for testing the acceptability / sustainability of proposals in relation to the requirement to provision adequate open space for recreation.	B	Screened out

A.3 Site Allocations

Allocation Type	Allocation Ref.	Type of Impact	Screened In / Out?
Residential and residential-led mixed-use	<ul style="list-style-type: none"> BSA0101, BSA0102, BSA0103, BSA0104, BSA0111, BSA0203, BSA0212, BSA0302, BSA0402, BSA0403, BSA0404, BSA0405, BSA0407, BSA0410, BSA0501, BSA0502, BSA0513, BSA0515, BSA0516, BSA0517, BSA0801*, BSA0802, BSA0803, BSA0805, BSA0906, BSA0907, BSA0909, BSA1001, BSA1011, BSA1101, BSA1103, BSA1108, BSA1109, BSA1112, BSA1113, BSA1114, BSA1115, BSA1116, BSA1117, BSA1118, BSA1119, BSA1120, BSA1122, BSA1123, BSA1124, BSA1201, BSA1202, BSA1203, BSA1207, BSA1210, BSA1213, BSA1301, BSA1302, BSA1304, BSA1305*, BSA1307, BSA1401, BSA1402, BSA1406, BSA1407; BDA0101, BDA0102, BDA0103, BDA0105, BDA0205, BDA0206, BDA0207, BDA0302, BDA0303, BDA0304, BDA0305, BDA0306, BDA0307, BDA0401, BDA0402, BDA0601, BDA0702, BDA0703, BDA0901, BDA1001, BDA1002, BDA1003, BDA1004, BDA1101, BDA1102, BDA1201, BDA1301, BDA1302, BDA1303, BDA1304, BDA1305, BDA1401, BDA1402, BDA1403, BDA1501, BDA1601, BDA1701, BDA1702, BDA1801, BDA1802*, BDA1901, BDA2001, BDA2201, BDA2301, BDA2302, BDA2402, BDA2501, BDA2502, BDA2601, BDA2602, BDA2603, BDA2604, BDA2605, BDA2701, BDA2702, BDA2703, BDA2801, BDA2802, BDA2803, BDA2901, BDA2902, BDA3001, BDA3002, BDA3101, BDA3201, BDA3401, BDA2101, BDA2401, BDA2002; SA101, SA104, SA102, SA401, SA403, SA404, SA601, SA603, SA604, SA607, SA608, SA609, SA610, SA612, SA501, SA503, SA505, SA506, SA507, SA509, SA510, SA511, SA512, SA301, SA202, SA513; KS10, KS06, KS02, KS03, KS07, KS04; CFS23001, CFS23002, CFS23003; and Sites proposed for release from green belt: DS11A, DS11C, DS12 	<ul style="list-style-type: none"> Habitat loss / physical damage Non-physical disturbance Changes to hydrological regime / water levels and quality Air pollution; and Recreational disturbance. 	In
Employment allocations	<ul style="list-style-type: none"> Industry and distribution area: IDA001, IDA016, IDA035, IDA013, IDA011, IDA019, IDA024, IDA025, IDA012, IDA030, IDA031, IDA032, IDA004, IDA034, IDA015, IDA006, IDA003, IDA028, IDA007, IDA014, IDA022, IDA021, IDA002, 	<ul style="list-style-type: none"> Habitat loss / physical damage 	In

Allocation Type	Allocation Ref.	Type of Impact	Screened In / Out?
	<p>IDA023, IDA010, IDA009, IDA008, IDA005, IDA020, IDA017, IDA018, IDA033, IDA026, IDA036, IDA036;</p> <ul style="list-style-type: none"> • Avonmouth Site Allocations: ASA001, ASA002, ASA005, ASA003, ASA004; and • Maritime industry: MIWA001, MIWA002. 	<ul style="list-style-type: none"> • Non-physical disturbance • Changes to hydrological regime / water levels and quality • Air pollution; and • Recreational disturbance. 	

*Sites with a residential or residential-led mixed use reference but will include ‘industry’, ‘light industry’ and/or ‘warehousing’ and will be assessed as such.

A.4 Summary of plans or projects screened in or out for potential LSE in-combination

Geography	Document	Screened In / Out	Rationale
South Gloucestershire	Local Plan: Core Strategy (2013) Policies, Sites and Places Plan (2017) Local Plan Phase 2 Consultation – Urban, Rural and Key Issues (2022)	In	Potential effect of plan(s) after implementation
Bath and North East Somerset	Local Plan: Core Strategy (2014) Placemaking Plan (2017) Local Plan Partial Update (2023) Local Plan 2022 to 2042: Launch Document (2022)	In	Potential effect of plan(s) after implementation
North Somerset	Council Local Plan: Core Strategy (2017) Sites and Policies Plan Part 1: Development Management Policies (2016) Sites and Policies Plan Part 2: Site Allocations Plan (2018) Preferred Options Local Plan Consultation (2022)	In	Potential effect of plan(s) after implementation
West of England	Travelwest Joint Local Transport Plan 4 (2020 – 2036) ⁶⁹	In	Potential effect of plan(s) after implementation
	Travelwest West of England Local Cycling and Walking Infrastructure Plan 2020-2036 ⁷⁰	In	Potential effect of plan(s) after implementation
West of England	Joint Waste Core Strategy (2011)	In	Potential effect of plan(s) after implementation
Bristol Water	Water Resources Management Plan. (2019) Bristol Water Drought Plan (2022)	In	Potential effect of plan(s) after implementation
Wessex Water	Water Resources Management Plan (2019) Wessex Water Drought Plan (2022) Drainage and Wastewater Management Plan (2023)	In	Potential effect of plan(s) after implementation
Severn Valley River Basin District	Severn River Basin Management Plan (2022)	In	Potential effect of plan(s) after implementation
Severn Estuary Coastal Group	Severn Estuary Shoreline Management Plan (SMP2) (2017) Severn Estuary Flood Risk Management Strategy (2013) Severn Estuary Strategy (2017)	In	Potential effect of plan(s) after implementation
	Bristol Avon Flood Strategy (2021)	In	Potential effect of plan(s) after implementation
Bristol City Council	Bristol One City Plan (fourth iteration) (2023)	Out	No source of LSE to EDS from plan

⁶⁹ <https://travelwest.info/app/uploads/2020/05/JLTP4-Adopted-Joint-Local-Transport-Plan-4.pdf>

⁷⁰ LCWIP-West-of-England-Local-Cycling-and-Walking-Infrastructure-Plan-2020-2036-VJan21.pdf (travelwest.info)

