Local Plan for the Broads: Review Period 2021 to 2041 Publication Consultation

Habitats Regulations Assessment

October 2024







Local Plan for the Broads: Review Period 2021 to 2041 Publication Consultation

Habitats Regulations Assessment

LC-785	Document Control Box
Client	Broads Authority
Report Title	Publication Consultation Habitats Regulations Assessment Report
Status	Final
Filename	LC-785_Local Plan for the Broads_Regulation 19 HRA_8_071024SC.docx
Date	October 2024
Author	SC/EH
Reviewed	SC
Approved	ND

Front Cover: Ward Way along the River Yare

Contents

Exec	utive Summaryvi
1	Introduction1
1.1	Background1
1.2	The Broads Authority1
1.3	Habitats Regulations Assessment
1.4	Previous HRA work4
1.5	Purpose of this report4
2	Methodology5
2.1	Overview5
2.2	Stage 1: Screening for Likely Significant Effects6
2.3	In-combination effects7
2.4	Stage 2: Appropriate Assessment and Integrity Test8
2.5	Dealing with uncertainty9
2.6	The Precautionary Principle
3	Scoping of threats and pressures at habitats sites
3.1	Introduction
3.2	Identification of a HRA study area10
3.3	Scoping impact pathways
3.4	Air Quality13
3.5	Water quality and water quantity19
3.6	Recreational pressure
3.7	Urbanisation effects
3.8	Habitats site threats and pressures
4	Screening of the Publication Local Plan
4.1	Introduction
4.2	Screening
4.3	Screening conclusion
5	Air Quality Appropriate Assessment
5.1	Introduction
5.2	Air quality impacts
5.3	Baseline air quality information40
5.4	Appropriate Assessment
6	Water Appropriate Assessment
6.1	Introduction
6.2	Baseline information
6.3	Appropriate Assessment
7	Recreation and Urbanisation Appropriate Assessment
7.1	Introduction
7.2	Baseline information
7.3	Appropriate Assessment
8	Next Steps
8.1	Conclusions
8.2	Next steps61

Tables

Table 2.1: Screening evaluation and reasoning categories from Part F of the DTA Handbook	6
Table 3.1: Atmospheric pollution impact pathways to habitats sites	15
Table 3.2: Review of hydrological impact pathways to habitats sites within the influence of the Local Plan	26
Table 3.3: Potential impact pathways from the Local Plan at each habitats site.	32
Table 4.1: Policies and allocations of the Local Plan screened into the HRA process (summarised from Appendix C)	37
Table 5.1: Local Plan policies screened into the HRA process due to air quality LSEs (see Appendix C)	39
Table 6.1: Local Plan policies screened into the HRA process due to water LSEs (see Appendix C)	46
Table 7.1: Local Plan policies screened into the HRA process due to air quality LSEs (see Appendix C)	52

Figures

Figure 1.1: The Broads Authority executive area	2
Figure 2.1: Stages in the Habitats Regulations Assessment process	5
Figure 3.1: Surface water management catchment (SWMC) areas in the Plan area	
Figure 3.2: Water Resource Zones (WRZs) in the Plan area	
Figure 3.3: European protected sites requiring nutrient neutrality strategic solutions – The Broads SAC	
Figure 3.4: SPAs for consideration in the HRA process	
Figure 3.5: Ramsar sites for consideration in the HRA process	
Figure 3.6: SACs for consideration in the HRA process	
Figure 5.1: Pie chart to illustrate local contributions to nitrogen deposition to the SPA and SAC	
Figure 7.1: Local Plan allocations	

Appendices

Appendix A	In-Combination Assessment			
Appendix B	Habitats site conservation objectives, qualifying features, threats and pressures			
Appendix C	Appendix C Screening of Regulation 19 Local Plan Policies and Allocations			
Appendix D	Baseline air quality information (Source: APIS)			

Acronyms & Abbreviations

AA	Appropriate Assessment
AADT	Annual Average Daily Traffic
ALS	Abstraction License Strategy
APIS	Air Pollution Information System
AWS	Anglian Water Services
BLP	Broads Local Plan
CAMS	Catchment Abstraction Strategy
CIEEM	Chartered Institute of Ecology and Environmental Management
CJEU	Court of Justice of the European Union
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
DLUHC	Department for Levelling Up, Housing and Communities
DTA	David Tyldesley and Associates
EA	Environment Agency
FLL	Functionally Linked Land
GI	Green Infrastructure
GIRAMS	Green Infrastructure & Recreational Avoidance and Mitigation Strategy
HDV	Heavy Duty Vehicle
HRA	Habitats Regulations Assessment
IAQM	Institute of Air Quality Management
IROPI	Imperative Reasons of Overriding Public Interest
IRZ	Impact Risk Zone
IUCN	International Union for Conservation of Nature
JNCC	Joint Nature Conservation Committee
LPA	Local Planning Authority
LSE	Likely Significant Effect
LTP	Local Transport Plan
NBP	Norfolk Biodiversity Partnership
NPPF	National Planning and Policy Framework
NSPF	Norfolk Strategic Planning Framework
RAMS	Recreational impact Avoidance and Mitigation Strategy
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
SANG	Suitable Alternative Natural Greenspace
SIP	Site Improvement Plan
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest

SWMC	Surface Water Management Catchment
TraC	Transitional and Coastal
WFD	Water Framework Directive
WMS	Waterways Management Strategy
WRC	Wastewater Recycling Centre
WRMP	Water Resource Management Plan
WRZ	Water Resource Zones
WwTW	Wastewater Treatment Works
ZOI	Zone of Influence

Executive Summary

About this report

- E1. Lepus Consulting has been appointed, on behalf of the Broads Authority, to undertake a Habitats Regulations Assessment (HRA) in compliance with the Habitats Regulations (as amended)¹ of the Publication Broads Local Plan at Regulation 19.
- E2. This report provides the outputs of the HRA process which has been undertaken alongside preparation of the Local Plan.

Screening outcomes (HRA Stage 1)

- E3. The Local Plan for the Broads is not directly connected with or necessary to the management of any habitats site. Consideration was therefore given to potential links or causal connections between the effects of the Local Plan and habitats sites within the study area to identify Likely Significant Effects (LSEs). This exercise was undertaken through the collation of information for each habitats site and application of a 'source-pathway-receptor' model.
- E4. Taking no account of mitigation measures, the screening stage concluded that the Local Plan has the potential to have LSEs at the following habitats sites:
 - Benacre to Easton Bavents SPA recreational LSEs;
 - Breckland SPA recreational LSEs;
 - Breckland SAC recreational LSEs;
 - Breydon Water SPA water quality/quantity, recreational and urbanisation LSEs;
 - Breydon Water Ramsar water quality/quantity, recreational and urbanisation LSEs;
 - Broads SAC air quality, water quality/quantity, recreational and urbanisation LSEs;
 - Broadland Ramsar air quality, water quality/quantity, recreational and urbanisation LSEs;
 - Broadland SPA air quality, water quality/quantity, recreational and urbanisation LSEs;
 - Dersingham Bog Ramsar recreational LSEs;
 - Great Yarmouth and North Denes SPA recreational and urbanisation LSEs;
 - Norfolk Valley Fens SAC water quantity and recreational LSEs;
 - North Norfolk Coast Ramsar recreational LSEs;
 - North Norfolk Coast SAC recreational LSEs;
 - North Norfolk Coast SPA recreational LSEs;
 - Outer Thames Estuary SPA urbanisation LSEs;
 - River Wensum SAC water quantity LSEs;

¹ The Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents [Accessed: 03/10/24] as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: https://www.legislation.gov.uk/ukdsi/2019/9780111176573 [Accessed: 03/10/24].

- Roydon and Dersingham Bog SAC recreational LSEs;
- Roydon Common Ramsar recreational LSEs;
- The Wash and North Norfolk Coast SAC recreational LSEs;
- The Wash Ramsar recreational LSEs;
- The Wash SPA recreational LSEs; and
- Winterton-Horsey Dunes SAC recreational and urbanisation LSEs.
- E5. The identification of LSEs at the screening stage triggered the requirement for an Appropriate Assessment (AA), stage 2 of the HRA process.

Appropriate Assessment outcomes (HRA Stage 2)

Air quality Appropriate Assessment

E6. The assessment evaluated ecological impacts of air pollution on the Broads SAC, Broadland Ramsar and Broadland SPA and focused on qualifying and supporting habitat within 200m of strategic road links. Baseline air quality levels across these habitats sites were analysed and background air pollution contributions from different sectors in the context of air quality trends were reviewed, including agriculture and transport. Results showed that there has been a decline in nitrogen deposition at the Broads SAC, Broadland Ramsar and Broadland SPA since 2003 and an associated overall decline in acid deposition. It is noted that the overall housing delivery target for Broads is 358 dwellings (see Local Plan Policy POSP15) over the plan period. The Local Plan allocates a total of 250 dwellings (at one site - Utilities Site) and 43 residential moorings over the 20-year Plan period (around 20 dwellings per year). The remaining need (which is part of the overlapping District's need and not additional to) will be achieved through allocations, windfall, completions and permissions. Allocations PUBTHU1 (16 dwellings) and PUBOUL2 (76 dwellings) already have planning permission but are also included in the Local Plan until they are built out. This scale of development is likely to lead to a small increase in traffic emissions, predominantly on rural roads. Taking these factors into consideration, alongside Local Plan protective policies and national policy, it was concluded in the assessment that no adverse impacts on the site integrity of any habitats sites will arise due to a change in air quality from the Local Plan alone or in-combination.

Water Quality and Water Quantity Appropriate Assessment

E7. The assessment considered the potential effects of a change in water quality and quantity on hydrologically sensitive habitats sites associated with Local Plan development. This took into account the high-level regulatory water quality and quantity protective frameworks which address Local Plan and in-combination growth in neighbouring areas. It also took into consideration Local Plan requirements as well as local measures in the form of plans, programmes, environmental operating procedures and strategies. In addition, nutrient neutrality mitigation requirements were considered to ensure no adverse impacts upon the Broads SAC and Broadland Ramsar designations either alone or incombination. This information was analysed in the context of the conservation objectives for each habitats site. It was concluded that no adverse impacts on the site integrity at any habitats site due to a change in water quality or quantity will arise as a result of the Local Plan either alone or in-combination.

Recreation and Urbanisation Appropriate Assessment

E8. To provide an evaluation of the ecological impacts of recreation and urbanisation effects on habitats sites due to the Local Plan both alone and in-combination, the assessment took into consideration existing mitigation requirements which are already in operation, and which have been adopted by the Broads Authority. These included the Norfolk Recreational disturbance Avoidance and Mitigation Strategy (Norfolk RAMS) and the Suffolk Coast Recreation Disturbance Avoidance and Mitigation Strategy (Suffolk RAMS). These strategies address in-combination development within a defined Zone of Influence. This data was evaluated in the context of the Local Plan allocations. Taking into consideration Local Plan policy wording which secures appropriate mitigation for both alone and on-combination impact on the site integrity of any habitats site will arise from increased development.

Next steps

- E9. The purpose of this report is to inform the HRA of the Publication Local Plan using best available information. The Broads Authority, as the Competent Authority, is responsible for preparing the Integrity Test, which can be undertaken in light of the conclusions set out in this report.
- E10. This report will be submitted to Natural England, the statutory nature conservation body, for formal consultation. The Broads Authority must 'have regard' to their representations under the provisions of Habitats Regulations prior to making a final decision as to whether they will 'adopt' the conclusions set out within this report as their own.

1 Introduction

1.1 Background

- 1.1.1 The Broads Authority (the Authority) is the local planning authority (LPA) for the Broads and is responsible for producing the Local Plan for the Broads. The purpose of a local plan is to guide development in the area and is used in determining planning applications. Local plans should be reviewed to assess whether they need updating at least once every five years². The existing local plan³ was adopted in 2019 and covers the period up to 2036.
- 1.1.2 The adopted local plan commits to a review 18 months after adoption. As such, the Authority is currently undertaking a review of the Local Plan which aims to update policies in light of changes to the National Planning Policy Framework (NPPF)⁴ and address issues such as climate change.
- 1.1.3 Between October and December 2022, the Authority published the Issues and Options consultation which was designed to obtain views on key issues and current policies⁵. The Authority consulted on the Preferred Options Consultation in March 2024⁶. The responses to these consultations have informed the Publication Local Plan at Regulation 19.

1.2 The Broads Authority

- 1.2.1 The Broads Authority is a Special Statutory Authority established under the 1988 Norfolk and Suffolk Broads Act. The Authority has a statutory duty to manage the Broads for the following three purposes:
 - Conserving and enhancing the natural beauty, wildlife and cultural heritage of the Broads;
 - Promoting opportunities for the understanding and enjoyment of the special qualities of the Broads by the public; and
 - Protecting the interests of navigation.

² Department for Levelling Up, Housing and Communities (2023). Para 33 of the National Planning Policy Framework. Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2 [Date Accessed: 27/09/24].

³ The Broads Authority (2019) Local Plan for the Broads. Available at: <u>https://www.broads-authority.gov.uk/planning/planning-policies/development</u> [Date Accessed: 27/09/24].

⁴ Department for Levelling Up, Housing and Communities (2023). National Planning Policy Framework. Available at: <u>https://www.gov.uk/government/publications/national-planning-policy-framework--2</u> [Date Accessed: 27/09/24].

⁵The Broads Authority (2022) The Local Plan for the Broads Review Issues and Options Consultation July 2022. Available at: https://www.broads-authority.gov.uk/about-us/how-we-work/transparency/consultations [Date Accessed: 27/09/24].

⁶ The Broads Authority (March 2024) The Local Plan for the Broads: Review Plan period 2021 to 2041 Preferred Options consultation. Available at: <u>https://www.broads-authority.gov.uk/______data/assets/pdf__file/0032/513599/Preferred-Options-February-2024.pdf</u> [Date Accessed: 27/09/24].

- 1.2.2 The designated Broads Authority executive area covers parts of Norfolk and North Suffolk and extends around the floodplains and lower reaches of the main rivers which flow through the area (Bure, Yare and Waveney) and their tributaries (Thurne, Ant, Wensum and Chet) as illustrated in **Figure 1.1**.
- 1.2.3 The Executive Area includes areas of Broadland District, South Norfolk District, North Norfolk District, Great Yarmouth Borough, Norwich City, and East Suffolk Council. The councils for these areas do not have planning powers in the Broads area but retain all other local authority powers and responsibilities. Norfolk County Council and Suffolk County Council are the county planning authority for their respective part of the Broads, with responsibilities that include minerals and waste planning. These authorities are also the Lead Local Flood Authority in their respective geographic jurisdictions.

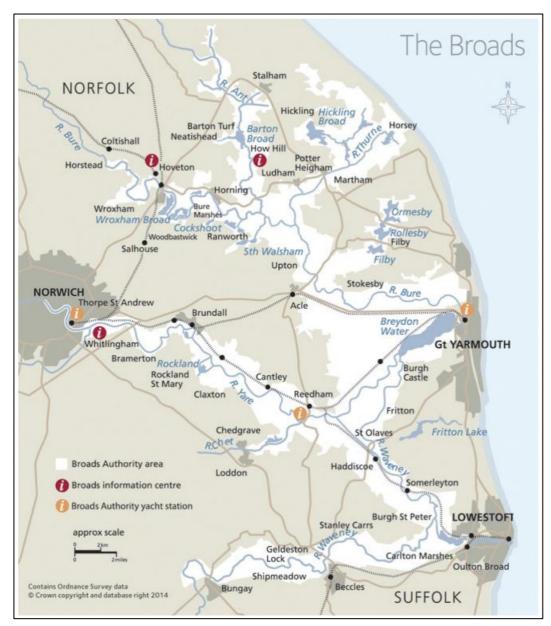


Figure 1.1: The Broads Authority executive area⁷

⁷ Broads Authority (2023) Member's Handbook. Broads Authority executive area.