Geography	Document	Screened In / Out	Rationale
	Bristol Local Flood Risk Management Strategy (2023)	In	Potential effect of plan(s) after implementation
	West of England Climate Emergency Plan (2020)	Out	No source of LSE to EDS from plan
West of England	West of England Climate and Ecological Strategy and Action Plan (2023)	Out	No source of LSE to EDS from plan
	West of England Joint Green Infrastructure Strategy 2020-2030 (2020)	Out	No source of LSE to EDS from plan
	Bristol City Council Climate Emergency Action Plan (2022 - 2025) (2022)	Out	No source of LSE to EDS from plan
Bristol City Council	Bristol City Council Ecological Emergency Action Plan 2021 – 2025 (2021)	Out	No source of LSE to EDS from plan
	Bristol Biodiversity Action Plan. Bristol Biodiversity Partnership (2008)	Out	No source of LSE to EDS from plan
South Gloucestershire (1km to the north of Bristol City Council)	Seabank 3 combined cycle gas turbines	Out	Project not submitted for consent.
	Avon Power Station 950 MW output	Out	Project not submitted for consent.
Bristol City Council and North Somerset Council	Portishead Branch Line - MetroWest Phase 1	In	Potential effect of plan(s) after implementation
	Hinkley Point C Connection	In	Potential effect of plan(s) after implementation
Bristol City Council, South Gloucester Council, Environment Agency	Avonmouth Severnside Enterprise Area Ecology Mitigation and Flood Defence Project to provide 17 km of upgraded flood defence and create 80 ha compensatory wetland marsh at Northwick and Hallen Marsh.	In	Potential effect of plan(s) after implementation

A.5 Assessment of ‘In-Combination’ Plans and Projects

Appendix A.5 provides further detail on the plans and projects identified in Appendix A.4 and Table 4 as having the potential to give rise to any effects which could harm an EDS, and therefore have the potential for a LSE in-combination with the Bristol Local Plan. Any plans and projects identified in Appendix A.4 that do not encourage development or changes to traffic and the movement of people into an EDS or create the potential for increased water or air pollution, have been screened out and are not considered further.

South Gloucestershire Local Plan

Summary and Status
<p>The South Gloucestershire Local Plan comprises the Core Strategy (2013), and the Policies, Sites and Places Plan document (2017).</p> <p>South Gloucestershire Council is preparing a new Local Plan for the district. The council is still at an early stage of preparing the new plan. Consultation on the Local Plan Phase 1 – Issues and Approaches was undertaken between November 2020 and March 2021, with consultation on the Local Plan Phase 2 – Urban, Rural and Key Issues undertaken between February 2022 and April 2022. The new Local Plan is yet to include a proposed strategy for development within South Gloucestershire.</p>
Development Plan Provision
<p>The Core Strategy includes the provision for 28,355 new homes to be delivered in the period of 2006 – 2027. As 5,810 of these homes have already been provided between 2006 and 2013, this commitment represents a requirement for a further 22,545 homes to be delivered in the plan area.</p> <p>Policy CS5 of the Local Plan sets out that development will be focused mainly within the North and East Fringes of the Bristol urban area and in new sites in the rest of South Gloucestershire (including a new neighbourhood at Yate and housing opportunities at Thornbury).</p> <p>In accordance with Policy CS5, land is safeguarded for economic development at the following locations:</p> <ul style="list-style-type: none">• North fringe of Bristol urban area – 355ha.• East fringe of the Bristol urban area – 147ha.• Yate and Chipping Sodbury – 88ha.• Thornbury – 19ha.• Rural area- 14ha.• Severnside – 635ha.
HRA Implications
<p>Separate HRAs were prepared for the Core Strategy and Policies, Sites and Places Plan in 2011 and 2016, respectively. The HRA produced in 2011 identified at the screening stage that the Core Strategy had the potential to significantly affect the following EDS:</p> <ul style="list-style-type: none">• Severn Estuary SAC, SPA and Ramsar site;• Chew Valley Lake SPA; and• Avon Valley Woodlands SAC. <p>The appropriate assessment determined that the Core Strategy was unlikely to have an adverse effect on or compromise the conservation objectives of any of the sites listed above.</p> <p>HRA screening on the Policies, Sites and Places Plan determined that the following EDS would need to be given further consideration with regards to potential for LSE.</p> <ul style="list-style-type: none">• Severn Estuary SPA, SAC and Ramsar site;• Chew Valley Lake SPA; and• Avon Valley Woodlands SAC. <p>Despite this, the HRA concluded that the Policies, Sites and Places Plan was unlikely to have a significant effect on the conservation objectives of the three sites comprising the assessment, either alone or in-combination with other plans or projects.</p> <p>To date, the council has only prepared a HRA Statement (2018) for the new Local Plan. This sets out the likely scope of any future HRA work required.</p>
Conclusion Regarding Potential for In-Combination Effects
<p>The HRAs for South Gloucestershire Local Plan concluded that the Plan is unlikely to have any significant effects on EDS, alone or in-combination with other local plans or projects. However, it is unknown at this stage of the Bristol Local Plan HRA (Screening Stage) whether in-combination effects with the South Gloucestershire Local Plan could arise. The development of</p>

residential and employment sites may create a source for a range of effects on EDS, as listed in Section 5.2. Potential effects could arise from: loss and/or damage to habitats, non-physical disturbance, air quality and recreational disturbance. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.

Potential EDS where in-combination effects could arise are:

- Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site.
- Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects.
- Air pollution effects to Severn Estuary SAC, SPA and Ramsar site.
- Recreational disturbance to Severn Estuary SAC and Ramsar site through increased visitor pressure.

Bath and North East Somerset Local Plan

Summary and Status

The Bath and North East Somerset Local Plan is comprised of three documents - the Core Strategy (2014), Placemaking Plan (2017) and the Local Plan 2011-2029 Partial Update (2023).

Work is presently being undertaken on a new Local Plan document for Bath and North East Somerset to cover the period up to 2042. This work is still at an early stage with consultation on the Local Plan launch document being undertaken in October 2022 to understand residents' views on the approach for preparing the new plan. Work for the new Local Plan has not yet presented a potential development strategy for the plan area.

Development Plan Provision

The Core Strategy provides for the development of 12,960 new homes. The spatial distribution of proposed housing development is outlined below:

- Bath – 7,020
- Keynsham – 2,150
- Somer Valley - 2,470
- Rural areas – 1,120
- Whitchurch Green Belt – 200

In order to meet the economic growth aspirations, Policy DW1 of the plan seeks to enable the delivery of around 10,300 new jobs. This policy provides for 49,900m² of office floor space in addition to a net increase of 48,300m² of industrial floor space.

The Local Plan 2011-2029 Partial Update updated the Core Strategy and the Placemaking Plan to reflect Bath and North East Somerset's Declaration of Climate and Ecological Emergencies and the commitment to securing net zero by 2030.

HRA Implications

An interim HRA Screening of the Bath & North East Somerset Core Strategy Options Document was published in September 2009, and included a series of amendments or recommendations to be included within the draft Core Strategy. Of the 13 EDS assessed at screening, 13 were carried forward to the appropriate assessment, which was undertaken in 2010. The appropriate assessment determined that the Core Strategy was not likely to result in any significant effects to any EDS alone or in-combination, on the provision that the future Placemaking Plan Document would have a major role to play in the protection of EDS.

Policy changes, particularly changes in relation to providing additional housing, within the Core Strategy were later subject to a further HRA in 2011, which recommended that site specific development requirements be added, as well as clarifications for certain policies. These changes were implemented before another HRA was carried out to assess the final proposed changes to the Core Strategy in 2013. This HRA concluded that any impacts resulting from the additional housing would be informed and influenced by the Placemaking Plan rather than the Core Strategy. The likelihood of a significant effect on EDS was excluded in relation to this policy change.

The HRA for the draft Placemaking Plan was undertaken in 2015 after the adoption of the Core Strategy in 2014. The three EDS identified as being of concern in the Core Strategy HRA were considered through this assessment. It was concluded that significant effects on EDS were unlikely as a result of the site allocations.

The HRA undertaken for the Local Plan 2011-2029 Partial Update was prepared in August 2021 with an addendum produced in December 2021. Key updates to policies included an increase in housing provisions of 1,100 and a student accommodation policy potentially leading to development within the university campus. The HRA identified uncertain effects in relation to the Bath and Bradford-on-Avon Bats SAC, Chew Valley Lake SPA and North Somerset and Mendip Bats SAC. The appropriate assessment stage of the HRA concluded that, subject to the implementation of additional site development requirements for a limited number of allocations and a small change to one policy, the updated Local Plan Partial Update would not have an adverse effect on the integrity of the EDS included in the HRA, either alone or in-combination with other plans and projects.

No HRA work has been undertaken for the emerging Local Plan.

Conclusion Regarding Potential for In-Combination Effects

Through an iterative process, all of the HRAs undertaken to assess the potential effects of the Bath and North East Somerset Local Plan concluded that the Plan was unlikely to have an adverse effect on the integrity of EDS. However, it is unknown at this stage of the Bristol Local Plan HRA (Screening Stage) whether in-combination effects with the Bath and North East Somerset Local Plan could arise. The development of residential and employment sites may create a source for a range of effects on EDS, as listed in Section 5.2. Potential effects could arise from: loss and/or damage to habitats, non-physical disturbance, changes to hydrological regime / water levels and quantity, air quality and recreational disturbance. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.

Potential EDS where in-combination effects could arise are:

- Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site
- Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects.
- Changes to water levels for the Chew Valley Lake SPA in relation water abstraction across plan areas, leading to habitat loss and/or degradation.
- Recreational impacts to Chew Valley Lake SPA in relation to increased housing allocations and visitor pressure.
- Loss of functionally linked land required for foraging and commuting bats, and/or non-physical disturbance from development and operational activities across both the Bristol and Bath and North East Somerset Local Plan areas.

North Somerset Local Plan

Summary and Status

The current North Somerset Local Plan comprises the Core Strategy (2017), Sites and Policies Plan Part 1: Development Management Policies (2016) and Sites and Policies Plan Part 2: Site Allocations Plan (2018). The Core Strategy was originally adopted in April 2012. A high court challenge resulted in nine policies being resubmitted for re-examination. In September 2015 one of these policies was re-adopted. The remaining policies were re-adopted following re-examination in January 2017. Work is presently being undertaken on a new North Somerset Local Plan with the Preferred Options Local Plan published for consultation from March 2022.

Development Plan Provision

Through the adopted Core Strategy, a minimum of 20,985 homes are to be delivered in the plan area between 2006 and 2026. The majority of homes are to be delivered in the built-up area, with the focus at the Weston urban area (6,300 dwelling), Weston Villages (6,500 dwellings), Clevedon, Nailsea and Portishead (5,100 dwellings) and the service villages (2,100 dwelling). The remaining dwellings will be delivered at other settlements and the countryside (985 dwellings). The adopted Sites and Policies Plan Part 2: Site Allocations Plan (2018) makes provision for a slight increase in housing delivery at 22,285 additional dwellings during the plan period. This is due to the Core Strategy examination of remitted policies allowing for increasing flexibility at Weston-super-Mare, the towns and service villages by allowing new residential growth of an appropriate scale.

The Core Strategy sets out to deliver 10,100 additional employment opportunities, including around 114ha of land for B1, B2 and B8 uses. The focus of employment growth is provided at the Weston urban area (43.82ha), Weston villages (37.70ha), Clevedon (8.95ha), Nailsea (1.40ha), Portishead (3.17ha) and the remaining areas of the district (18.87ha).

The Preferred Options Local Plan sets out that a minimum of 20,085 new dwellings and 70ha employment land will be provided within North Somerset over the plan period 2023-2038. Housing is to be focussed on Weston-super-Mare (6,980 dwellings) Wolverhill (north of Banwell) (2,800 dwellings), Clevedon (226 dwellings), Nailsea (1,781 dwellings), Portishead (572 dwellings), Yatton (391 dwellings), Backwell (1,120 dwellings), a new garden village at Yanley Lane (2,500 dwellings) and the villages and rural area (1,676 dwellings). Employment growth will be delivered at Yanley Lane (10ha), Weston-super-Mare including Wolverhill (north of Banwell) (48ha), and the other towns and villages (13ha).

HRA Implications

The HRA for the Core Strategy (2011) concluded that there are sufficient mitigation measures in place to suggest that it is unlikely that there will be any significant adverse effects on EDS. No appropriate assessment was required. The HRA for the Sites and Policies Part 1: Development Management Policies (2015) document concluded that the mitigation measures detailed in the Core Strategy are sufficient to suggest that there is unlikely to be any significant adverse effects on EDS. The HRA for the Sites and Policies Plan Part 2: Site Allocations Plan (2016) found that with appropriate mitigation identified in the report, there would not be likely significant effects on EDS.

No HRA work has been undertaken for the emerging Local Plan.

Conclusion Regarding Potential for In-Combination Effects

The HRAs for North Somerset Local Plan concluded that the Plan is unlikely to have any significant adverse effects on EDS. However, it is unknown at this stage of the Bristol Local Plan HRA (Screening Stage) whether in-combination effects with the North Somerset Local Plan could arise. The development of residential and employment sites may create a source for a range of effects on EDS, as listed in Section 5.2. Potential effects could arise from: loss and/or damage to habitats, non-physical

disturbance, changes to hydrological regime / water levels and quantity, air quality and recreational disturbance. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.

Potential EDS where in-combination effects could arise are:

- Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site
- Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects.
- Air pollution effects to Severn Estuary SAC, SPA and Ramsar site, as well as Avon Gorge Woodlands SAC.
- Changes to water levels for the Chew Valley Lake SPA in relation water abstraction across plan areas, leading to habitat loss and/or degradation.
- Recreational impacts to Chew Valley Lake SPA in relation to increased housing allocations and visitor pressure.
- Loss of functionally linked land required for foraging and commuting bats, and/or non-physical disturbance from development and operational activities across both the Bristol North Somerset Local Plan areas.

West of England Joint Local Transport Plan

Summary and Status

The preparation of the Joint Local Transport Plan 4 has been led by the West of England Combined Authority, working with Bath & North East Somerset, Bristol, North Somerset and South Gloucestershire councils and sets out the vision for transport for the sub-region up to 2036. The latest Joint Local Transport Plan builds on a draft published and consulted on in 2019.