1.3 Habitats Regulations Assessment

- 1.3.1 The application of Habitats Regulations Assessment (HRA) to land-use plans is a requirement of the Conservation of Habitats and Species Regulations 2017 (as amended)⁸. HRA applies to plans and projects, including all Local Development Documents in England and Wales.
- 1.3.2 Where a plan is likely to have a significant effect on a habitats site (either alone or incombination) and is not directly connected with or necessary to the management of the habitats site, Regulation 105 of the Habitats Regulations notes that the plan making authority for that plan must, before the plan is given effect, make an Appropriate Assessment (AA) of the implications for the site in view of that site's conservation objectives. These tests are referred to collectively as an HRA.
- 1.3.3 The Habitats Regulations⁹ provide a definition of a European site at Regulation 8. These sites include Special Areas of Conservation (SAC), Sites of Community Importance, Special Protection Areas (SPA) and sites proposed to the European Commission in accordance with Article 4(1) of the Habitats Directive. In addition, policy in England and Wales notes that the following sites should also be given the same level of protection as a European site¹⁰. European sites together with sites set out in national policy (listed below) are referred to in England and Wales as a habitats site¹¹. The term 'habitats site' is therefore also used in this HRA report.
 - A potential SPA (pSPA)
 - A possible / proposed SAC (pSAC)
 - Listed and proposed Ramsar Sites (wetland of international importance)
 - In England, sites identified or required as compensation measures for adverse effects on statutory European sites, pSPA, pSAC, and listed or proposed Ramsar sites.

⁸ The Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London, as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

⁹ Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London, as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

¹⁰ Department for Levelling up, Housing and Communities & Local Government (2023). National Planning Policy Framework. Para 187.

¹¹ Habitats site: Any site which would be included within the definition at Regulation 8 of the Conservation of Habitats and Species Regulations 2017 for the purpose of those regulations, including candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation, Special Protection Areas and any relevant Marine Sites. Ministry of Housing, Communities & Local Government (2021). National Planning Policy Framework. Para 181. Available in Annex 2 (Glossary) at: <u>https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf</u> [Date Accessed: 30/09/24].

1.4 Previous HRA work

- 1.4.1 The Issues and Options consultation (2022) of the Local Plan review was supported by an HRA (the Preliminary HRA Scoping Report), which included a preliminary screening of issues and options and made recommendations to inform policy wording¹². It concluded potential LSEs at a number of habitats sites from air quality, hydrology and recreational disturbance, urbanisation effects and habitat loss / fragmentation impact pathways.
- 1.4.2 The Preferred Options Consultation was also supported by an HRA which screened in air quality, water, recreational and urbanisation effects at several habitats sites and provided recommendations for the next stages in the Plan making process¹³. Natural England indicated they were satisfied that the HRA at Regulation 18 provided a comprehensive assessment of the likely significant effects of the Local Plan on habitats sites¹⁴.

1.5 Purpose of this report

- 1.5.1 Lepus Consulting has prepared this report to inform the HRA of the Regulation 19 Local Plan on behalf of the Authority. The Authority, as the Competent Authority, will have responsibility to make the Integrity Test. This can be undertaken in light of the conclusions set out in this report, having regard to representations made by Natural England under the provisions of the Habitats Regulations.
- 1.5.2 This HRA report has been prepared in accordance with the Habitats Regulations and has been informed by the following guidance:
 - Planning Practice Guidance: Appropriate Assessment¹⁵; and
 - The Habitat Regulations Assessment Handbook David Tyldesley and Associates (referred to hereafter as the DTA Handbook), 2013 (in particular Part F: 'Practical Guidance for the Assessment of Plans under the Regulations')¹⁶.

¹² Lepus Consulting. July 2022. Habitats Regulations Assessment of the Local Plan for the Broads. Issues and Options Consultation. Preliminary HRA Scoping Report.

¹³ Lepus Consulting (2024) Preferred Options Habitats Regulations Assessment of the Local Plan for the Broads.

¹⁴ Natural England (2024) Broads Authority Local Plan Review - Preferred Options and Validation Checklist – Plan Period 2021 to 2041 17th May 2024 [Letter]

¹⁵ Department for Levelling Up, Housing and Communities (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment.

¹⁶ Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (June) (2024) edition UK: DTA Publications Limited.

2 Methodology

2.1 Overview

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

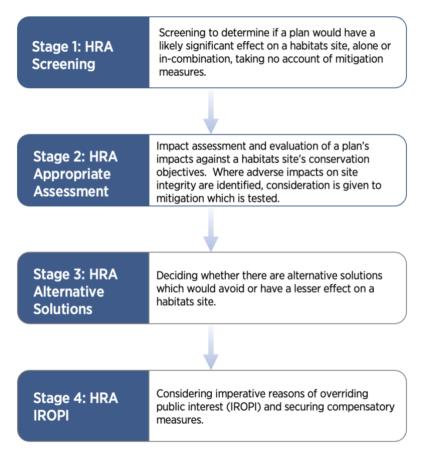


Figure 2.1: Stages in the Habitats Regulations Assessment process¹⁷

¹⁷ Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (January) (2021) edition UK: DTA Publications Limited.

2.2 Stage 1: Screening for Likely Significant Effects

- 2.2.1 The first stage in the HRA process comprises the screening stage (see Figure 2.1). The purpose of the screening process is to firstly determine whether a plan is either (1) exempt (because it is directly connected with or necessary to the management of a habitats site), (2) whether it can be excluded (because it is not a plan), or (3) eliminated (because there would be no conceivable effects), from the HRA process. If none of these conditions apply, it is next necessary to identify whether there are any aspects of the plan which may lead to an LSE at a habitats site, either alone or in-combination with other plans or projects.
- 2.2.2 Screening was undertaken of the Local Plan as part of both the Issues and Options and Preferred Options consultations (see **paragraph 1.1.4**) which concluded that it had the potential to have LSEs on a number of habitats sites. It was therefore concluded that the Local Plan would be screened into the HRA process, and an AA would be required (Stage 2 **Figure 2.1**).
- 2.2.3 Where elements of the Local Plan have been updated in response to both stages of Regulation 18 consultation, these components have been re-screened to determine whether the Publication Regulation 19 Local Plan is likely to have an LSE alone or incombination. The codes set out in **Table 2.1** are used to inform the formal screening decision (Column 2). The results of this re-screening exercise are presented in **Chapter 4** of this report.

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

¹⁸ Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (December) (2019) edition UK: DTA Publications Limited. Available at: http://www.dtapublications.co.uk/ [Accessed: 30/09/24].

LC-785_Local Plan for the Broads_Regulation 19 HRA_8_071024SC.docx

Screening evaluation and reasoning categories from Chapter F of the Habitats Regulations Assessment Handbook (DTA Publications, 2013):	Screen in / screen out
K. Policies or proposals unlikely to have a significant effect either alone or in- combination.	Screen Out
L. Policies or proposals which might be likely to have a significant effect in-combination.	Screen In
M. Bespoke area, site or case-specific policies or proposals intended to avoid or reduce harmful effects on a habitats site.	Screen In

2.2.4 The judgement by the European Court of Justice on the interpretation of the Habitats Directive in the case of People Over Wind and Sweetman vs Coillte Teoranta (Case C-323/17¹⁹) determined that mitigation measures are only permitted to be considered as part of the Appropriate Assessment stage of the HRA process. The HRA screening process has therefore taken no account of incorporated mitigation or avoidance measures that are intended to avoid or reduce harmful effects on a habitats site when assessing the LSEs of the Local Plan on habitats sites. These are measures which, if removed (i.e. should they no longer be required for the benefit of a habitats site), would still allow the lawful and practical implementation of a plan.

2.3 In-combination effects

- 2.3.1 Should screening conclude there are no LSEs from the Local Plan alone, it is necessary to then consider whether the effects of the Local Plan in-combination with other plans and projects would combine to result in an LSE on any habitats site. It may be that the Local Plan alone will not have an LSE but could have a residual effect which may contribute to in-combination LSEs on a habitats site. The in-combination assessment is compliant with the Wealden Judgement (2017)²⁰.
- 2.3.2 Plans and projects considered to be of most relevance to the in-combination assessment of the Local Plan include those that have similar impact pathways (see **Appendix A**). These include those plans and projects which have the potential to increase development in the HRA study area including the following Local Planning Authority (LPA) local development plans:
 - Greater Norwich Development Partnership (Broadland District Council, South Norfolk Council and Norwich City Council)²¹;
 - North Norfolk District Council²²;
 - Great Yarmouth Borough Council²³; and

¹⁹ InfoCuria (2018) Case C-323/17. Available at:

http://curia.europa.eu/juris/document/document.jsf?docid=200970&doclang=EN [Date accessed: 10/01/24].

²⁰ Wealden District Council & Lewes District Council before Mr Justice Jay. Available at:

http://www.bailii.org/ew/cases/EWHC/Admin/2017/351.html [Date Accessed: 04/09/24].

²¹ GNDP (2024) Greater Norwich Local Plan. Available at: <u>https://www.gnlp.org.uk/local-plan-examination-local-plan-examination-document-library/j-inspectors-report-and-adoption</u> [Accessed: 27/09/24]

²² North Norfolk District Council (2022) North Norfolk Local Plan: Proposed Submission Version. Available at: https://www.north-norfolk.gov.uk/tasks/planning-policy/local-plan-new/ [Accessed: 27/09/24]

²³ Great Yarmouth Borough Council (2021) Great Yarmouth Local Plan Part 2. Available at: <u>https://www.great-yarmouth.gov.uk/article/2489/Current-Local-Plan</u> [Accessed: 27/09/24]

- East Suffolk District Council²⁴.
- 2.3.3 In addition, other plans and projects with the potential to increase traffic across the study area have the potential to act in-combination with the Local Plan such as the Norfolk County Council Local Transport Plan 2021-2036²⁵ and the Suffolk County Council Local Transport Plan 2011-2031²⁶ and waste and mineral plans. Plans which allocate water resources or are likely to influence water quality in the study area have also been considered, including the Anglian River Basin Management Plan (RBMP)²⁷, Anglian Water Resource Management Plan (WRMP)²⁸, Essex and Suffolk WRMP²⁹ and Drought Plans (see **Appendix A** for more details).

2.4 Stage 2: Appropriate Assessment and Integrity Test

- 2.4.1 Stage 2 of the HRA process comprises the AA and Integrity Test. The purpose of the AA is to undertake an assessment of the implications of a plan for a habitats site in light of its conservation objectives³⁰.
- 2.4.2 As part of this process, plan makers should take account of the potential consequences of no action, the uncertainties inherent in scientific evaluation and they should consult interested parties on the possible ways of managing the risk, for instance, through the adoption of mitigation measures. Mitigation measures should aim to avoid, minimise or reduce significant effects on habitats sites. Mitigation measures may take the form of policies within the Local Plan, or mitigation proposed through other plans or regulatory mechanisms. All mitigation measures must be deliverable and able to mitigate the adverse effects for which they are targeted.

²⁴ East Suffolk Council (2019) Waveney Local Plan. Available at:

https://www.eastsuffolk.gov.uk/assets/Planning/Waveney-Local-Plan/Adopted-Waveney-Local-Plan-including-Erratum.pdf [Accessed: 27/09/24]

²⁵ Norfolk County Council (2022) Local Transport Plan. Available at: <u>https://www.norfolk.gov.uk/localtransportplan</u> [Date accessed: 27/09/24]

²⁶ Suffolk County Council (2011) Suffolk County Council Local Transport Plan. Available at:

https://www.suffolk.gov.uk/roads-and-transport/transport-planning/transport-planning-strategy-and-

plans?nodeld=f87fcf06-0383-5bf4-91c9-936ee5d7e16e&entryId=1acccd42-c53c-5753-ad60-0efcc29d1e33 [Date accessed: 30/09/24]

²⁷ Environment Agency (2022) Anglian river basin district River basin management plan. Available at:

https://www.gov.uk/guidance/anglian-river-basin-district-river-basin-management-plan-updated-2022 [Date accessed: 30/09/24].

²⁸ Anglian Water (2024) Water Resources Management Plan. Available at:

https://www.anglianwater.co.uk/siteassets/household/about-us/wrmp/revised-draft-wrmp24-main-report-v2.pdf [Date accessed: 30/09/24]

²⁹ Essex and Suffolk Water (2024) Water Resources Management Plan. Available at:

https://www.nwg.co.uk/responsibility/environment/wrmp/ [Date accessed: 30/09/24]

³⁰ Department of Levelling Up, Housing and Communities (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment.

2.4.3 The AA aims to present information in respect of all aspects of the Local Plan and ways in which it could, either alone or in-combination with other plans and projects, impact a habitats site. The plan making body (as the Competent Authority) must then ascertain, based on the findings of the AA, whether the Local Plan will adversely affect the integrity of a habitats site either alone or in-combination with other plans and projects. This is referred to as the Integrity Test.

2.5 Dealing with uncertainty

- 2.5.1 Uncertainty is an inherent characteristic of HRA, and decisions can be made using currently available and relevant information. This concept is reinforced on the 7^{th of} September 2004 'Waddenzee' ruling³¹ as stated below:
- 2.5.2 'However, the necessary certainty cannot be construed as meaning absolute certainty since that is almost impossible to attain. Instead, it is clear from the second sentence of Article 6(3) of the Habitats Directive that the competent authorities must take a decision having assessed all the relevant information which is set out in particular in the Appropriate Assessment. The conclusion of this assessment is, of necessity, subjective in nature. Therefore, the competent authorities can, from their point of view, be certain that there will be no adverse effects even though, from an objective point of view, there is no absolute certainty'.

2.6 The Precautionary Principle

2.6.1 The HRA process is characterised by the Precautionary Principle which is embedded in the Integrity Test. The Precautionary Principle aims to ensure a higher level of environmental protection through preventative decision-taking in the case of risk³².

³¹ EC Case C-127/02 Reference for a Preliminary Ruling 'Waddenzee' 7th September 2004 Advocate General's Opinion (para 107).

³² EUR-Lex. The Precautionary Principle. Available at: https://eur-lex.europa.eu/EN/legal-content/summary/the-precautionary-principle.html [Accessed: 27/09/24].

3 Scoping of threats and pressures at habitats sites

3.1 Introduction

3.1.1 An important initial stage of the screening process is gathering information on habitats sites which may be affected by the Local Plan. This is informally known as scoping and provides an understanding of potential impact pathways from the Local Plan and connections to habitats sites and their vulnerabilities. This information is then used to inform the screening assessment (**Chapter 4**). This chapter presents an update to baseline information obtained at Regulation 18 for each habitats site and their associated threats and pressures in the context of potential impacts from the Local Plan at Regulation 19.

3.2 Identification of a HRA study area

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

3.3 Scoping impact pathways

- 3.3.1 Threats and pressures to which habitats sites are vulnerable have been identified through reference to data held by the JNCC and Natural England and through reference to Ramsar Information Sheets and Site Improvement Plans (SIPs). This information provides current and predicted issues at each habitats site and is summarised in **Appendix B.**
- 3.3.2 Supplementary advice notices prepared by Natural England often provide more recent information on threats and pressures upon habitats sites than SIPs and have therefore also been reviewed. A number of threats and pressures are unlikely to be exacerbated by the Local Plan and have therefore not been considered.
- 3.3.3 Sites of Special Scientific Interest (SSSIs) are protected areas in the United Kingdom designated for conservation. SSSIs are the building blocks of site-based nature conservation in the UK. A SSSI will be designated based on the characteristics of its fauna, flora, geology and/or geomorphology. Whilst typically analogous in ecological function, the reasons for its designation can be entirely different to those for which the same area is designated as a SAC, SPA or Ramsar.
- 3.3.4 Natural England periodically assesses the conservation conditions of each SSSI unit, assigning it a status. The conservation status of each SSSI highlights any habitats site that is currently particularly vulnerable to threats/pressures. Conservation status is defined as follows:
 - Favourable;
 - Unfavourable recovering;
 - Unfavourable no change; or
 - Unfavourable declining.
- 3.3.5 SSSI units in either an 'Unfavourable no change' or 'Unfavourable declining' condition indicate that the habitats site may be particularly vulnerable to certain threats or pressures. It is important to remember that the SSSI may be in an unfavourable state due to the condition of features unrelated to its designation. However, it is considered that the conservation status of SSSI units that overlap with habitats sites offer a useful indicator of habitat / species health at a particular location.