The West of England Local Cycling and Walking Infrastructure Plan (LCWIP) is a supporting strategy to the West of England Joint Local Transport Plan and was adopted in June 2020.

Development Plan Provision

The West of England Joint Local Transport Plan 4 sets out how the West of England will develop transport in the region and address priorities to reduce energy demands, lower carbon emissions and address the climate emergency. The schemes included in the plan's major schemes programme are as follows:

- Transformational major schemes (Mass transit schemes):
 - Bristol City Centre to Airport
 - Bristol City Centre to Bath
 - Bristol City Centre to East Fringe
 - Bristol City Centre to North Fringe
 - Bath city centre and corridors
- Early investment schemes in progress (committed projects):
 - M49 Avonmouth junction
 - Temple Quarter masterplan
 - MetroWest Phase 1
 - MetroWest Phase 2
 - Hengrove Transport Package
 - Lockleaze Transport Package
 - Metrobus Cribbs Patchway extension
 - Bristol South West Economic Link (BSWEL)
 - East of Bath access improvements
- Early investment schemes under development:
 - M5 Junction 19
 - Passenger Rail Service and Capacity Improvements, Station Upgrades and New Stations Package
 - Smart Motorways: M4 J18-19
 - M5 new junction J21A
 - A4174 Ring Road junction improvements including Wraxall Road (Longwell Green)
 - Freezing Hill junction upgrade and whole route improvements
 - Interurban cycle routes
 - M4 Junction 18A to A4174 Ring Road
 - Metrobus – Bristol City Centre to Clevedon and Nailsea
 - M4 Junction 18A to A4174 Ring Road
 - Metrobus – Bristol City Centre to Clevedon and Nailsea
 - Metrobus consolidation package

<ul style="list-style-type: none"> - Settlement specific improvement packages, including those for Bath, Bristol, Weston-super-Mare, Banwell, Keynsham/ Midsomer Norton and Somer Valley, Yate and Coalpit Heath, Nailsea and Backwell, Thornbury, Buckover and Charfield, Churchill • Other longer-term opportunities: <ul style="list-style-type: none"> - Strategic Rail and Road Freight Package - A46 to M4 route improvements, Cold Ashton - Bath Area Bus Network Improvement Scheme (BABNIS) - Henbury Loop rail services - Rail services to Thornbury - M5 Junction 20 Local Highway Improvements
HRA Implications
<p>The HRA Screening undertaken for the Joint Local Transport Plan found potential for LSEs in relation to:</p> <ul style="list-style-type: none"> • Avon Gorge Woodlands SAC; • Bath and Bradford-on- Avon Bats SAC; • Chew Valley Lake SPA; • Mendip Limestone Grasslands SAC; • Mendip Woodlands SAC; • North Somerset and Mendip Bats SAC; and • Severn Estuary SAC, SPA and Ramsar. <p>The HRA undertaken for the Joint Local Transport Plan recommended that a separate HRA of the Local Cycling and Walking Infrastructure Plan should ascertain the predicted level of use of new cycle routes in the West of England and therefore more accurately predict the potential for an adverse effect on the European sites identified and be able to put forward suitable mitigation.</p> <p>Furthermore, the conclusions of the Joint Local Transport Plan 4 June 2019 HRA Appropriate Assessment Report identified that MetroWest Phase 1 would result in the direct loss of up to 0.71ha of woodland within the Avon Gorge Woodland SAC and therefore an adverse effect on the SAC would remain following mitigation. No feasible alternatives to this scheme were identified and therefore it was deemed necessary for the scheme to proceed to the 'IROPI test'.</p> <p>At the stage of writing the HRA for the Joint Local Transport Plan 4, it was therefore not possible to conclude no adverse effect on the integrity of the Avon Gorge Woodland SAC. With the exception of the MetroWest Phase 1 scheme, the HRA set out that provided that the mitigation measures identified within the HRA were incorporated within the Joint Local Transport Plan 4, it should be possible to conclude that the plan will not have an adverse effect on the integrity of all other EDS, either alone or in-combination with other plans and projects.</p>
Conclusion Regarding Potential for In-Combination Effects
<p>Given the HRA implications above, it is considered likely that there is the potential for in-combination effects with the emerging Bristol Local Plan. Potential effects on EDS could include: further loss and/or damage to habitats, non-physical disturbance, changes to hydrological regime / water levels and quantity, air quality and recreational disturbance. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.</p> <p>Potential EDS where in-combination effects could arise are:</p> <ul style="list-style-type: none"> • Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site • Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects. • Air pollution effects to Severn Estuary SAC, SPA and Ramsar site, as well as Avon Gorge Woodlands SAC. • Recreational impacts to Chew Valley Lake SPA and to Severn Estuary SAC and Ramsar site in relation to increased visitor pressure. • Loss of functionally linked land required for foraging and commuting bats, and/or non-physical disturbance from development and operational activities across both the Bristol Local Transport Plan areas.

West of England Joint Waste Core Strategy

Summary and Status
<p>The West of England Joint Waste Core Strategy was developed by the four unitary authorities of Bath and North East Somerset, Bristol, North Somerset and South Gloucestershire and adopted in March 2011. The strategy is applicable to all waste, with the exception of most radioactive waste. The Joint Waste Core Strategy sets out a number of strategic objectives and locations identified as being central to supporting the delivery of the policies of the document. The objectives outlined include the provision of an integrated network of waste management facilities.</p>

Development Plan Provision
<p>Policy 5 of the Joint Waste Core Strategy allocates land for residual waste treatment facilities at the following locations:</p> <ul style="list-style-type: none"> • BA19 Broadmead Lane, Keynsham, Bath and North East Somerset (4.49ha); • BA12 Former Fuller's Earth Works, Fosseway, Bath and North East Somerset (3.36ha); • BR505 Hartcliffe Way, Bristol (2.20ha); • DSO5 Merebank, Kings Weston Lane, Bristol (6.63ha); • DS06 BZL Site, Kings Weston Lane, Bristol (46.20ha); • DS07 Sevalco Plant (northern part), Severn Road, Bristol (11.0 ha); • DS13 Rhodia Chemical Works, Kings Weston Lane, Bristol (23.34ha); • DS14 Gypsy and Traveller Site, Kings Weston Lane, Bristol (2.53ha); • DS15 Advanced Transport System Ltd Site, Severn Rd, Bristol (3.32ha); • SG39 South of Severnside Works, South Gloucestershire (12.81ha); and • IS8 Warne Rd, Weston-super-Mare, North Somerset (1.4ha). <p>The above sites cover a total area of 117.28ha and are safeguarded for waste treatment facilities, except where suitable alternatives become available. Policy 5 also establishes two Strategic Areas (Area A and Area B), which have been identified as locations appropriate in principle for the development of residual waste treatment facilities.</p>
HRA Implications
<p>The HRA undertaken for the Joint Waste Core Strategy in 2009, concluded that there would be no LSE on EDS from traffic emissions, ground water and surface water, but was not able to conclude that stack emissions would have no likely significant effects on EDS. However, these effects pertained largely to sites that were omitted from the adopted version of the strategy. The HRA established a requirement for mitigation to be implemented in relation to bird sites in order to rule out potential for likely significant effects. This requirement was also carried forward into the adopted version of the strategy.</p>
Conclusion Regarding Potential for In-Combination Effects
<p>Given the HRA implications above, it is considered likely that there is the potential for in-combination effects with the emerging Bristol Local Plan. Potential effects on EDS could include: further loss and/or damage to habitats (including functionally linked land), non-physical disturbance, changes to hydrological regime / water levels and quantity, air quality and recreational disturbance. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.</p> <p>Potential EDS where in-combination effects could arise are:</p> <ul style="list-style-type: none"> • Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site • Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects. • Air pollution effects to Severn Estuary SAC, SPA and Ramsar site, as well as Avon Gorge Woodlands SAC. • Loss of functionally linked land required for foraging and commuting bats, and/or non-physical disturbance from development and operational activities across both the Bristol and Joint Waste Core Strategy areas.