- 3.3.6 Natural England defines zones around each SSSI which may be at risk from specific types of development, these are known as Impact Risk Zones (IRZ). These IRZs are 'a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs also cover the interest features and sensitivities of habitats sites, which are underpinned by the SSSI designation and "Compensation Sites", which have been secured as compensation for impacts on Natura 2000/Ramsar sites'³³. The location of IRZs has been taken into consideration in this assessment as they provide a useful guide as to the location of Functionally Linked Land (FLL) as defined in **paragraph 4.3.7**, and likely vulnerabilities to development proposed within the Local Plan.
- 3.3.7 Based on previous HRA work undertaken at Regulation 18, the following potential impact pathways are considered to be within the scope of influence of the Local Plan. Land use planning also has the potential to result in impacts upon qualifying features when located outside a designation boundary and these are known as FLL³⁴ (**paragraph 4.2.2**). This HRA therefore also considers effects upon FLL or mobile species within the following topic assessments.
 - Air pollution: Land use planning has the potential to increase atmospheric emissions of pollutants to the air. These can result in adverse effects at habitats sites such as eutrophication (nitrogen), acidification (nitrogen and sulphur) and direct toxicity (ozone, ammonia and nitrogen oxides)³⁵;
 - Water resources and water levels: Urban development can change run off rates from urbanised areas to habitats sites or watercourses which run through them. An increase in housing provision can also influence supply and demand for water within the region which may impact water levels;
 - Water quality: Surface water run-off from urban areas has the potential to reduce the quality of water entering a catchment. Water quality may also be reduced through point source effluent discharges from new development at Wastewater Treatment Works (WwTWs) and other controlled discharge sources. Changes in

³³ Natural England (2019) Natural England's Impact Risk Zones for Sites of Special Scientific Interest User Guidance. Available at: https://magic.defra.gov.uk/Metadata_for_magic/SSSI%20IRZ%20User%20Guidance%20MAGIC.pdf [Accessed: 30/09/24].

³⁴ "The term 'functional linkage' refers to the role or 'function' that land or sea beyond the boundary of a European site might fulfil in terms of ecologically supporting the populations for which the site was designated or classified. Such land is therefore 'linked' to the European site in question because it provides an important role in maintaining or restoring the population of qualifying species at favourable conservation status". Source: Natural England (2016) Commissioned Report. NECR207. Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects - a review of authoritative decisions.

³⁵ APIS (2016) Ecosystem Services and air pollution impacts. Available at: <u>http://www.apis.ac.uk/ecosystem-services-and-air-pollution-impacts</u> [Date Accessed: 30/09/24].

water quality also has the potential to affect functionally linked land³⁶ (land outside a designated site boundary);

- Recreational pressure: Increased development has the potential to increase recreational pressure upon habitats sites which are accessible to the public; and
- Urbanisation: Urban development has the potential to result in disturbing activities (such as noise, lighting and visual disturbance). Disturbance effects may impact upon habitats sites themselves and also their qualifying features when outside a designated site boundary.

3.4 Air Quality

- 3.4.1 Natural England has developed a standard methodology for the assessment of traffic related air quality impacts under the Habitats Regulations which is relevant to the HRA of land use plans³⁷. This guidance sets a methodology and thresholds for screening of likely significant (air quality) effects at the HRA screening stage (Stage 1 of the HRA process).
- 3.4.2 Natural England's guidance (in the form of a series of questions below) has been applied to determine potential air quality impact pathways to habitats sites:
 - Does the Local Plan give rise to emissions which are likely to reach a habitats site?
 - Are the qualifying features of sites within 200m of a road sensitive to air pollution?
 - Could the sensitive qualifying features of the site be exposed to emissions?
 - Application of screening thresholds (alone and then, if necessary, in-combination).

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

3.4.3 The Local Plan will lead to the development of small-scale residential development and residential moorings and supports employment and gypsy and traveller development. It is noted that the overall housing delivery target for Broads is 358 dwellings (see Local Plan Policy POSP15) over the plan period. The Local Plan allocates a total of 250 dwellings (at one site - Utilities Site) and 43 residential moorings over the 20-year Plan period (around 20 dwellings per year). The remaining need (which is part of the overlapping District's need and not additional to) will be achieved through allocations, windfall, completions and permissions. Allocations PUBTHU1 (16 dwellings) and PUBOUL2 (76 dwellings) already have planning permission but are also included in the Local Plan until they are built out. This is likely to result in a small increase in traffic-related emissions.

³⁶ "The term 'functional linkage' refers to the role or 'function' that land or sea beyond the boundary of a Habitats site might fulfil in terms of ecologically supporting the populations for which the site was designated or classified. Such land is therefore 'linked' to the Habitats site in question because it provides an important role in maintaining or restoring the population of qualifying species at favourable conservation status". Source: Natural England. 2016. Commissioned Report. NECR207. Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects - a review of authoritative decisions.

³⁷ Natural England (2018) Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001). Available at:

http://publications.naturalengland.org.uk/publication/4720542048845824 [Accessed: 07/06/24].

- 3.4.4 Air quality impacts have been shown to typically affect habitats sites within 10km of a plan boundary³⁸. Campman and Kite (2021) note that 'this zone is based on professional judgment recognising that the effects of growth from development beyond 10km will have been accounted for in the Nitrogen Futures modelling work business as usual scenario'³⁹. This 10km distance threshold can be a useful guide to identify the general areas that may be impacted by air quality. However, it is noted that consideration should also be given to larger residential or commercial allocations and their wider potential for air quality impacts in the context of the local and regional road network. Given the Local Plan is not proposing large residential or commercial allocations, and taking into consideration the rural nature of the locality, it is considered that 10km represents a reasonable distance within which to consider air quality LSEs. This also reflects the allocation of only one residential development which will be located in central Norwich.
- 3.4.5 Habitats sites within this 10km radius and which are sensitive to air quality impacts⁴⁰ are listed in **Table 3.1**.

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

- 3.4.6 It is widely accepted that air quality impacts are greatest within 200m of a road source, decreasing with distance^{41,42,43}. Baseline mapping data has been used to determine the proximity of habitats sites, and the presence of qualifying habitats, to roads (within 200m) which may result in an exceedance of Natural England's screening thresholds (A and B roads) within a 10km buffer from the Local Plan administrative area⁴⁴ and within the key commuting area.
- 3.4.7 The UK Air Pollution Information System (APIS) provides information on all habitats sites and the sensitivity of their qualifying features (habitats and / or species) to air pollution. This data has been interrogated, alongside a desk-based review of site-based data (**Appendix B**), to determine whether there may be impact pathways from the Local Plan to any habitats site through a change in atmospheric emissions. This review indicates that only the Broads SAC, Broadlands SPA and Broadlands Ramsar are sensitive to a change in air quality and have strategic road links located within 200m of potentially qualifying habitat (see **Table 3.1**).

³⁸ Chapman, C and Kite, B. (2021) Main Report. Guidance on Decision-making Thresholds for Air Pollution. JNCC Report No. 696. Available at: https://hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447 [Accessed: 30/09/24].

³⁹ JNCC. Nitrogen Future. Available at: https://jncc.gov.uk/our-work/nitrogen-futures/ [Accessed: 30/09/24].

⁴⁰ Habitats sites which are not sensitive to air quality impacts (as per Natural England Site Improvement Plan information) have not been included.

⁴¹ The Highways Agency, Transport Scotland, Welsh Assembly Government, The Department for Regional Development Northern Ireland (2007) Design Manual for Roads and Bridges, Volume 11, Section 3, Part 1: Air Quality.

⁴² Natural England (2016) The ecological effects of air pollution from road transport: an updated review. Natural England Commissioned Report NECR 199.

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

⁴⁴ As per Nitrogen Futures Modelling Work – see Paragraph 5.4.8.

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

3.4.8 As noted in **paragraph 3.4.3**, the Local Plan will trigger the development of residential dwellings (around 20 per year) and residential moorings and supports employment and gypsy and traveller development. As such, it has the potential to increase traffic related emissions along road links within 200m of those habitats sites listed in **Table 3.1**.

Habitats site name within 10km of Broads Authority executive area and key commuting zone	Is the habitats site sensitive to air quality impacts (as indicated in SIP / NE Supplementary Advice – Appendix B)?	Is there a strategic road link located within 200m of the habitats site?	Are there qualifying habitats present within 200m of strategic road links (using aerial photography and priority habitat mapping data)?	Scope habitats site in to the HRA process?
Benacre to Easton Bavents Lagoons SAC Benacre to Easton Bavents SPA	No	n/a	n/a	No
Broads SAC	Yes	Yes A1064 This road link runs adjacent to the SAC near Filby.	Yes Reed banks, shrub and tree cover including deciduous woodland and lowland fens; aquatic habitats.	Yes
Broads SAC	Yes	Yes A149 This road link runs adjacent to the SAC near Ormesby St Michael and approximately 113m to the north east of the SAC at Sutton.	Yes Reed banks, shrub and tree cover; aquatic habitats.	Yes
Broads SAC	Yes	Yes A47 This road link runs adjacent to the SAC near Acle.	Yes Grazing marshes, ditches, reeds and river dykes.	Yes

Table 3.1: Atmospheric pollution impact pathways to habitats sites⁴⁵

⁴⁵ APIS does not provide air quality information on the sensitivity of specific Ramsar features. However, all Ramsar sites included in this HRA are coincident with either a SAC or SPA designation and therefore air quality information for these habitats sites has been used for this scoping assessment.

Habitats site name within 10km of Broads Authority executive area and key commuting zone	Is the habitats site sensitive to air quality impacts (as indicated in SIP / NE Supplementary Advice – Appendix B)?	Is there a strategic road link located within 200m of the habitats site?	Are there qualifying habitats present within 200m of strategic road links (using aerial photography and priority habitat mapping data)?	Scope habitats site in to the HRA process?
Broads SAC	Yes	Yes B1140 This road is a dead-end road where it meets the railway line to the north of the SAC and therefore it is considered unlikely that air quality will reduce as a result of traffic generated by the Local Plan.	n/a	No
Broads SAC	Yes	Yes B1150 This road link runs adjacent to the SAC at Crostwick	Ye s Grazing marshes; lowland fens	Yes
Broadland SPA and Broadland Ramsar	Yes	Yes A1064 This road link runs adjacent to the SAC near Filby.	Yes Deciduous woodland and lowland fens; aquatic habitats.	Yes
Broadland SPA and Broadland Ramsar	Yes	Yes A47 This road link runs adjacent to the SAC near Acle.	Yes Grazing marshes, ditches, reeds and river dykes.	Yes

Habitats site name within 10km of Broads Authority executive area and key commuting zone	Is the habitats site sensitive to air quality impacts (as indicated in SIP / NE Supplementary Advice – Appendix B)?	Is there a strategic road link located within 200m of the habitats site?	Are there qualifying habitats present within 200m of strategic road links (using aerial photography and priority habitat mapping data)?	Scope habitats site in to the HRA process?
Broadland SPA and Broadland Ramsar	Yes	Yes B1140 This road is a dead-end road where it meets the railway line to the north of the SPA and Ramsar and therefore it is considered unlikely that air quality will reduce as a result of traffic generated by the Local Plan.	n/a	No
Broadland SPA and Broadland Ramsar	Yes	Yes B1150 This road link runs adjacent to the SAC at Crostwick	Yes Grazing marshes; lowland fens	Yes
Breydon Water SPA and Breydon Water Ramsar	No	n/a	n/a	No
Great Yarmouth North Denes SPA	Yes	No	n/a	No
Greater Wash SPA	Yes	Yes B1159 This road runs along the coastline and does not provide a strategic link to / from the Plan area.	n/a	No

Habitats site name within 10km of Broads Authority executive area and key commuting zone	Is the habitats site sensitive to air quality impacts (as indicated in SIP / NE Supplementary Advice – Appendix B)?	Is there a strategic road link located within 200m of the habitats site?	Are there qualifying habitats present within 200m of strategic road links (using aerial photography and priority habitat mapping data)?	Scope habitats site in to the HRA process?
Greater Wash SPA	Yes	Yes B1145 This road comes to an end where it runs within 200m of the SPA. Therefore, it is considered unlikely that air quality will reduce as a result of traffic generated by the Local Plan.	n/a	No
Norfolk Valley Fens SAC	Yes	No. No components which are located within 10km of the Broads Authority area	No	No
Outer Thames Estuary SPA	No	n/a	n/a	No
Paston Great Barn SAC	No	n/a	n/a	No
River Wensum SAC	No	n/a	n/a	No
Winterton-Horsey Dunes SAC	Yes	No	n/a	No

Application of screening thresholds (alone and then, if necessary, incombination)

- 3.4.9 Natural England's advice on the assessment of air quality impacts under the Habitats Regulations states that consideration should be given to the risk of road traffic emissions associated with a local plan⁴⁶. This advice states that an assessment of the risks from road traffic emissions can be expressed in terms of the average annual daily traffic flow (AADT as a proxy for emissions). The use of the AADT screening threshold is advocated by Highways England in their Design Manual for Roads and Bridges (DMRB). This screening threshold is intended to be used as a guide to determine whether a more detailed assessment of the impact of emissions from road traffic is required. This non-statutory or guideline threshold is based on a predicted change of daily traffic flows of 1,000 AADT or more (or heavy-duty vehicle flows on motorways (HDV) change by 200 AADT or more).
- 3.4.10 It is noted that the overall housing delivery target for Broads is 358 dwellings (see Local Plan Policy POSP15) over the plan period. The Local Plan allocates a total of 250 dwellings (at one site Utilities Site) and 43 residential moorings over the 20-year Plan period (around 20 dwellings per year). The remaining need (which is part of the overlapping District's need and not additional to) will be achieved through allocations, windfall, completions and permissions. PUBTHU1 (16 dwellings) and PUBOUL2 (76 dwellings) already have planning permission but are also included in the Local Plan until they are built out. Given this scale of development, the Broads Authority has not commissioned traffic modelling to inform the plan's development. The Local Plan is however likely to trigger a small increase in traffic and therefore the Broads SAC, Broadlands Ramsar and Broadlands SPA will be scoped into the HRA process for further consideration in terms of air quality impacts.

3.5 Water quality and water quantity

- 3.5.1 Urban development coming forward through the Local Plan has the ability to affect water dependant habitats sites through a number of impacts as listed below. These impacts have the potential to change the water balance (levels) and quality of water entering habitats sites:
 - Change in surface permeability and run off rates;
 - Increased water demand to supply new homes and businesses;
 - Reduced quality of surface water run off; and
 - Increased effluent discharge for treatment from Wastewater Treatment Works (WwTWs).
- 3.5.2 Decisions relating to water abstraction for supply and disposal of water are controlled through a number of licensing mechanisms and a high-level water planning framework which is subject to HRA. This ensures the protection of the water environment and compliance with the Water Framework Directive (WFD).

⁴⁶ Natural England (2018) Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001). Available at:

http://publications.naturalengland.org.uk/publication/4720542048845824 [Date Accessed: 30/09/24].