Bristol Water Resources Management Plan (2019)

Summary and Status
<p>The Bristol Water Resources Management Plan (2019) (WRMP19) was developed to supersede the previous 2014 version (WRMP14) and plans for a 1 in 200-year drought event. The plan provides a strategy to ensure a secure water supply throughout the period of 2020 – 2045.</p>
Development Plan Provision
<p>The WRMP19 is set out to ensure water supply is able to provide for an increased demand over the period 2020-2045. The plan sets out the approach relating to a reduction in leakage of 15% by 2025. The plan does not identify the need for any new supply options to be implemented.</p>
HRA Implications
<p>The HRA concluded that the works associated with proposed leakage reduction options could not be assessed at plan level, particularly as the location of the works were not identified as part of the plan. The effects of individual leakage-reduction schemes would therefore need to be subject to a HRA at the project level.</p> <p>However, the HRA states that based on the type and scale of the works expected, the options do not have a risk of unavoidable adverse effects and established best-practice measures would ensure that significant or significant adverse effects do not occur. The HRA therefore concluded that the WRMP19 would have no adverse effects, alone or in-combination, on EDS. However, it was emphasised that this conclusion does not remove the need for consideration at the project-level.</p>
Conclusion Regarding Potential for In-Combination Effects

Given the HRA implications above, it is considered likely that there is the potential for in-combination effects with the emerging Bristol Local Plan. Potential effects on EDS could include: further loss and/or damage to habitats, non-physical disturbance, changes to hydrological regime / water levels and quantity, air quality and recreational disturbance. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.

Potential EDS where in-combination effects could arise are:

- Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site
- Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects.
- Loss of functionally linked land required for foraging and commuting bats as part of the North Somerset and Mendip Bats SAC.

Bristol Water Drought Plan (2022)

Summary and Status

The Bristol Water Drought Plan (2022) sets out Bristol Water's operational approach to the management of water resources during periods of drought. It is an operational plan setting out what actions will be taken before, during and after a drought to maintain a secure supply of water. The plan is consistent with the company levels of service set out in Bristol Water's Water Resources Management Plan (2019) (WRMP19).

Development Plan Provision

The Bristol Water Drought Plan includes the provision of two types of drought management measure. These are demand management measures and supply augmentation measures. Demand management measures are designed to reduce the demand for water across the entire water supply area. These include measures such as varying bans on water usage and appeals for constraint. Supply augmentation measures include bringing disused, licensed water sources back into supply and applying for drought permits to temporarily vary the conditions of abstraction licences for specific water sources. Supply augmentation measures proposed within the Bristol Water Drought Plan include the recommissioning of the R24R Well Head source which has not been in operation for approximately 20 years, as well as applications to the Environment Agency for the granting of Drought Permits to allow for additional flow release from:

- Blagdon Reservoir
- Chew Valley Reservoir
- Cheddar Reservoir

HRA Implications

At the screening stage of the HRA undertaken for the Bristol Water Drought Plan (2022), LSEs of the drought plan could not be ruled out upon the following European sites:

- North Somerset and Mendip Bats SAC;
- Severn Estuary SAC;
- Severn Estuary Ramsar site;
- Mendip Limestone Grasslands SAC;
- Somerset Levels and Moors SPA.

These likely significant effects relate to some of the water supply augmentation measures in the Drought Plan. It was concluded within the screening assessment that the demand management measures in the Drought Plan will not have any LSE on any EDS. These measures were therefore assessed further at the appropriate assessment stage. The appropriate assessment of the supply-side measures identified various mitigation measures to avoid adverse effects on EDS integrity.

Conclusion Regarding Potential for In-Combination Effects

Given the HRA implications above, it is unknown at this stage, based on the absence of objective information, on whether an LSE in-combination with the Local Plan is possible. It is considered possible that there could be an in-combination effect with the Local Plan leading to potential negative effects on Chew Valley Lake SPA. Potential effects could arise through:

- Changes to water levels for the Chew Valley Lake SPA in relation water abstraction across plan areas, leading to habitat loss and/or degradation.

Wessex Water – Water Resources Management Plan (2019)

Summary and Status

The existing Management Plan (2020-2045) was prepared in August 2019.

A draft Water Resources Management Plan for the period 2025 to 2080 was published for consultation in winter 2022.

Development Plan Provision
<p>Through the adopted Management Plan, Wessex Water's approach to balancing the demand for water from customers with available supplies and the protection of the environment is set out over the 25 years from 2020 to 2045.</p> <p>The draft Water Resources Management Plan sets out the approach for how Wessex Water will ensure a secure supply of water and protect the environment over at least a 25-year planning horizon.</p>
HRA Implications
<p>The HRA of the existing Management Plan concluded that the plan is not likely to have a significant effect, alone or in-combination, on the integrity of any EDS.</p> <p>The HRA screening undertaken for the draft Management Plan concluded that significant effects are either likely or uncertain for the following EDS that are within 15km of Bristol (Bath and Bradford-on-Avon Bats SAC and Severn Estuary SPA / Ramsar Severn Estuary). Options and sites screened in, in relation to these EDS were taken forward to the appropriate assessment stage. The appropriate assessment of demand-side measures (such as where the leakage reduction programme may require repair of a pipe in or near an SAC) was deferred to project level assessment. For supply side options, the appropriate assessment concluded that there would be no adverse effects on any EDS as a result of the Management Plan options, with the implementation of established scheme-level mitigation. The exception to this is for a number of EDS which are beyond 15km of Bristol (Dorset Heathlands SPA / Ramsar / Dorset Heaths SAC, Poole Harbour SPA / Ramsar, River Avon SAC and Solent and Dorset Coast SPA).</p>
Conclusion Regarding Potential for In-Combination Effects
<p>Given the HRA implications above, it is considered that there is unlikely to be an in-combination effect with the Bristol Local Plan. This is further explained by the likely absence of any direct or indirect hydrological pathway to the Local Plan area.</p>