[©] Lepus Consulting for the Broads Authority

- 3.5.3 This high-level water planning framework includes plans which inform the management of water quality and the supply of water at the catchment scale. The Broads Authority is located within the Anglian River Basin District. This is divided into several surface water management catchment (SWMC), with the Broads Authority executive area situated within the Broadland Rivers and the Anglian Transitional and Coastal (TraC) management catchment areas⁴⁷ (**Figure 3.1**). The Anglian River Basin Management Plan (RBMP)⁴⁸ provides a framework for protecting and enhancing the benefits provided by the water environment. To achieve this, and because water and land resources are closely linked, it also informs decisions on land-use planning.
- 3.5.4 It is a statutory requirement that every five years water companies produce and publish a Water Resources Management Plan (WRMP). The WRMP demonstrates long term plans to accommodate the impacts of population growth, drought, environmental obligations and climate change uncertainty in order to balance supply and demand. The Anglian Water⁴⁹ and Essex and Suffolk Water⁵⁰ WRMP24s cover the Local Plan period and set out objectives in relation to water management in the area, including demand management, water supply schemes and measures to protect the environment and address climate change.
- 3.5.5 The Environment Agency (EA) prepares Abstraction Licensing Strategies (ALS) through its Catchment Abstraction Management Strategy (CAMS) process. These ALSs are prepared for each sub-catchment within a river basin. The CAMS process aims to assess the amount of water available for further abstraction licensing, taking into account environmental needs and implementation of the RBMPs and water abstraction plans⁵¹. The CAMS process is published in a series of ALSs for each river basin. The plan area lies within the Broadland Rivers ALS area.

⁴⁷ Environmental Agency (2023) Anglian River Basin District, Management Catchments. Available at: <u>https://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/5</u> [Date Accessed: 30/09/24].

⁴⁸ Environment Agency (2022) Anglian River Basin Management Plan. Available at: <u>https://www.gov.uk/guidance/anglian-</u> <u>river-basin-district-river-basin-management-plan-updated-2022</u> [Date Accessed: 30/09/24].

⁴⁹ Anglian Water (2024) Water Resource Management Plan. Available at:

https://www.anglianwater.co.uk/siteassets/household/corporate/wrmp24/wrmp24-main-report.pdf [Date Accessed: 01/10/24].

⁵⁰ Essex and Suffolk Water (2023) Revised Water Resource Management Plan 2024. Available at:

https://www.eswater.co.uk/services/water/revised-draft-water-resources-management-plan-2024/ [Date Accessed: 01/20/24].

⁵¹ DEFRA. July 2021. Policy Paper: Water Abstraction Plan. Available at:

https://www.gov.uk/government/publications/water-abstraction-plan-2017/water-abstraction-plan [Date Accessed: 30/09/24].

3.5.6 Anglian Water and Essex and Suffolk Water are the potable water providers for the plan area. The East of England is one of the driest regions of the UK with the Anglian region being classed by the Environment Agency as being under serious water stress⁵². Water companies divide their supply into Water Resource Zones (WRZs). The Broads Authority executive area lies within the 'Norwich and the Broads', 'Happisburgh' and 'North Central' WRZs (**Figure 3.2**), which are classed as being under serious water stress particularly due to Heigham surface water abstraction on the River Wensum⁵³. Water abstraction occurs from these WRZs. Therefore any hydrologically sensitive habitats sites which are also located within WRZs served by the Plan area are considered likely to have a potentially significant water quantity effect as a result of development within the Local Plan and are scoped in for further consideration in the HRA process (see **Table 3.2**).

⁵³ Anglian Water (2022) Draft WRMP24 Water Resource Zone Summaries. Available at

⁵² Environment Agency. Areas of water stress: final classification. Available at:

https://www.iow.gov.uk/azservices/documents/2782-FE1-Areas-of-Water-Stress.pdf [Date Accessed: 15/02/24].

https://www.anglianwater.co.uk/siteassets/household/wrmp24-norwichandthebroads-dec22.pdf [Date Accessed: 15/02/24].

[©] Lepus Consulting for the Broads Authority

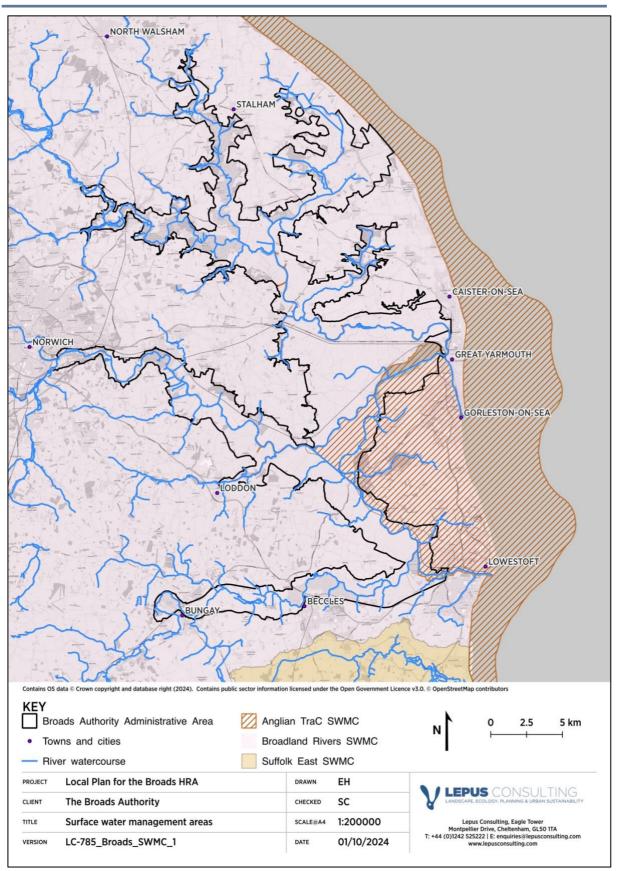


Figure 3.1: Surface water management catchment (SWMC) areas in the Plan area

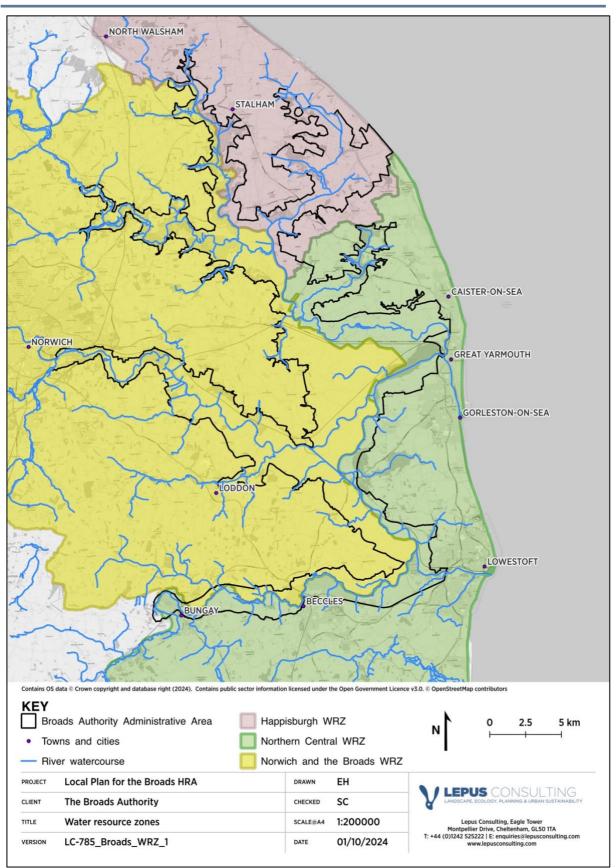


Figure 3.2: Water Resource Zones (WRZs) in the Plan area

- 3.5.7 Urbanisation run-off has the potential to reduce the quality of water entering a catchment. Water quality may also be reduced through effluent discharges from wastewater treatment works and other controlled point source discharges. Any change to water quality at a water sensitive habitats site has the potential to adversely affect the features for which they are designated.
- 3.5.8 Advice from the Chief Planning Officer from the Department for Levelling Up, Housing and Communities (DLUHC) on 16th March 2022⁵⁴ and advice from Natural England on the same date, highlighted the importance of nutrient impacts on The Broads SAC and Broadland Ramsar. This is relevant to components of the SAC and Ramsar which are in an unfavourable condition due to elevated and exceeded nutrient thresholds (see **Figure 3.3**). These components include those underpinned by the following Sites of Special Scientific Interest (SSSIs):
 - Ant Broads and Marshes SSSI;
 - Bure Broads and Marshes SSSI;
 - Trinity Broads and Marshes SSSI;
 - Upper Thurne Broads and Marshes SSSI; and
 - Yare Broads and Marshes SSSI.
- 3.5.9 Water quality data at these SSSI designations indicates that the targets for total phosphorus and total nitrogen are being exceeded. Within these areas, four units are achieving the target for Total Nitrogen (Cocksfoot Broad, Filby Broad, Ormesby Little Broad and Rollesby Broad Sailing Club).
- 3.5.10 Natural England's advice requires the Broads Authority (as the Competent Authority) to fully consider the implication of increased nutrient loading on these sites when determining relevant plans or projects in order to secure appropriate mitigation measures. Natural England suggests nutrient neutrality may be a potential solution to enable developments to proceed in the catchment(s) where an adverse effect on site integrity cannot be ruled out⁵⁵. Potential effects on water quality must be considered in the context of this advice.

⁵⁴ Letter from DLUHC to Chief Planning Officers and Local Planning Authorities affected by nutrient pollution. NUTRIENT POLLUTION: NEUTRALITY, SUPPORT AND FUNDING. 16 March 2022. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1061531/Chief_Plan ner_Letter_about_nutrient_pollution____March_2022.pdf [Date Accessed: 30/09/24].

⁵⁵ Letter from Natural England to LPA Chief Executives & Heads of Planning, County Council Chief Executives and Heads of Planning, EA Area and National Team Directors, Planning Inspectorate, Natural Resources Wales (Cross border sites only) & Secretary of State for Department for Levelling Up Housing & Communities (DLUHC). Advice for development proposals with the potential to affect water quality resulting in adverse nutrient impacts on habitats sites. 16 March 2022. [Date Accessed: 30/09/24].



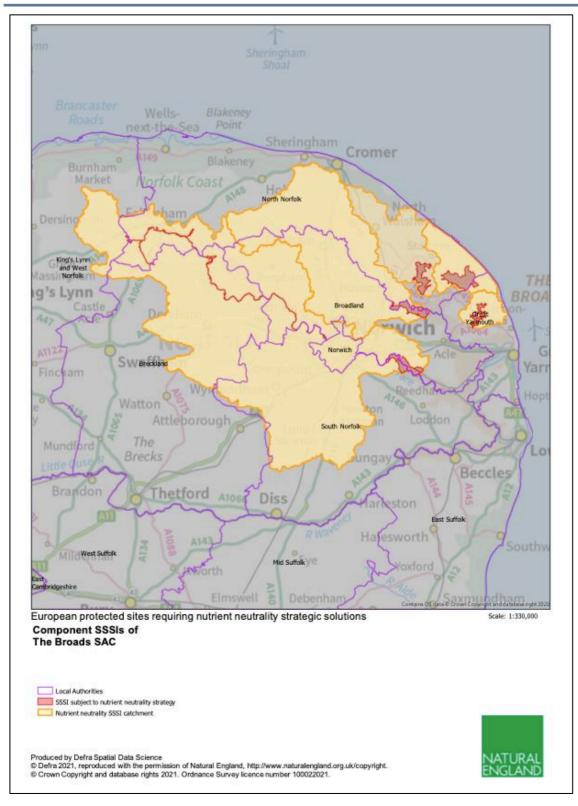


Figure 3.3: European protected sites requiring nutrient neutrality strategic solutions – The Broads SAC⁵⁶

⁵⁶ ©DEFRA (2021) reproduced with the permission of Natural England, © Crown Copyright and database rights 2021. Ordnance Survey License number 100022021.

3.5.11 Taking into consideration potential changes in water levels (through abstraction for water supply) and water quality (through surface water run-off and discharges from wastewater treatment works), habitats sites were screened for potential hydrological impact pathways. Table 3.2 indicates which habitats sites will be scoped into the screening assessment for further consideration in the HRA process in terms of hydrological impact pathways.

Table 3.2: Review of hydrological impact	nathways to hahitats sites	within the influence of the Local Plan
Table 3.2. Review of Tryurological Impact	ραιτιναγό το παριτατό όπος	

Habitats site name	Sensitive to hydrological impacts (water quality and water quantity)	Hydrology connectivity	Will the habitats site be scoped in for further assessment in the HRA process
Beancre to Easton Bavents Lagoons SAC Benacres to Easton Bavents SPA	Yes	The SAC and SPA are a series of lagoons (the Denes, Benacre Broad, Covehithe Broad and Easton Broad) located behind a shingle barrier. These can be impacted by poor water quality. Given their location more then 7km to the south of the Plan area change in water quality associated with development set out in the Local Plan is unlikely to have an impact. Whilst the SPA and SAC are located within the same WRZ as the Plan area, they are not sensitive to changes in water levels from abstraction and therefore water LSEs can be scoped out.	No
Breydon Water Ramsar	No	Breydon Water Ramsar is a large stretch of sheltered estuary and wetland habitat which forms the lower reaches of the River Yare and River Waveney. It comprises an inland tidal estuary with extensive areas of mud flats which support a diverse range of habitat types and species. Any change in water levels, flows or water quality has the potential to have direct and indirect effects on the features for which the Ramsar has been notified.	Yes
Breydon Water SPA	Yes	Breydon Water SPA is a large stretch of sheltered estuary and wetland habitat which forms the lower reaches of the River Yare and River Waveney. It comprises an inland tidal estuary with extensive areas of mud flats that are exposed during low tide forming intertidal flats. These habitats provide important feeding areas for internationally important wildfowl and waders which overwinter at the site. Any change in water levels, flows or water quality may indirectly affect the qualifying features of the SPA such as through a change in the availability of food resource.	Yes
Broads SAC	Yes	The Broads SAC is located within the Plan area and is formed of a network of naturally nutrient-rich lakes which were artificially created through peat extraction in medieval times. This network of lakes and ditches in areas of fen and drained marshlands support a range of water dependent habitats and species. Any change in water levels, flows or water quality (In particular in relation to nutrient inputs) has the potential to have direct / indirect effects on the features for which the SAC is designated.	Yes
Broadland Ramsar	Yes	Broadland Ramsar, similarly, to the SAC is located within the Plan area, and comprises a	Yes

Habitats site name	Sensitive to hydrological impacts (water quality and water quantity)	Hydrology connectivity	Will the habitats site be scoped in for further assessment in the HRA process
		series of flooded medieval peat cuttings which support a diverse range of habitat types and species. Any change in water levels, flows or water quality (In particular in relation to nutrient inputs) has the potential to have direct and indirect effects on the features for which the Ramsar has been notified.	
Broadland SPA	Yes	Broadland SPA is located within the Plan area and comprises a low-lying wetland complex created by a series of flooded medieval peat cuttings. It lies within the floodplains of five principal river systems, including the River Bure, River Yare and River Waveney and their major tributaries. It comprises a complex and interlinked mosaic of wetland habitats. Any change in water levels, flows or water quality has the potential to have indirect effects on the features for which the SPA is designated for instance through a change in food resource availability.	Yes
Great Yarmouth and North Denes SPA Winterton- Horsey Dunes SAC	Yes	Great Yarmouth and North Denes SPA and Winterton-Horsey Dunes SAC are located immediately adjacent to the plan area and comprise two component areas, the Great Yarmouth North Denes actively accreting low dune system and beach, together with the beach and foredune ridge at Winterton-Horsey Dunes. Hydrology impacts are identified as a threat associated with changes in the hydro-chemistry of the dune slacks. It is considered unlikely that changes in water levels associated with the scale of development proposed in the Local Plan will have an impact upon the SAC or SPA and therefore these designations can be scoped out of the assessment.	No
Greater Wash SPA	Yes	The Greater Wash SPA is located in the mid- southern North Sea between Bridlington Bay in the north and the Outer Thames Estuary SPA in the south and comprises seabed habitats and subtidal sandbanks. These habitats support a number of birds for which the SPA is designated. Whilst the qualifying features of the SPA are sensitive to changes in water quality, given its location from the Plan area out at sea, a change in water quality associated with the scale of development set out in the Local Plan is unlikely to have an impact. Whilst the SPA is located within the same WRZ as the Plan area, it is not sensitive to changes in water LSEs can be scoped out.	No
Minsmere to Walberswick Heaths & Marshes SAC	Yes	Minsmere to Walberswick Heaths & Marshes SAC and Ramsar comprises a complex of habitats including mudflat, shingle beach, reedbed, heathland and grazing marsh. Heathland is also present along a large continuous stretch of about 400ha at	No

Local Plan for the Broads – Publication HRA

LC-785_Local Plan for the Broads_Regulation 19 HRA_8_071024SC.docx

Habitats site name	Sensitive to hydrological impacts (water quality and water quantity)	Hydrology connectivity	Will the habitats site be scoped in for further assessment in the HRA process
Minsmere to Walberswick SPA Minsmere- Wallerswick Ramsar		Minsmere, Dunwich and Westleton Heath with smaller areas at Walberswick. Birds associated with the SPA and Ramsar designations rely on these habitat types. The SAC, SPA and Ramsar are sensitive to water pollution. Given the location of these designations more then 13km to the south of the Plan area, a change in water quality associated with the scale of development set out in the Local Plan is unlikely to have an impact. Whilst these designations are located within the same WRZ as the Plan area, they are not sensitive to changes in water levels from abstraction and therefore water LSEs can be scoped out.	
Norfolk Valley Fens SAC	Yes	The closest component of the Norfolk Valley Fens SAC is located upstream of the Plan area. As such, hydrology pathways of impact are not considered likely. This habitats site is therefore not considered further in terms of water quality impacts. However, the SAC is located within the same WRZ as the Plan area and therefore impacts upon water supply will be considered further.	Yes
Outer Thames Estuary SPA	No	The Outer Thames Estuary SPA comprises shallow and deeper water, mobile mud, sand, silt and gravely sediments and intertidal mid and sand flats which support a number of bird species. The SPA is not sensitive to change in water quality or levels and therefore can be scoped out of the HRA process.	No
River Wensum SAC	Yes	The River Wensum is a naturally enriched, calcareous lowland river. The SAC designation is situated approximately 5.4km upstream of the plan area to the north-west of Norwich. The Broads Authority area does not coincide with the nutrient neutrality catchment of the River Wensum ⁵⁷ . This habitats site is therefore not considered further in terms of water quality impacts. However, the SAC is located within the same WRZ as the Plan area and therefore impacts upon water supply will be considered further.	Yes

3.6 Recreational pressure

3.6.1 Increased recreational pressure at habitats sites can result in damage to habitats through erosion and compaction, troubling of grazing stock, causing changes in behaviour to animals such as birds at nesting and feeding sites, spreading invasive species, dog fouling, tree climbing etc.

⁵⁷ Natural England. River Wensum Special Area of Conservation - Evidence Pack (TIN201). Available at: <u>https://publications.naturalengland.org.uk/publication/5893505531772928</u> [Date Accessed: 15/02/24].

- 3.6.2 A common approach taken across the UK to address recreational impacts at habitat sites is to establish a Zone of Influence (ZOI) based on detailed visitor survey data. The ZOI is the area within which there are likely to be significant effects arising from recreational activities undertaken by additional residents due to growth. This is often calculated by taking the distance at which 75% of interviewees surveyed have travelled to reach a particular site (based on a review of visitor survey data).
- 3.6.3 The broad principle of buffer zones is one component of the HRA screening process for recreational pressures. This process also takes into consideration other factors such as recreational management at sites, proximity to settlements and existing recreational resources.
- 3.6.4 Where available, recreational ZOI distances have been applied to determine potential pathways of recreational effects from the Local Plan. The recreational draw of a habitats site depends on a number of factors. These include the extent and range of facilities provided (in particular parking), accessibility both within the habitats site and links to the wider area, incorporation of a habitats site as part of a wider designation such as a National Park and the site's promotion.
- 3.6.5 In 2015 and 2016 Norfolk County Council/the Norfolk Biodiversity Partnership (NBP) commissioned visitor surveys on behalf of all LPAs, to determine current and projected visitor patterns to habitats sites across Norfolk⁵⁸. Based on this work, a ZOI was established for each habitats site within the study area based on resident and tourist visitor data. Drawing on the visitor survey data, the Councils⁵⁹ and the Broads Authority (working together to address cross-boundary issues and offer a strategic solution through a Norfolk Strategic Planning Framework (NSPF)), prepared a Green Infrastructure (GI) and Recreational Avoidance and Mitigation Strategy (RAMS)⁶⁰. This strategy is referred to as GIRAMS and provides information to support LPAs in Norfolk in their statutory requirement to produce 'sound' i.e. legally compliant local plans for their administrative or plan making areas.

⁵⁸ Panter, C., Liley, D. & Lowen, S. (2016). Visitor surveys at European protected sites across Norfolk during 2015 and 2016. Unpublished report for Norfolk County Council. Footprint Ecology.

⁵⁹ Broadland District Council, Breckland District Council, Great Yarmouth Borough Council, The Borough Council of King's Lynn & West Norfolk, North Norfolk District Council, Norwich City Council, South Norfolk Council.

⁶⁰ Place Services. March 2021. *Draft subject to approval by the Norfolk Strategic Planning Group*. Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy (GIRAMS). Habitats Regulations Strategy Document.

- 3.6.6 On the basis of GIRAMS, the Broads Authority has developed its own guidance for developers on the implementation of Norfolk RAMS⁶¹. Relevant ZOI which were established through the visitor survey work (which include a ZOI for tourism development) have been applied in this assessment to determine recreational impact pathways from the Strategy to habitats sites. These have informed Natural England's SSSI Impact Risk Zones (IRZs). An overall ZOI map has been prepared for the Norfolk RAMS which covers the whole county. The ZOI for tourist accommodation is also countywide for all habitats sites. Habitats sites covered by this mitigation strategy, and which will be scoped into this HRA in terms of potential recreational LSEs, include the following:
 - Brecks sites: Breckland SPA and Breckland SAC
 - Broads sites: Broads SAC and Broadland SPA
 - East Coast sites: Breydon Water SPA, Winterton-Horsey Dunes SAC and Great Yarmouth and North Denes SPA
 - North Coast sites: North Norfolk Coast SAC, North Norfolk Coast SPA, North Norfolk Coast Ramsar and the Wash and North Norfolk Coast SAC
 - Norfolk Valley Fens SAC
 - Roydon and Dersingham Bog SAC and Ramsar
 - The Wash: The Wash SPA, The Wash Ramsar and The Wash and North Norfolk Coast SAC.

⁶¹ Broads Authority Developer Guidance. Available at: <u>https://www.broads-authority.gov.uk/planning/other-planning-issues/habitat-mitigation and https://www.broads-authority.gov.uk/_data/assets/word_doc/0024/413754/Norfolk-RAMS-Habitats-Regulations-Assessment-HRA-record-template-DRAFT-002.docx [Date Accessed: 30/09/24].</u>

3.6.7 East Suffolk Council (formally Suffolk Coastal District Council and Waveney District Council), Ipswich Borough Council, Mid Suffolk District Council and Babergh District Council have set out a Recreational Disturbance Avoidance and Mitigation Strategy (RAMS) to address recreational pressure at habitats sites within Suffolk^{62,63}. This strategy sets out a tariff-based approach to mitigating the impact of recreational disturbance on habitats sites resulting from increased residential development across the local authority areas. It also sets out the requirement for additional mitigation measures such as Suitable Alternative Natural Greenspace (SANG) or GI measures such as enhanced walking routes and connections to the Public Right of Way network. A ZOI for each habitats site has been developed based on visitor survey data, to determine where likely significant recreational effects may take place. For all habitats sites covered by the strategy this ZOI is defined as 13km. The only habitats site to fall within 13km of the Broads Authority executive area is the Benacre to Easton Bavents SPA. Although not involved in the production of the Suffolk Coast RAMS, as part of the ZOI fall within the Broads Authority executive area, the Broads Authority are working with the Suffolk Councils to secure appropriate mitigation⁶⁴. As such, this habitats site has been included in this assessment when considering recreational LSEs.

3.7 Urbanisation effects

- 3.7.1 Urbanisation effects typically occur when development is located close to a habitats site boundary. These may include impacts such as noise disturbance, lighting effects, cat predation, fly-tipping, wildfire, littering and vandalism. Urbanisation may also result in the loss of functionally linked land. Strategic mitigation schemes elsewhere in the UK have set a presumption against development (i.e. no net increase in residential dwellings) on the basis of site-specific evidence to safeguard against these impacts.
- 3.7.2 As with recreational impacts, urbanisation mitigation strategies have been implemented across the UK through the establishment of buffer zones. Commonly applied urbanisation ZOI extend around 400 500m from the edge of a designation as this reflects likely impacts from pets (e.g. cat predation) and the distance from which people access a site on foot. The Thames Basin Heaths Special Protection Area Delivery Framework⁵³ is one such strategy which makes recommendations for accommodating development while also protecting the SPA's qualifying features by establishing a 400m zone where development does not take place.
- 3.7.3 Habitats sites located within and immediately adjacent to the Broads Authority executive area are considered potentially vulnerable to such impacts and have therefore been scoped into this assessment for further consideration in the HRA process:

⁶² East Suffolk Council. May 2021. Recreational Disturbance Avoidance and Mitigation Strategy Supplementary Planning Document (SPD). A guide to implementing the Suffolk Coast Disturbance Avoidance and Mitigation Strategy.

⁶³ Footprint Ecology (2019) Habitats Regulations Assessment Recreational Disturbance Avoidance and Mitigation Strategy for Ipswich Borough, Babergh District, Mid Suffolk District and East Suffolk Councils – Technical Report. Available at: <u>https://www.eastsuffolk.gov.uk/assets/Planning/Section-106/Habitat-mitigation/Suffolk-HRA-RAMS-Strategy.pdf</u> [Date Accessed: 12/02/24].

⁶⁴ Broads Authority Developer Guidance. Available at: <u>https://www.broads-authority.gov.uk/planning/other-planning-issues/habitat-mitigation</u> [Date Accessed: 12/02/24].

- Breydon Water Ramsar
- Breydon Water SPA
- Broads SAC
- Broadland Ramsar
- Broadland SPA
- Great Yarmouth and North Denes SPA
- Outer Thames Estuary SPA
- Winterton Horsey Dunes SAC

3.8 Habitats site threats and pressures

3.8.1 Figures 3.4 to 3.6 illustrate the location of habitats sites which will be scoped into the HRA process for further consideration in the screening assessment (Chapter 4). Impact pathways which have the potential to affect these habitats sites are summarised in Table 3.3. These will form the basis of the HRA screening assessment (Chapter 4).

Air Quality Water quality and **Recreational pressure** Urbanisation pressure quantity changes LSEs LSEs **LSEs** Broads SAC Breydon Water SPA Benacre to Easton Breydon Water SPA **Bavents SPA** Broadland Ramsar Breydon Water Ramsar Breydon Water Ramsar Breckland SPA Broadland SPA Broads SAC Broads SAC Breckland SAC **Broadland Ramsar Broadland Ramsar** Breydon Water SPA Broadland SPA Broadland SPA Breydon Water Ramsar Norfolk Valley Fens SAC Greater Yarmouth & Broads SAC North Denes SPA **River Wensum SAC Broadland Ramsar** Outer Thames Estuary SPA Broadland SPA Winterton - Horsey-Greater Yarmouth & Dunes SAC North Denes SPA Norfolk Valley Fens SAC North Norfolk Coast SAC North Norfolk Coast SPA North Norfolk Coast Ramsar Roydon and Dersingham Bog SAC Roydon Common Ramsar Dersingham Bog Ramsar

Table 3.3: Potential impact pathways from the Local Plan at each habitats site.

Local Plan for the Broads – Publication HRA

LC-785_Local Plan for the Broads_Regulation 19 HRA_8_071024SC.docx

Air Quality	Water quality and quantity changes LSEs	Recreational pressure LSEs	Urbanisation pressure LSEs
		The Wash & North Norfolk Coast SAC	
		The Wash Ramsar	
		The Wash SPA	
		Winterton – Horsey- Dunes SAC	

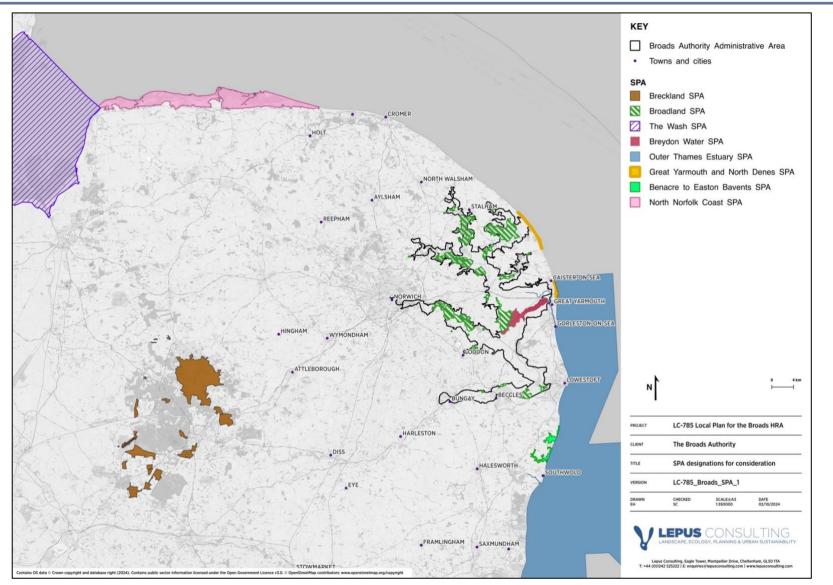


Figure 3.4: SPAs for consideration in the HRA process

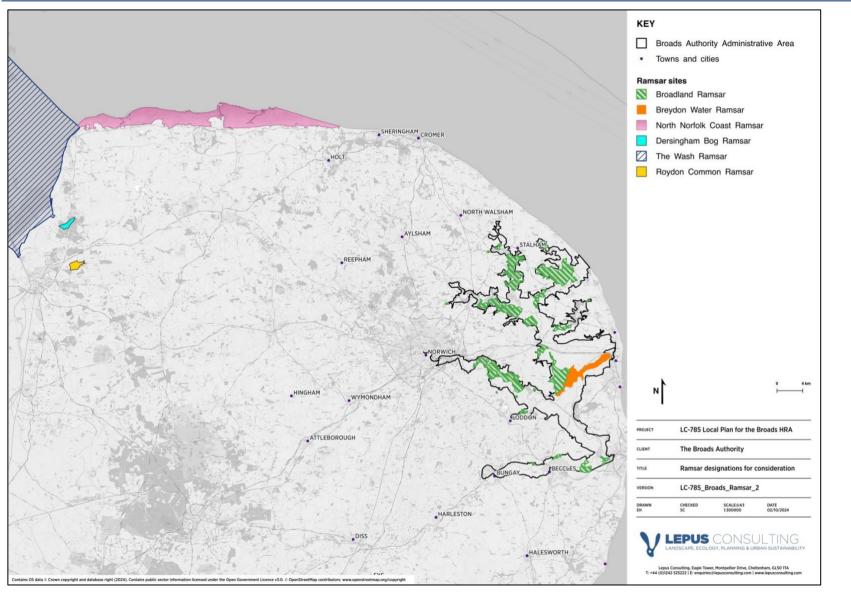


Figure 3.5: Ramsar sites for consideration in the HRA process

Local Plan for the Broads – Publication HRA

LC-785_Local Plan for the Broads_Regulation 19 HRA_8_071024SC.docx

October 2024

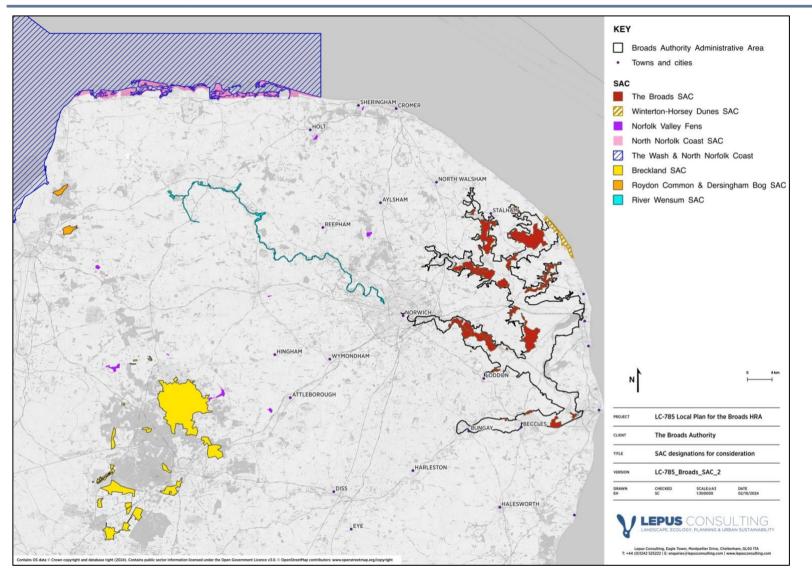


Figure 3.6: SACs for consideration in the HRA process

4 Screening of the Publication Local Plan

4.1 Introduction

4.1.1 This chapter screens each component of the Publication consultation for LSEs and identifies the requirement for AA (**Chapter 5, Chapter 6** and **Chapter 7**).