Wessex Water - Drought Plan (2022)

Summary and Status
The existing Wessex Water Drought Plan was published in June 2022.
Development Plan Provision
The plan sets out the tactical and operational response to extended periods of dry weather and drought. The Plan identifies the actions Wessex Water will take before, during, and after a drought to maintain a secure supply of water and outlines how the company will assess and mitigate against the environmental impacts of its actions.
HRA Implications
The HRA assessment included a screening of all proposed drought plan options, and appropriate assessments for those EDS that may be significantly affected by one or more options (alone or in-combination), or where the effects are uncertain. A number of options were taken forward to the appropriate assessment stage. The appropriate assessments concluded that there would be no adverse effects on the integrity of any EDS as a result of options implementation.
Conclusion Regarding Potential for In-Combination Effects
Given the HRA implications above, it is considered that there is unlikely to be an in-combination effect with the Bristol Local Plan. This is further explained by the likely absence of any direct or indirect hydrological pathway to the Local Plan area.

Wessex Water - Drainage and Wastewater Management Plan (2023)

Summary and Status
The existing Wessex Water Drainage and Wastewater Management Plan was published in May 2023.
Development Plan Provision
The plan sets out how Wessex Water will address pressures relating to its drainage and wastewater systems to ensure services remain robust and resilient. Pressures include climate change, population growth, storm overflows, tightening environmental standards and changes in customer behaviour. The plan sets out the required level of investment to enhance Wessex Water's assets and networks to ensure the company continues to deliver drainage and wastewater services in a sustainable and affordable way.
HRA Implications
Three option types were screened out as part of screening for the Drainage and Wastewater Management Plan due to their fundamental characteristics. These options relate to interventions or activities that will not lead to development and which will (in the context of the plan objectives) not have any mechanisms for significant effects on EDS. For the remaining options, the EDS potentially exposed to the outcomes of the options (including those potentially exposed to changes in more than one drainage area) were identified. Where possible, EDS were screened out if significant effects as a result of the plan could be self-evidently excluded based on the characteristics of the interest features and their sensitivity and exposure to the likely outcomes of the options. For precautionary reasons this inevitably excluded few sites due to the inherent uncertainties over the delivery of most options. All European Designated Sites in or near the drainage areas were therefore taken forward to an

<p>‘appropriate assessment’ stage. These were Dorset Heaths SA, Dorset Heathlands SPA, Dorset Heathlands Ramsar, Poole Harbour SPA, Poole Harbour Ramsar and River Avon SAC none of which are of relevance to the HRA for the emerging Bristol Local Plan.</p> <p>The level of assessment achievable for the Drainage and Wastewater Management Plan at the appropriate assessment stage was heavily constrained by the limited information available on the options. The appropriate assessment recognised that detailed assessment of the effects of specific options on specific sites is not possible, and therefore assessment must necessarily be deferred ‘down the line’. The HRA concluded that the plan will have no adverse effects on the integrity of any EDS, subject to appropriate consideration of residual uncertainties ‘down the line’ through the design and planning process and, ultimately, at project level. To ensure this, the final version of the plan includes a direction for potential effects on European Designated Sites to be appropriately considered throughout the design and planning stages for each option (and their component schemes).</p>
<p>Conclusion Regarding Potential for In-Combination Effects</p> <p>There are no likely in-combination effects of the existing Wessex Water Drainage and Wastewater Management Plan with the emerging Bristol Local Plan.</p> <p>Implementation of the updated Local Plan’s policies and allocated sites are reliant on the delivery of Wessex Water’s DWMP. Overall, given the HRA implications, and from a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS. Such effects could occur from:</p> <ul style="list-style-type: none"> • Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site for construction of any wastewater treatment works. • Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects.

Severn River Basin Management Plan (2022)

<p>Summary and Status</p> <p>The existing Severn River Management Plan was published in October 2022.</p>
<p>Development Plan Provision</p> <p>River Basin Management Plans provide a long-term framework for the management of all issues that affect the water environment in a River Basin District. They rely on a range of more detailed plans that government or key sectors are responsible for developing to enable the objectives of the River Basin Management Plan to be achieved.</p>
<p>HRA Implications</p> <p>The River Basin Management Plan does not specify exactly where or how measures should be implemented, this will be determined at either a lower-tier plan or project level. At the level of detail in the plan, the HRA concluded that the measures can be implemented without having a likely significant effect on habitats sites alone or in-combination.</p>
<p>Conclusion Regarding Potential for In-Combination Effects</p> <p>Given the restorative nature of the River Management Plan, there are no likely in-combination effects based on the level of detail included within the River Management Plan.</p>

Severn Estuary Coastal Group Shoreline Management Plan (2017)

<p>Summary and Status</p> <p>The existing Shoreline Management Plan was approved in February 2017.</p>
<p>Development Plan Provision</p> <p>The Management Plan proposes how the shoreline around the Severn Estuary should be managed over the next 100 years, taking account of predicted changes to sea level rise caused by climate change over the next 100 years. Policy options are provided for each area along the estuary and for each time period covered by the plan, including:</p> <ul style="list-style-type: none"> • Hold the Line – providing some line of defence at their current position (120 preferred policy options). • No Active Intervention – no maintenance, repair or replacement of existing defence structures takes place (65 preferred policy options). • Managed Realignment – landward movement of defences, giving up some land to the sea to form a more sustainable defence line in the future (13 preferred policy options). • Advance the Line - reclaiming land from the sea by building new defences further seaward (no preferred policy options). <p>One of the main impacts arising from the implementation of the plan includes the loss of intertidal habitat arising from options that hold the existing line of defence and result in coastal squeeze.</p>
<p>HRA Implications</p> <p>The December 2010 HRA of the Management Plan could not conclude that the plan would not have potentially significant effects on the Severn Estuary SPA, SAC and Ramsar site and the Somerset Levels and Moors SPA and Ramsar site. The</p>

<p>adverse impacts of the plan are due to loss of intertidal habitat as a result of coastal squeeze, loss of terrestrial and freshwater habitats as a result of Managed Realignment, and changes to the shape of the estuary as a whole, which could affect the way it works.</p> <p>As the plan could not be shown to have no adverse effect on the integrity of the sites, it was required to be demonstrated that there were no alternative solutions. A decision from the Secretary of State and Welsh Government was then to be sought on whether the plan should be approved on the grounds of IROPI.</p>
<p>Conclusion Regarding Potential for In-Combination Effects</p>
<p>The development of the management plan may create a source for a range of effects on EDS, as listed in Section 5.2. Potential effects could arise from: loss and/or damage to habitats, non-physical disturbance, changes to hydrological regime / water levels and quantity, air quality and recreational disturbance. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.</p> <p>Potential EDS where in-combination effects could arise are:</p> <ul style="list-style-type: none"> • Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site • Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects. • Air pollution effects to Severn Estuary SAC, SPA and Ramsar site. • Recreational impacts to Severn Estuary SPA and Ramsar site in relation to increased housing allocations and visitor pressure. • Loss of functionally linked land required for foraging and commuting bats, and/or non-physical disturbance from development.