4.2 Screening

- 4.2.1 Each policy and allocation which forms the Local Plan has been appraised against the HRA pre-screening criteria (see **Table 2.1**), taking into consideration case law and best practice. **Appendix C** provides the output of this screening exercise. This detailed assessment has informed the test of likely significance i.e. will the Local Plan have an LSE, alone or in-combination, at a habitats site.
- 4.2.2 It is concluded that LSEs, from either the Local Plan alone or in-combination with other plans or projects, could be screened out for a number of components. This is because they fell into the following categories (see **Table 2.1** for a description of each category):
 - Category A: General statements of policy / general aspirations
 - Category D: Environmental protection / site safeguarding
 - Category F: Policies or proposals that cannot lead to development or other change
- 4.2.3 Those policies and allocations set out in **Table 4.1** are considered to have an LSE incombination with other plans and projects and have been screened into the AA process.

Appendix C)			
Policy number	Policy name		
PUBM11	Green and blue Infrastructure and Public Rights of Way		
PUBM14	Re-use, Conversion or Change of Use of Historic Buildings		
PUBDM17	Mitigating Recreational Impacts		
PUBDM18	Mitigating Nutrient Enrichment Impacts		
PUBSP8	Accessibility and Transport		
PUBSP9	Recreational Access around the Broads Area		
PUBDM29	Transport, Highways and Access		
PUBDM30	Recreational Facilities Parking Areas		
PUBSP10	A Prosperous Local Economy		
PUBDM35	Retail Development in the Broads		
PUBSP12	Sustainable Tourism		
PUBSP13	Navigable Water Space		
PUBDM38	Access to the Water		
PUBDM39	Bank Stabilisation		
PUBSP14	Mooring Provision		
PUBDM40	Mooring, Mooring Basins and Marinas		
PUBDM41	The Impact of Replacing Quay Heading on Navigation		

Table 4.1: Policies and allocations of the Local Plan screened into the HRA process (summarised from**Appendix C**)

Local Plan for the Broads – Publication HRA

LC-785_Local Plan for the Broads_Regulation 19 HRA_8_071024SC.docx

Policy number	Policy name
POSP15	Residential Development
PUBDM44	Residential Development within Defined Development Boundaries
PUBDM45	Gypsy, Traveller and Travelling Show People
PUBDM46	New Residential Moorings
PUBNOR1	Utilities Site
PUBTHU1	Tourism development at Hedera House, Thurne
PUBBRU6	Brundall Gardens Marina Residential Moorings
PUBGIL1	Gillingham residential moorings (H. E. Hipperson's Boatyard)
PUBCHE1	Greenway Marine residential moorings
PUBSOM1	Somerleyton Marina Residential Moorings
PUBSTA1	Land at Stalham Staithe (Richardson's Boatyard)
PUBOUL2	Oulton Broad - Former Pegasus/Hamptons Site

4.2.4 The following LSE were identified at habitats sites as follows:

- Air quality LSEs in-combination
- Water quality and/or quantity LSEs alone and in-combination
- Recreational impacts in-combination
- Urbanisation effects in-combination

4.3 Screening conclusion

4.3.1 As required under Regulation 105 of the Habitats Regulations, an assessment of LSEs of the Local Plan upon habitats sites has been undertaken. The screening checks (Appendix C) indicate that the Local Plan has the potential to have LSEs on a number of habitats sites, both alone, and for a number of policies and allocations, in-combination. The Local Plan is not directly connected with or necessary to the management of any habitats site. The screening assessment takes no account of mitigation measures that the Local Plan may incorporate to mitigate adverse impacts upon habitats sites. It is therefore concluded that the Local Plan will be screened into the HRA process. The next stage of the HRA process will be Stage 2 – AA.

5 Air Quality Appropriate Assessment

5.1 Introduction

- 5.1.1 The following section of the AA focuses on assessing more precisely the ecological impacts of air pollution on the qualifying features of habitats sites as set out in **Chapter 4** due to Local Plan growth alone and in-combination.
- 5.1.2 The policies set out in **Table 5.1** were screened into the HRA process for consideration in an AA due to likely significant air quality impacts (**Appendix C**):

Table 5.1: Local Plan policies screened into the HRA process due to air quality LSEs (see Appendix C)

Policy number	Policy name
PUBDM14	Re-use, Conversion or Change of Use of Historic Buildings
PUBSP10	A Prosperous Local Economy
PUBDM35	Retail Development in the Broads
PUBSP12	Sustainable Tourism
POSP15	Residential Development
PUBDM44	Residential Development within Defined Development Boundaries
PUBDM45	Gypsy, Traveller and Travelling Show People
PUBDM46	New Residential Moorings

- 5.1.3 All allocations which allocate development (residential, residential moorings and employment, tourism) also have the potential to act cumulatively to increase traffic flows on the local and wider road network and were screened into the HRA process (Appendix C). An increase in traffic related emissions from all allocations cumulatively has the potential to change air quality at the above sites both alone and in-combination when considered with growth in neighbouring LPA areas. These allocations include the following:
 - Policy PUBNOR1: Utilities Site
 - Policy PUBTHU1: Tourism development at Hedera House, Thurne
 - Policy PUBBRU6: Brundall Gardens Marina Residential Moorings
 - Policy PUBGIL1 Gillingham residential moorings (H. E. Hipperson's Boatyard)
 - Policy PUBCHE1: Greenway Marine residential moorings
 - Policy PUBSOM1: Somerleyton Marina Residential Moorings
 - Policy PUBSTA1: Land at Stalham Staithe (Richardson's Boatyard)
 - Policy PUBOUL2: Oulton Broad Former Pegasus/Hamptons Site

5.2 Air quality impacts

- 5.2.1 The main mechanisms through which air pollution can have an adverse effect are through eutrophication (nitrogen), acidification (nitrogen and sulphur) and direct toxicity (ozone, ammonia and nitrogen oxides)⁶⁵. Deposition of air pollutants can alter the soil and plant composition and species which depend upon these.
- 5.2.2 Excess atmospheric nitrogen deposition within an ecosystem or habitat can disrupt the delicate balance of ecological processes interacting with one another. As the availability of nitrogen increases in the local environment, some plants that are characteristic of that ecosystem may become competitively excluded in favour of more nitrophilous plants. It also impacts the ammonium and nitrate balance of the ecosystem, which disrupts the growth, structure and resilience of some plant species.
- 5.2.3 Excess nitrogen deposition often leads to the acidification of soils and a reduction in the soils' buffering capacity (the ability of soil to resist pH changes). It can also render the ecosystem more susceptible to adverse effects of secondary stresses, such as frost or drought, and disturbance events, such as foraging by herbivores.

5.3 Baseline air quality information

- 5.3.1 The qualifying features of the Broads SAC and Broadland SPA are listed in Appendix B. The SIP⁶⁶ for these designations indicates that a number of their qualifying features are sensitive to air pollution. Qualifying habitats can either be sensitive to direct toxicity from air pollution or to changes in soil chemistry associated with nitrogen deposition and acidification. Qualifying species may be indirectly affected by air quality changes where they result in a change in habitat composition and food / resource availability.
- 5.3.2 The Broadland Ramsar information sheet does not identify a threat from air quality⁶⁷. It is recognised that the notified Ramsar features for the Broadland Ramsar are the same as the qualifying features of the SAC and SPA and therefore this AA also applies to the Broadland Ramsar designation.

⁶⁵ APIS (2016) Ecosystem Services and air pollution impacts. Available at: <u>http://www.apis.ac.uk/ecosystem-services-and-</u> <u>air-pollution-impacts</u>. [Date Accessed: 30/09/24].

⁶⁶ Natural England (2014) Broadlands Site Improvement Plan. Available at:

https://publications.naturalengland.org.uk/publication/5444118129934336 [Date Accessed: 30/09/24].

⁶⁷ Ramsar Information Sheet. Available at: <u>https://jncc.gov.uk/jncc-assets/RIS/UK11010.pdf</u> [Date Accessed: 30/09/24].

- 5.3.3 In an attempt to manage the negative consequences of atmospheric nitrogen deposition and acidification, 'critical loads' and 'critical levels' have been established for ecosystems across Europe. Each habitats site is host to a variety of habitats and species, the features of which are often designated a critical load for nitrogen deposition. The critical loads of pollutants are defined as a `...quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge' ⁶⁸. Critical levels are defined as 'concentrations of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur according to present knowledge'⁶⁹.
- 5.3.4 Appendix D summarises the critical loads and current levels of deposition for the SAC and SPA for each qualifying feature⁷⁰. It also provides source contribution data for nitrogen deposition. This data indicates that nitrogen deposition and acidity is currently exceeding the critical load for a number of qualifying features. APIS indicates that there would be no expected negative impact from increased nitrogen deposition on species broad habitat types for all qualifying features of the SPA, with the exception of Great bittern (*Botaurus stellaris*) and Eurasian marsh harrier (*Circus aeruginosus*) when using fen, marsh and swap habitat for reproducing and Eurasian wigeon (*Anas penelope*) when using literal sediment for wintering activity. For species using open standing water habitat type, the impact of nitrogen deposition will be dependent on whether the water body is nitrogen or phosphorus limited. APIS indicates there would be no expected negative impact from increased acid deposition on the species broad habitat types for all SPA qualifying features.
- 5.3.5 The scoping assessment presented in **Table 3.1** indicates that there are a number of strategic road links within 200m of the SAC and SPA which are capable of carrying traffic which may exceed Natural England's screening thresholds. A review of aerial photography and site mapping data for the SAC and SPA indicates that there is the potential for qualifying habitat to be present within 200m of these road links.

⁶⁸ Coordination Centre for Effects (CCE). Critical load and level definitions. Available at:

https://www.umweltbundesamt.de/en/Coordination Centre for Effects [Date Accessed: 30/09/24].

⁶⁹ Coordination Centre for Effects (CCE). Critical load and level definitions. Available at: <u>https://www.umweltbundesamt.de/en/Coordination_Centre_for_Effects</u> [Date Accessed: 30/09/24].

⁷⁰ Air Pollution Information Systems (APIS) Available at: <u>http://www.apis.ac.uk/</u> [Date Accessed: 30/09/24]. Data for Ramsar sites is not available on APIS.

5.4 Appropriate Assessment

- 5.4.1 As set out in Section 3.4, Natural England has developed a standard methodology for the assessment of traffic related air quality impacts under the Habitats Regulations which is relevant to the HRA of land use plans⁷¹. In addition, the Institute of Air Quality Management (IAQM)⁷² and the Chartered Institute of Ecology and Environmental Management (CIEEM)⁷³ have also prepared advice on the assessment of air quality impacts at designated sites. This includes consideration of factors such as:
 - The action needed to achieve the conservation objectives for the habitats site(s);
 - The expected future trend in pollutants of concern (and the scientific reasonableness of any trend);
 - The magnitude of any future 'in combination' dose and how it may change the trend; and
 - The physical extent of the affected area as a proportion of that interest feature within the habitats site(s)⁷⁴.
- 5.4.2 The conservation objectives for the SAC and SPA specify that the integrity of these sites is to 'maintain' or 'reduced' as appropriate, to ensure that they contribute to achieving the Favourable Conservation Status of the SAC's Qualifying Features and ensure that the SPA contributes to achieving the aims of the Wild Birds Directive⁷⁵⁷⁶. In order to achieve this, air quality at the SAC and SPA will need to be maintained (SAC) or reduced (SPA) to 'at or below' critical levels and loads.
- 5.4.3 A review of background air quality trends provided on APIS⁷⁷ indicates that there has been a decline in nitrogen deposition since 2003 and an associated overall decline in acid deposition (although there was a small peak in 2017 which is now shown to be declining). This may be attributed to national initiatives such as improvements in vehicle technologies (new standard Euro 6/VI vehicles) and the implementation of other catchment wide initiatives.

⁷¹ Natural England (2018) Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001). Available at:

http://publications.naturalengland.org.uk/publication/4720542048845824 [Date Accessed: 30/09/24].

⁷² Holman et al (2020). A guide to the assessment of air quality impacts on designated nature conservation sites – version 1.1, Institute of Air Quality Management, London.

⁷³ CIEEM (2021) Advice on Ecological Assessment of Air Quality Impacts. Chartered Institute of Ecology and Environmental Management. Winchester, UK.

⁷⁴ CIEEM. January 2021. Paragraph 20. Advisory Note: Ecological Assessment of Air Quality Impacts.

⁷⁵ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features The Broads Special Area of Conservation (SAC) Site Code: UK0013577.

⁷⁶ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Broadland Special Protection Area (SPA) Site Code: UK9009253.

⁷⁷ The Air Pollution Information System. Available at: <u>https://www.apis.ac.uk/</u>. [Date accessed: 30/09/24]

5.4.4 APIS data indicates that local contributions to nitrogen deposition are predominantly associated with agricultural sources, with 15% of contributions from fertiliser applications and 37.5% from livestock, see **Figure 5.1.** By comparison, road sources only contribute 5.7% to local nitrogen deposition levels. This data suggests that the Local Plan area sits within an agricultural 'hotspot'. It is clear from this data that steps to avoid critical load exceedance and restore the site to 'at or below' critical loads, will require action to reduce emissions from existing agricultural sources as a priority. CIEEM's guidance notes that where 'road transport makes only a small contribution to the critical load exceedance, investment to encourage cleaner car technology may be sufficient to regard a new proposal which leads to a small increase in traffic on local roads as acceptable'. This data indicates that in order to ensure conservation objectives are achieved in relation to air quality, a strategic approach towards agricultural emissions will be taken.

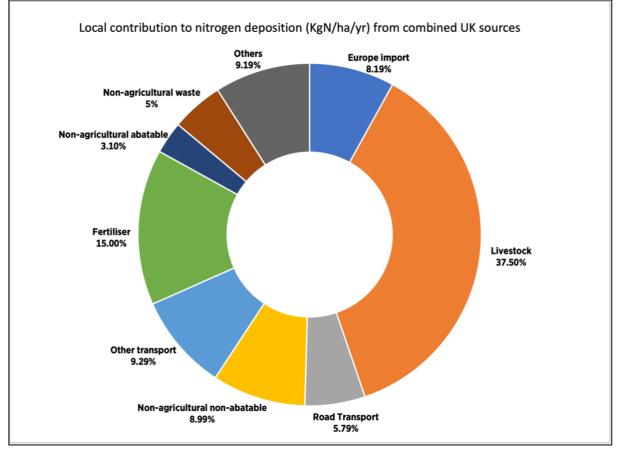


Figure 5.1: Pie chart to illustrate local contributions to nitrogen deposition to the SPA and SAC

5.4.5 Policies set out in the Local Plan incorporate measures for sustainable transport and a requirement to encourage a modal shift, electric vehicles and promote active transport options (PUBDM29: Transport, Highways and Access). Other policies such as Policy PUBSP8 (Accessibility and Transport) and Policy PUBSP9 (Recreational access around the Broads area) and Policy PUBDM30 (Recreation facilities parking areas) also promote sustainable and active forms of transport. Together these policies will have a positive impact upon air quality by discouraging the private car use and encouraging use of electric cars and other sustainable modes of transport.