Severn Estuary Flood Risk Management Strategy (2013)

<p>Summary and Status</p>
<p>Second consultation on the draft Strategy was undertaken in 2013. The Strategy does not yet have any formal approval from Defra or Welsh Government. The Strategy is the starting point for ongoing collaboration between the Environment Agency, National Resources Wales, landowners, communities and organisations, to consider and plan for change for the next 100 years.</p>
<p>Development Plan Provision</p>
<p>The Strategy sets out a long-term plan to manage tidal flood risks in the Severn Estuary. It covers the coast from Gloucester to Lavernock Point near Cardiff and from Gloucester to Hinkley Point in Somerset.</p>
<p>HRA Implications</p>
<p>No HRA work has been published for the Severn Estuary Flood Risk Management Strategy.</p>
<p>Conclusion Regarding Potential for In-Combination Effects</p>
<p>The development of the management strategy may create a source for a range of effects on EDS, as listed in Section 5.2. Potential effects could arise from: loss and/or damage to habitats, non-physical disturbance, changes to hydrological regime / water levels and quantity, air quality and recreational disturbance. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.</p> <p>Potential EDS where in-combination effects could arise are:</p> <ul style="list-style-type: none"> • Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site • Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects. • Air pollution effects to Severn Estuary SAC, SPA and Ramsar site. • Recreational impacts to Severn Estuary SPA and Ramsar site in relation to increased visitor pressure. • Loss of functionally linked land required for foraging and commuting bats, and/or non-physical disturbance from development.

Severn Estuary Strategy (2017)

<p>Summary and Status</p>
<p>The Severn Estuary Strategy was first produced in 2001 by the Severn Estuary Partnership. In 2017 it was revised in the context of new and emerging legislation, plans, policies and developments to cover the period 2017 to 2027. The strategy aims to:</p> <ul style="list-style-type: none"> • Update and streamline the 2001 Severn Estuary Strategy. • Provide a strategic policy framework for the Severn Estuary. • Provide context to inform and support decision making.

<ul style="list-style-type: none"> Facilitate the Marine and Coastal Access Act (2009) obligations related to cross-border integration, land-sea integration and taking an ecosystem-based approach to management.
Development Plan Provision
<p>The Strategy does not set out any policies to address development pressures or specific sites to be allocated. Instead, the strategy sets out a series of principles, each with corresponding objectives, outcomes and actions. These principles are:</p> <ul style="list-style-type: none"> Achieving a Sustainable Marine Economy. Ensuring a Strong, Healthy and Just Society. Living Within Environmental Limits. Promoting Good Governance. Using Sound Science Responsibly.
HRA Implications
An HRA was not able to be viewed at this stage. Assessments and implications in-combination effects are thus based on a precautionary basis.
Conclusion Regarding Potential for In-Combination Effects
<p>The development of the strategy may create a source for a range of effects on EDS, as listed in Section 5.2. Potential effects could arise from recreational disturbance and air pollution. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.</p> <p>Potential EDS where in-combination effects could arise are:</p> <ul style="list-style-type: none"> Air pollution effects to Severn Estuary SAC, SPA and Ramsar site. Recreational impacts to Severn Estuary SPA and Ramsar site in relation to increased visitor pressure.

Bristol Local Flood Risk Management Strategy (2023)

Summary and Status
The existing Bristol Local Flood Risk Management Strategy was approved in May 2023.
Development Plan Provision
<p>The Bristol Local Flood Risk Management Strategy sets out a number of agreed local objectives to support the ambitions of creating a more resilient city and protecting the most densely populated areas of the city. Across the city around 3,400 properties are at risk from surface water flooding.</p> <p>The objectives of the strategic include to actively manage flood risk infrastructure, to reduce the likelihood of flooding causing harm to people and damage to society, the economy and the environment.</p>
HRA Implications
No HRA is available for the Bristol Local Flood Risk Management Strategy.
Conclusion Regarding Potential for In-Combination Effects
<p>The development of the management strategy may create a source for a range of effects on EDS, as listed in Section 5.2. Potential effects could arise from: loss and/or damage to habitats, non-physical disturbance, changes to hydrological regime / water levels and quantity, air quality and recreational disturbance. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.</p> <p>Potential EDS where in-combination effects could arise are:</p> <ul style="list-style-type: none"> Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects. Air pollution effects to Severn Estuary SAC, SPA and Ramsar site. Recreational impacts to Severn Estuary SPA and Ramsar site in relation to increased visitor pressure. Loss of functionally linked land required for foraging and commuting bats, and/or non-physical disturbance from development, in relation to North Somerset and Mendip Bats SAC.

Portishead Branch Line - MetroWest Phase 1

Summary and Status
The Development Consent Order for the Portishead Branch Line - MetroWest Phase 1 was granted in November 2022.

Development Plan Provision
<p>The Development Consent Order for the project covers the rebuilding of the disused branch line between Portishead and Pill and reintroduction of passenger train services to Bristol and beyond. It consists of the following elements:</p> <ul style="list-style-type: none"> • A new railway of 4.762km in length from Quays Avenue in Portishead to Portbury Junction in Pill on the trackbed of the disused railway. • A new railway from Portbury Junction through the village of Pill to a new junction west of Pill Tunnel on an existing freight line. • A new railway from Portbury Junction, parallel to Work No 1B, through the village of Pill to a new junction west of Pill Tunnel on an existing freight line to connect to Royal Portbury Dock. • New stations at Portishead and Pill together with new car parks and works to the highway network, urban realm and public right of way improvements. • A new cycle and pedestrian bridge to the south of Trinity Primary School, Portishead and associated new cycle tracks. • Permanent maintenance compounds at Sheepway, Severn Road, Pill and Ham Green (all in North Somerset) and Clanage Road in Bristol. • Works to the bridleway network in the vicinity of Royal Portbury Dock and the extension of the bridleway under the M5 Avonmouth Bridge to provide a continuous public right of way to Pill. • Bus stop works at Pill and District Memorial Club, Pill. • Works to the Winterstoke Road/Ashton Vale Road Junction in Bristol. • Temporary compounds and haul roads.
HRA Implications
<p>The HRA concluded that the development is likely to have a significant effect on the North Somerset and Mendip Bats SAC and the Avon Gorge Woodland SAC. It was reported that when mitigation measures are taken into account, adverse effects on the integrity of the North Somerset and Mendip Bats SAC can be excluded. However, adverse effects on the integrity of the Avon Gorge Woodland SAC cannot be excluded.</p> <p>The Secretary of State was satisfied that there were no alternative solutions that would fulfil the objectives of the development and that there were IROPI for the Development to be carried out. It was concluded that the benefit of development would override the impacts to the Avon Gorge Woodland SAC, subject to the securing of compensatory measures.</p>
Conclusion Regarding Potential for In-Combination Effects
<p>The development of this project may create a source for a range of effects on EDS, as listed in Section 5.2. Potential effects could arise from: loss and/or damage to habitats, non-physical disturbance, changes to hydrological regime / water levels and quantity, air quality and recreational disturbance. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.</p> <p>Potential EDS where in-combination effects could arise are:</p> <ul style="list-style-type: none"> • Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site, and potentially near or within the Avon Gorge Woodlands SAC • Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects. • Air pollution effects to Severn Estuary SAC, SPA and Ramsar site. • Recreational impacts to Severn Estuary SPA and Ramsar site in relation to increased visitor pressure. • Loss of functionally linked land required for foraging and commuting bats, and/or non-physical disturbance from development, in relation to North Somerset and Mendip Bats SAC.