- 5.4.6 The Broads Plan is a high-level overarching plan for the Broads which sets out a long-term vision and strategic objectives for the Broads, and draws together and guides a wide range of other Broads plans, programmes and policies. The Broads Plan and other Broads Authority strategic plans and guiding strategies set out a series of measures which will have a positive impact and contribute towards the mitigation of air quality impacts from traffic sources at habitats sites. These include the following:
 - The Broads Plan: Several strategic objectives under the theme of climate change aim to reduce climate emissions through initiatives such as replacing all Broads Authority operating vehicles with electric options (A2), initiatives such as 'Electrifying the Broads' and promotion of tourism hotspots with electric vehicle and alternative fuel strategies and visitor green travel (A3). Other objectives under the 'promoting understating and enjoyment' theme support initiatives for active travel around the Broads (E1).
 - The Broads Authority Integrated Transport Strategy⁷⁸ aims to encourage sustainable travel choices such as public transport, walking, cycling and nonpowered boating, and improve links between public transport provision, visitor destination points and access routes.
 - The Norfolk County Council Local Transport Plan (LTP) 4 Strategy⁷⁹ aims to address issues such as air quality and carbon reduction and tackle infrastructure issues in relation to major road, bus and rail connections. It sets out a series of strategies and policies in relation to this. Policy 2 of LTPS4 notes the priority for reducing emissions will be to support a shift to more sustainable modes and more efficient vehicles, including lower carbon technology and cleaner fuels. Policy 3 notes that innovation and new technologies will be embraced and used proactively to meet new targets set by the recently adopted environmental policy. Policy 4 encourages a behaviour change and interventions that can help to increase the use of sustainable transport.
 - The Suffolk LTP⁸⁰ sets out a series of priorities which include improvements to air quality through promotion of sustainable transport options and promotion of technological improvements.
 - National⁸¹ and local planning policy requires the protection of habitats sites and will apply to all development which requires planning permission. Policy PUBSP5 (Biodiversity) and PUBDM15 (Natural Environment) provide protection for habitats sites and sets out the requirement for compliance with the Habitats Regulations at the project level. Policy PUBDM3 (Pollution and Hazards in

⁷⁸ Broads National Park (2019) Integrated Access Strategy for the Broads.

⁷⁹ Norfolk County Council (2022). Local Transport Plan 4 Strategy 2021 – 2036.

⁸⁰ Suffolk County Council (2011) Local Transport Plan 2011 – 2031. Part 1 Transport Strategy.

⁸¹ Community of Levelling Up, Housing and Communities (2023). National Planning Policy Framework. Para 187. Available at: <u>https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf</u> [Date Accessed: 30/09/24].

development and protecting environmental quality) also sets out measures to protect air quality.

- 5.4.7 As noted in Section 3.4.10, traffic modelling has not been undertaken as part of the Local Plan for the Broads. It is noted that the overall housing delivery target for Broads is 358 dwellings (see Local Plan Policy POSP15) over the plan period. The Local Plan allocates a total of 250 dwellings (at one site - Utilities Site) and 43 residential moorings over the 20year Plan period (around 20 dwellings per year). The remaining need (which is part of the overlapping District's need and not additional to) will be achieved through allocations, windfall, completions and permissions. Allocations PUBTHU1 (16 dwellings) and PUBOUL2 (76 dwellings) already have planning permission but are also included in the Local Plan until they are built out. Given this small scale of housing growth, it is considered unlikely that there will be a significant increase in traffic flows on strategic road links from the Local Plan alone or a significant contribution to in-combination effects. In addition, no new roads are proposed within 200m of any habitats site. The Utilities site allocation is located more than 5km from the closest habitats site. Other allocations made in the Local Plan are for residential moorings. In addition, it is noted that road links across the Plan area, and Norfolk as a whole, are rural in nature. A review of mapping data indicates that a total of 0.6% of the Broads SAC and 0.2% of the Broadlands SPA and Broadlands Ramsar designations lie within 200m of strategic road links when compared to the overall coverage of each designation.
- 5.4.8 The following factors have been taken into consideration in this section of the AA which is consistent with the approach taken in neighboring Districts:
 - Local Plan policy wording to encourage a modal shift, promote active forms of transport and encourage uptake of electric vehicles;
 - Local Plan policy wording which sets out protection for habitats sites and requirement for project level HRA;
 - National and county policy initiatives to encourage a modal shift, electric vehicles, and active transport;
 - Housing provision over the Plan period (a need of 358 dwellings and allocation of 250 residential dwellings on one site and 43 residential moorings);
 - The overall need for the Broads is part of the need for the neighbouring districts, and not additional to their need;
 - Downward local air quality trends and limited road traffic source contribution to nitrogen deposition;
 - Key management issues at the SAC and SPA in terms of nitrogen deposition are associated with management of agricultural sources; and
 - Total proportion of designations within 200m of strategic road links.
- 5.4.9 Taking these factors into consideration it is considered unlikely that there will be any adverse impacts on site integrity at the Broads SAC, Broadland Ramsar and Broadland SPA (either alone or in-combination) due to a change in air quality as a result of the Local Plan.

6 Water Appropriate Assessment

6.1 Introduction

- 6.1.1 The HRA screening process in **Chapter 4** concluded that a number of Local Plan policies and all allocations have the potential to result in likely significant hydrological impacts at the following habitats sites:
 - Breydon Water Ramsar
 - Breydon Water SPA
 - Broads SAC
 - Broadland Ramsar
 - Broadland SPA
 - Norfolk Valley Fens SAC
 - River Wensum SAC
- 6.1.2 This chapter provides an AA which assesses more precisely the ecological impacts associated with a deterioration in water quality and changes to water quantity due to Local Plan growth at each habitats site in view of its qualifying features and conservation objectives.
- 6.1.3 The following policies were screened into the HRA process for consideration in an AA due to water LSEs (**Table 6.1**):

Policy number	Policy name
PUBDM14	Re-use, Conversion or Change of Use of Historic Buildings
PUBSP10	A Prosperous Local Economy
PUBDM35	Retail Development in the Broads
PUBSP12	Sustainable Tourism
PUBSP13	Navigable water space
PUBDM38	Access to the water
PUBDM39	Bank stabilisation
PUBSP14	Mooring provision
PUBDM40	Moorings, mooring basins and marinas
PUBDM41	The impact of replacement quay heading on navigation
POSP15	Residential Development
PUBDM44	Residential Development within Defined Development Boundaries
PUBDM45	Gypsy, Traveller and Travelling Show People
PUBDM46	New Residential Moorings

- 6.1.4 All allocations which allocate development (residential dwellings and residential moorings) also have the potential to act cumulatively to trigger changes in water quality or quantity and were therefore also screened into the HRA process (**Appendix C**). These allocations include the following:
 - Policy PUBNOR1: Utilities Site
 - Policy PUBTHU1: Tourism development at Hedera House, Thurne

- Policy PUBBRU6: Brundall Gardens Marina Residential Moorings
- Policy PUBGIL1 Gillingham residential moorings (H. E. Hipperson's Boatyard)
- Policy PUBCHE1: Greenway Marine residential moorings
- Policy PUBSOM1: Somerleyton Marina Residential Moorings
- Policy PUBSTA1: Land at Stalham Staithe (Richardson's Boatyard)
- Policy PUBOUL2: Oulton Broad Former Pegasus/Hamptons Site

6.2 Baseline information

Water Quality

- 6.2.1 As noted in Section 3.7, urbanisation has the potential to reduce the quality of water entering a catchment through processes such as sedimentation, accidental spillage of chemicals and materials and operational surface water runoff. Water quality may also be reduced through effluent discharges at wastewater treatment works. This change in water quality can increase nutrient inputs into a catchment which can lead to algal blooms, reduce dissolved oxygen and increased turbidity. This can affect the overall condition of the receiving waterbody and may have adverse effects at hydrologically sensitive and connected habitats sites and their qualifying features.
- 6.2.2 Wastewater treatment in the plan area is provided via Wastewater Recycling Centres (WRCs) operated and maintained by Anglian Water Services (AWS). Treated wastewater is ultimately discharged to nearby waterbodies. Each WRC is connected to development by a network of wastewater pipes (the sewerage system) which collects wastewater generated by homes and businesses to the WRC. The Environment Agency control discharges from WRC through the issue of permits.
- 6.2.3 Given the location of the Plan area within the nutrient sensitive catchments of the Broads SAC and Broadland Ramsar (see Section 3.5) potential impacts upon water quality at these habitats sites is likely. Other water quality impact pathways, e.g. via surface water runoff, may also affect other habitats sites within the plan area such as Broadland SPA, Breydon Water SPA and Breydon Water Ramsar.

Water quantity

- 6.2.4 Urban development can reduce catchment permeability and the presence of drainage networks may be expected to remove runoff from urbanised catchments. This may result in changes in run off rates from urbanised areas to habitats sites or watercourses which connect to them and therefore water levels. Water mains leakage and sewer infiltration may also affect water levels. In addition, supply to meet water demand associated with new development (residential and employment supported by the Local Plan) also has the potential to affect water balances at hydrologically sensitive habitats sites which are connected to the plan area.
- 6.2.5 As noted in Section 3.5, the main water service providers for the Broads are Anglian Water and Essex and Suffolk Water. The Anglian Water and Essex and Suffolk Water WRMPs set out objectives to manage water demand. Abstractions for water supply are managed by the Environment Agency through licences issues in line with their CAMS process. The CAMS process is published in a series of ALSs for each river basin, with the Broadland Rivers ALS area being of relevance to the Broads Authority. As set out in Section 3.5, a number of habitats sites are located within the same WRZ as the Plan area and these are therefore potentially susceptible to impacts associated with water abstraction from new development allocated through the Local Plan. These sites include the following:
 - Breydon Water SPA
 - Breydon Water Ramsar
 - Broads SAC
 - Broadland Ramsar
 - Broadland SPA
 - Norfolk Valley Fens SAC
 - River Wensum SAC

6.3 Appropriate Assessment

Water quality

- 6.3.1 Given the unfavourable and declining status of the SSSIs which underpin the Broads SAC and Broadland Ramsar (see Section 3.5), any reduction in water quality would result in an adverse impact on site integrity.
- 6.3.2 Increased nutrient loading (nitrogen and phosphorus) as a result of new development has the potential to reduce water quality. The Broads contain examples of naturally nutrient-rich lakes. These lakes and the ditches in areas of fen and drained marshlands support relict vegetation of the original fenland flora, and collectively contains one of the richest assemblages of rare and local aquatic species in the UK⁸². The features for which the SAC and Ramsar are designated, as well as the composition of species, are dependent on the condition of water quality.

⁸² WOOD, A., WAKE, H. and MCKENDRICK-SMITH, K (2022) The Broads Special Area of Conservation/Broadland Ramsar – Evidence Pack. Natural England Technical Information Note. TIN205 Natural England.

6.3.3 Policy PUBDM18 (Mitigating Nutrient Enrichment Impacts) of the Publication Local Plan contains protective policy wording to ensure that new development (from both the Local Plan alone and in-combination) does not increase nutrient loading.

Policy PUBDM18: Mitigating Nutrient Enrichment Impacts

- **1.** Any development proposal for overnight accommodation which is located within the catchments of the Broads Special Area of Conservation (SAC) and Broadland Ramsar site⁸³, must provide evidence within a shadow HRA to enable the Authority to conclude through a Habitats Regulations Assessment that the proposal will not increase nutrient loads, such that it will not have likely significant effects on the integrity of sites. This can be demonstrated through nutrient neutrality.
- **2.** Planning permission will be granted subject to demonstrating no adverse effect on the integrity of Habitats Sites from nutrient enrichment when considered alone or in-combination.
- **3.** The Norfolk Nutrient Calculator/Natural England Nutrient Calculator will need to be completed. If the calculator concludes an impact from nutrients, these impacts will need to be mitigated using appropriate mitigation, likely secured through a local or national mitigation scheme. The Authority may use legal agreements to ensure this mitigation is secured and in place and will be delivered.
- 6.3.4 One method to achieve this is through nutrient neutrality. Nutrient budgets can be calculated using either the Norfolk Nutrient Calculator or Natural England's Nutrient Calculator. Guidance has been prepared which identifies potential solutions to achieve nutrient neutrality⁸⁴. The Norfolk Environmental Credits⁸⁵ has been set up to invest in local environmental schemes which will provide nutrient neutrality mitigation and generate credits for development to demonstrate that nutrients can be offset.
- 6.3.5 Part 7 of the Levelling Up and Regeneration Act (2023) places a duty on water companies discharging to affected catchment areas to upgrade their Wastewater Treatment Works to achieve the highest technological levels for nutrient removal by 1 April 2030. In addition, Natural England-led Nutrient Mitigation Scheme⁸⁶ is progressing and will allow developers to purchase nutrient credits to demonstrate nutrient neutrality.
- 6.3.6 Under Policy PUBDM18, relevant permissions will only be granted where nutrient neutrality can be demonstrated to ensure compliance with the Habitats Regulations. This policy requires evidence to be submitted to the Authority (as the Competent Authority) to show that on-site or off-site mitigation to achieve nutrient neutrality will be provided for relevant

⁸³ Specifically the Bure Broads and Marshes SSSI, Trinity Broads SSSI, Yare Broads and Marshes SSSI, Ant Broads and Marshes SSSI, Upper Thurne Broads and Marshes SSSI.

⁸⁴ Royal Haskoning DHV (2023) Norfolk Nutrient Guidance.

⁸⁵ Norfolk Environmental Credits. Available at: <u>https://www.norfolkenvironmentalcredits.co.uk/.</u> [Date accessed: 30/09/24]

⁸⁶ Natural England Nutrient Mitigation Scheme. Available at <u>https://www.gov.uk/government/publications/natural-englands-nutrient-mitigation-scheme-for-developers</u> [Date accessed: 30/09/24]

- 6.3.7 Other policies set out in the Preferred Options Local Plan (Policy PUBDM5: Water Quality, Foul Drainage and Policy PUBDM6: Boat Wash-Down Facilities and Policy PUBSP2: Strategic flood risk policy) will also contribute towards the protection of water quality at the SAC and Ramsar, and other sites listed in **Paragraph 6.2.5**.
- 6.3.8 In addition, Policy PUBDM15: Natural Environment will apply to all allocations, and any other windfall development which comes forward through the Local Plan. This policy includes requirements for development to comply with the Habitats Regulations and ensures no adverse impacts on the site integrity of any habitats site either alone or incombination.
- 6.3.9 The overarching Broads Plan and other Broads Authority strategic plans and guiding strategies (as listed below) also set out a series of local measures, which will have a positive impact and contribute towards the protection of water quality at habitats sites.
 - The Broads Plan: Strategic Objective B2 aims to promote best practice water capture and usage across the Broadland Rivers catchment and reduce pollution. It also aims to adopt and implement objectives set out in other water-based plans. Section 1.3 sets out the requirement for all lower tier plans and projects (required to implement the strategic objectives in the Broads Plan) to be undertaken in a manner that is sensitive to the environment. It notes that works will also need to comply with relevant permits and controls to ensure environmental protection on habitats sites, and where relevant, such plans, programmes and works will be subject to HRA. Theme F sets out Natural England's guidance received on the requirement for new development to achieve nutrient neutrality.
 - Broadland Rivers Catchment Plan aims to reduce run-off of contaminants, soil and nutrients from entering the Broadland Rivers catchment. It also aims to increase water capture and manage water efficiency within the catchment.
 - The Waterways Management Strategy⁸⁷ sets out a series of protective policies and mechanisms within which work will take place to ensure water quality and water levels are protected. It also sets out the requirement for lower tier plan and project HRA. The WMS has been subject to HRA.
 - The Broads Authority also provides guidance on environmentally friendly boating⁸⁸, which includes low wash hulls, guidance on maintaining water quality (from detergents and anti-fouling paints) to protect water quality.