Hinkley Point C Connection Project

Summary and Status
The Development Consent Order for the Hinkley Point C Connection Project was granted in January 2016.
Development Plan Provision
<p>The Development Consent Order for the project covers the installation of National Grid Overhead Lines connector (400kV) from Bridgwater to Seabank, Avonmouth. It consists of the following elements:</p> <ul style="list-style-type: none"> • Installation of a 400kV overhead line of approximately 48.5km. • Installation of 400kV underground cables of approximately 8.5km. • Modifications to existing overhead line layout, including construction of additional line and pylons suitable for 400kV, at Hinkley Point, Somerset. • Construction of three 400kV cable sealing end ("CSE") compounds along the route of the connection. • Construction of a 400/132kV substation at Sandford, North Somerset.

<ul style="list-style-type: none"> • Extension of the existing 400kV substation at Seabank. • The removal of existing 132kV overhead lines and the construction of replacement 132kV overhead lines and 132kV underground cables. • Extensions or other changes to existing 132kV substations at Churchill, Portishead, Avonmouth and Seabank. • Temporary and permanent compulsory purchase of land necessary for the construction and operation of the project.
HRA Implications
<p>The Project was assessed as having the potential to have LSE on nine European sites when considered alone and in-combination with other plans and projects. These sites are:</p> <ul style="list-style-type: none"> • The Somerset Levels and Moors SPA. • The Somerset Levels and Moors Ramsar site. • The Severn Estuary SPA. • The Severn Estuary Ramsar site. • North Somerset and Mendip Bats SAC. • Mendip Limestone Grasslands SAC. • Mells Valley SAC. • Bath and Bradford-on-Avon Bats SAC. • Exmoor and Quantock Oakwoods SAC. <p>Following appropriate assessment, it was concluded that with mitigation in place no adverse effect is expected on integrity of any European site either alone or in-combination with other plans or projects.</p>
Conclusion Regarding Potential for In-Combination Effects
<p>The development of this project may create a source for a range of effects on EDS, as listed in Section 5.2. Potential effects could arise from: loss and/or damage to habitats, non-physical disturbance, changes water quality. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.</p> <p>Potential EDS where in-combination effects could arise are:</p> <ul style="list-style-type: none"> • Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site. • Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects. • Loss of functionally linked land required for foraging and commuting bats, and/or non-physical disturbance from development, in relation to North Somerset and Mendip Bats SAC.

Avonmouth Severnside Enterprise Area Ecology Mitigation and Flood Defence Scheme

Summary and Status
<p>The Avonmouth Severnside Enterprise Area Ecology Mitigation and Flood Defence Scheme spans parts of Bristol and South Gloucestershire. Planning permission was granted for sites in South Gloucestershire in April 2019 with planning permission granted for sites in Bristol in May 2019.</p>
Development Plan Provision
<p>The Avonmouth Severnside Enterprise Area Ecology Mitigation and Flood Defence Scheme includes works at three sites within South Gloucestershire, as follows:</p> <ul style="list-style-type: none"> • Area 1 Scheme (Aust to Severn Beach - Severnside) - Construction of new flood defence walls, embankments and flood gates, raising of existing flood defence walls and embankments, and improvements to the Cake Pill Outfall, Chestle Pill Outfall, and Cotteralls Pill Outfall. • Area 3A Scheme (Severn Beach Railway - North) - Construction of new flood defence walls and embankments, raising of existing flood defence walls, and improvements to the New Pill Outfall. • Area 5 Scheme (Northwick) - Creation of an ecological mitigation area comprising 41.9ha freshwater seasonally wet grassland habitat and 14.49ha of permanent open water in the form of ponds. <p>Within Bristol the scheme includes three sites:</p> <ul style="list-style-type: none"> • Area 2 - land within Bristol Port (Avonmouth Docks) – Improvements of flood defences at Mitchells Salt Outfall, Avonmouth Fuel Storage Depot and on the northern bank of Avon Estuary, next to the port road and industrial premises outside of the port boundary. • Area 3B - land along Severn Road and the Severn Beach Railway – Construction of a sheet pile flood defence wall adjacent to the A403 Severn Road and a grass covered flood defence embankment in the A403 Severn Road to Stup Pill Outfall.

- Area 4 - Land off Washingpool Lane, between Chittening Road to the west, Severn Road to the north, the M49 to the east, and a railway line to the south (Major) -Proposed as an area of wet grassland habitat.

HRA Implications

The HRA for the Avonmouth Severnside Enterprise Area Ecology Mitigation and Flood Defence Scheme found LSEs in relation to Severn Estuary SAC, SPA and Ramsar site with regards to habitat loss, habitat degradation, pollution, air pollution, potential barriers to migration, construction noise and vibration disturbance, and interruption of migratory route of passage birds. LSEs were also identified for the River Wye SAC and the River Usk SAC. Effects relating to habitat degradation or pollution of water courses, potential barriers to migration and construction noise and vibration disturbance were identified for both of these European sites.

The HRA concluded that providing all the mitigation measures accounted for in the report were applied, no adverse effects on site integrity were expected in relation to any EDS, either alone or in-combination with other plans or projects.

Conclusion Regarding Potential for In-Combination Effects

The development of the project may create a source for a range of effects on EDS, as listed in Section 5.2. Potential effects could arise from: loss and/or damage to habitats, non-physical disturbance, changes to hydrological regime / water levels and quantity, air quality and recreational disturbance. From a precautionary perspective, in the absence of detailed assessment, and without consideration of mitigation an LSE in-combination could arise on particular EDS.

Potential EDS where in-combination effects could arise are:

- Loss and/or degradation of functionally linked land for waterbirds of the Severn Estuary SPA and Ramsar site
- Impacts to Severn Estuary SAC and Ramsar site fish and habitat features through construction disturbance and/or water quality effects.
- Air pollution effects to Severn Estuary SAC, SPA and Ramsar site.
- Recreational impacts to Severn Estuary SPA and Ramsar site in relation to increased visitor pressure.
- Loss of functionally linked land required for foraging and commuting bats, and/or non-physical disturbance from development, in relation to North Somerset and Mendip Bats SAC.