⁸⁷ Broads Authority (2022) Waterways Management Strategy and Action Plan 2022/23 – 2026/27.

⁸⁸ Available at: <u>https://www.broads-authority.gov.uk/boating/owning-a-boat/environmentally-friendly-boating</u> [Date Accessed: 30/09/24].

- 6.3.10 The Advocate General's opinion in the European Court of Justice case C-6/04 *European Commission v United Kingdom* confirmed the progression of assessment that must take place either from higher level to lower-level plans, or as the plan becomes more specific. She notes at paragraph 49: 'Adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure^{89'}.
- 6.3.11 It is important to note that the Local Plan for the Broads does not remove the requirement for lower tier plans and projects to be subject to HRA through the Habitats Regulations. Once detailed information on the exact nature, scope, timing, location and scale of specific applications are known, these will be assessed, and mitigation defined and secured. HRA of lower tiered plans and projects, are required as a matter of law and Government policy.
- 6.3.12 Taking into consideration mitigation secured through policy wording in the Local Plan to protect water quality, it can be concluded that there will be no adverse impacts on the site integrity of any habitats site either alone or in-combination with other plans or projects.

Water quantity

- 6.3.13 HRA is a key requirement associated with the development of the Anglian Water and Essex and Suffolk Water WRMP. These WRMPs take a strategic approach to water planning, and their accompanying HRAs fully assess impacts upon water quantity in-combination with abstraction for other neighbouring LPA areas.
- 6.3.14 Policies in the Local Plan, such as Policy PUBDM7: Water efficiency and re-use, aim to drive down water demand and therefore reduce pressures upon the Anglian region and subsequently at hydrologically sensitive designated sites (see Section 3.5). Policy PUBDM55: (Non-residential development and BREEAM) requires that development achieves three water credits which reflects the location of the Plan area within an area of water stress. In addition, the overarching Broads Plan and other Broads Authority strategic plans and guiding strategies (listed in **Paragraph 6.3.9**) also set out a series of measures to protect water quantity at habitats sites. In particular, the Norfolk Water Strategy Programme aims to look at the significant pressures on water resources in the eastern area and address the effects of climate change.
- 6.3.15 Water supply issues for both the Local Plan area and neighbouring areas will be addressed through the higher-level water planning framework and licencing process (RBMP, WRMP, Drought Plans and CAMS). Local Plan policies to improve water efficiency (Policy PUBDM7) will also ensure water supplies at habitats sites can be met to meet the requirements of Habitats Directive. It can therefore be concluded that there will be no adverse impacts on the integrity of any habitats site, either alone or in-combination, due to a change in water quantity as a result of the Local Plan.

⁸⁹ Opinion available at:

https://curia.europa.eu/juris/showPdf.jsf;jsessionid=3D44C34DA890BCDA175840065B4AECE4?text=&docid=58359&pageI ndex=0&doclang=en&mode=lst&dir=&occ=first&part=1&cid=3054642 [Date Accessed: 30/09/24].

7 Recreation and Urbanisation Appropriate Assessment

7.1 Introduction

- 7.1.1 The following section of the AA focuses on assessing more precisely the ecological impacts of increased recreational pressure and urbanisation from the Local Plan upon the qualifying features of the following habitats sites which were scoped into the HRA process (Chapter 3):
 - Brecks sites: Breckland SPA and Breckland SAC
 - Broads sites: Broads SAC and Broadland SPA
 - East Coast sites: Breydon Water SPA, Winterton-Horsey Dunes SAC and Great Yarmouth and North Denes SPA
 - Norfolk Valley Fens SAC
 - North Coast sites: North Norfolk Coast SAC, North Norfolk Coast SPA, North Norfolk Coast Ramsar and the Wash and North Norfolk Coast SAC
 - Roydon and Dersingham Bog SAC and Ramsar
 - Suffolk sites: Benacre to Easton Bavents SPA
 - The Wash: The Wash SPA, The Wash Ramsar and The Wash and North Norfolk Coast SAC
- 7.1.2 The following policies were screened into the HRA process for consideration in an AA due to water LSEs (**Table 7.1**):

Table 7.1: Local Plan policies screened into the HRA process due to air quality LSEs (see Appendix C)

Policy number	Policy name
PUBDM11	Green and blue Infrastructure and Public Rights of Way
PUBDM14	Re-use, Conversion or Change of Use of Historic Buildings
PUBSP8	Accessibility and Transport
PUBSP9	Recreational access around the Broads Area
PUBDM29	Transport, highways and access
PUBSP12	Sustainable Tourism
POSP15	Residential Development
PUBDM44	Residential Development within Defined Development Boundaries
PUBDM45	Gypsy, Traveller and Travelling Show People
PUBDM46	New Residential Moorings

- 7.1.3 In addition, all allocations which allocate development (residential and residential moorings) also have the potential to act cumulatively to trigger recreational and urbanisation effects and were therefore also screened into the HRA process (Appendix C). These allocations include the following:
 - Policy PUBNOR1: Utilities Site
 - Policy PUBTHU1: Tourism development at Hedera House, Thurne
 - Policy PUBBRU6: Brundall Gardens Marina Residential Moorings

- Policy PUBGIL1 Gillingham residential moorings (H. E. Hipperson's Boatyard)
- Policy PUBCHE1: Greenway Marine residential moorings
- Policy PUBSOM1: Somerleyton Marina Residential Moorings
- Policy PUBSTA1: Land at Stalham Staithe (Richardson's Boatyard)
- Policy PUBOUL2: Oulton Broad Former Pegasus/Hamptons Site

7.2 Baseline information

- 7.2.1 The Broads Plan indicates that more than eight million people a year visit the Broads National Park for recreational activities⁹⁰. These visitors are attracted by the inland waterways, coast and other recreational offerings in the area.
- 7.2.2 Broads Authority monitoring data indicates that in 2022 there were 12,549 craft licenced to use the Broads with the majority being privately owned but a large number also registered to the boat hire industry⁹¹. Other popular recreational activities set out in the Broads Plan include angling, walking, cycling, horse riding, visiting local sites of interest and the draw of local wildlife.
- 7.2.3 Increased development has the potential to result in public access and disturbance pressures at habitats sites which can take the form of urbanisation and / or recreational impacts (as discussed in Section 3.6 and 3.7). Recreational activities including land and water-based pursuits can lead to impacts such as increased erosion of habitats through increased footfall, increased dog fouling causing the eutrophication of habitats, pressures on water related habitats and disturbance to birds from people and dogs. Urbanisation impacts can include vandalism, fly tipping, fragmentation of habitats, lighting and visual pollution and increased fire risk.
- 7.2.4 Whilst the overall need in the Plan area and allocations set out in the Local Plan may not individually have an adverse impact upon a habitats site due to increased recreational pressure, when taken together cumulatively, and in-combination with growth in neighbouring LPA areas, there is the potential for adverse direct and indirect impacts upon their qualifying features.
- 7.2.5 The survey work commissioned in 2015 and 2016 to determine current and projected visitor patterns at habitats sites across Norfolk (see Section 3.6)⁹² included 40 different survey locations where public access and the qualifying features of habitats site coincide. The results of these surveys highlight how an increase in recreational pressure (particularly at the North Coast, the Broads and the Valley Fens) is predicted to be linked to residential and tourism development across multiple local authority areas within Norfolk. This study took into consideration the in-combination impact of development from different LPA areas upon these habitats sites.

⁹⁰ Broads Authority (2022) Broads Plan 2022-27. STEAM data for Broads and area of influence.

⁹¹ Broads Authority (2022). Annual Monitoring Report 2021/2022.

⁹² Panter, C., Liley, D. & Lowen, S. (2016). Visitor surveys at European protected sites across Norfolk during 2015 and 2016. Unpublished report for Norfolk County Council. Footprint Ecology.

7.2.6 Recreational and urbanisation pressures are identified as a threat in the SIPs and Natural England's supplementary advice for the network of habitats sites within Norfolk and Suffolk (Appendix B). These threats may have direct impacts upon qualifying features and also indirect impacts upon areas of functionally linked land and / or water bodies.

7.3 Appropriate Assessment

7.3.1 Policy POSP15 (Residential Development) indicates that the Authority will endeavour to enable housing delivery to meet its objectively assessed housing need throughout the plan period (2021 to 2041). Allocations PUBTHU1 (16 dwellings) and PUBOUL2 (76 dwellings) already have planning permission. The Local Plan allocates a total of 250 dwellings (on one allocation site) and 43 residential moorings as listed in **paragraph 5.1.3** and shown Figure 7.1.

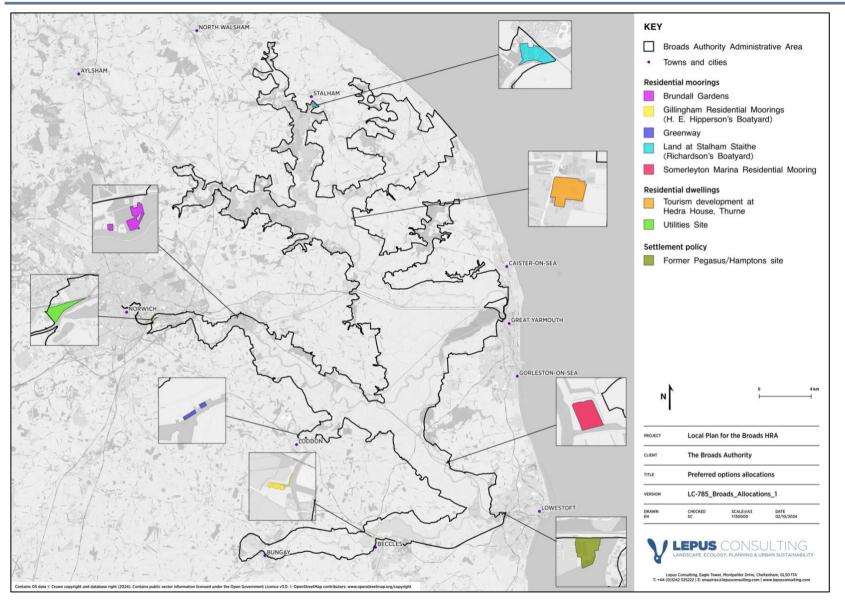


Figure 7.1: Local Plan allocations

© Lepus Consulting for the Broads Authority

- 7.3.2 As noted in Section 3.6, strategic mitigation solutions to address recreational pressures at habitats sites associated with new development in Suffolk and Norfolk have been produced. These are currently implemented by the Authority. These solutions are strategic in nature, considering cross boundary impacts associated with new development across administrative boundaries. Their implementation will ensure appropriate mitigation to address in-combination impacts which will be delivered for new development both inside and outside the Authority's executive area. These solutions currently identify a ZOI for residential development which covers the following areas:
 - 12km Roydon and Dershingham Bog SAC and Ramsar
 - 13km Benacre to Easton Bavents SPA
 - 15km Norfolk Valley Fens SAC
 - 25km Broads Sites: The Broads SAC and the Broadland SPA and Ramsar
 - 26km Brecks Sites; Breckland SPA and SAC
 - 30km East Coast Sites: Breydon Water SPA, Winterton-Horsey Dunes SAC and Great Yarmouth and North Denes SPA
 - 42km North Coast Sites: North Norfolk Coast SAC, SPA, Ramsar and the Wash and North Norfolk Coast SAC
 - 61km The Wash: The Wash SPA, Ramsar and The Wash and North Norfolk Coast SAC
- 7.3.3 The number of ZOI for habitats sites in each LPA area varies depending on the geographical position, however, a single county wide tariff area is recommended for the sake of simplicity in the GIRAMS⁹³. This recommendation reflects the entirety of Norfolk including all partner LPAs and would see a common tariff amount for all net new dwellings in the county. This has been calculated from the RAMS mitigation package to cover the lifetime of the local plans in perpetuity.
- 7.3.4 Development applications must currently be accompanied by a project level HRA and provide appropriate mitigation which can include a contribution towards these strategic mitigation schemes and, where applicable (over 50 units or equivalent), provide an appropriate scale of GI to deliver alternative recreational space⁹⁴.
- 7.3.5 The Norfolk and Suffolk Coast RAMS, which address in-combination recreational impacts, will continue to be secured through the following Local Plan policy.

⁹³ Place Services. March 2021. Draft subject to approval by the Norfolk Strategic Planning Group. Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy (GIRAMS). Habitats Regulations Strategy Document.

⁹⁴ Broads Authority planning guidance. Available at: <u>https://www.broads-authority.gov.uk/planning/planning-permission/habitat-mitigation</u> [Date accessed: 30/09/24]

[©] Lepus Consulting for the Broads Authority

Policy PUBDM17: Mitigating Recreational Impacts

- 1. Any development which results in a net increase in residential development and / or overnight tourism accommodation will need to put in place adequate measures to avoid and mitigate potential adverse recreational impacts on the integrity of Habitats Sites which are identified within the following strategies and Zones of Influence (ZOI):
- a) Norfolk Recreational disturbance Avoidance and Mitigation Strategy (Norfolk RAMS) covers the whole of Norfolk.
- b) Suffolk Coast Recreation Disturbance Avoidance and Mitigation Strategy (Suffolk RAMS) 13 km ZOI around the relevant Habitats Sites in the Suffolk Coast area.
- 2. Planning permission will be granted subject to demonstrating no adverse effect on the integrity of Habitats Sites from recreational disturbance when considered alone or in-combination.
- 3. Proposed adequate measures must be delivered prior to occupation of development, in perpetuity and agreed with Natural England.
- 4. For development over 50 units, the provision or enhancement of adequate green infrastructure, either on the development site or nearby, to provide for the informal recreational needs of residents as an alternative to visiting the habitats sites is required.
- 7.3.6 This policy will apply to the following developments:
 - New homes;
 - Student accommodation;
 - Care homes;
 - Tourism attractions;
 - Tourist accommodation; and
 - Permitted development (which gives rise to new overnight accommodation) under the Town and Country Planning (General Permitted Development) (England) Order 2015.
- 7.3.7 It will apply to all development coming forward through the Local Plan, including allocated sites and also any windfall development which is supported by the Local Plan.
- 7.3.8 All new development subject to this policy will need to put in place appropriate measures to avoid and mitigate potential adverse recreational impacts on the integrity of habitats sites which form part of the Norfolk and Suffolk RAMS schemes. This mitigation can be delivered through financial contributions towards these mitigation schemes which address both alone and in-combination effects.
- 7.3.9 The policy wording notes that a bespoke approach may be required for development comprising more than 50 dwellings and in more sensitive locations. This may include the requirement to provide GI in addition to financial contributions towards RAMS. A developer may also provide alternative bespoke mitigation, however this will need to be fit for purpose and agreed and approved with Natural England and the Broads Authority.

- 7.3.10 Policy PUBNOR1 (Utilities Site) allocates over 50 dwellings (250 residential dwellings) and will therefore need to demonstrate that it is able to deliver appropriate GI in line with policy requirements. Policy specific wording in PUBNOR1 incorporates the requirement for this allocation to comply with PUBDM17 and also provide recreational opportunities on site. The Policy notes (at point 5(iii)) the potential for this to be achieved at Whitlingham Country Park and through delivery of a pedestrian/cycle link across the Wensum and Yare between the City Centre and Whitlingham Country Park.
- 7.3.11 It is also noted that all development will need to comply with Policy PUBDM11: Green and blue infrastructure and Public Rights of Way. This policy notes that 'Development shall contribute to the delivery and management of green and blue infrastructure including establishment of new and enhancement of existing green and blue infrastructure'.
- 7.3.12 All mitigation must be in place prior to the occupation of development and delivered in perpetuity in order for it to be effective. This requirement is set out in Policy PUBDM17.
- 7.3.13 The Broads Authority also promotes a number of codes which aim to reduce the impact of recreational activities across the Broads and make them as sustainable as possible. For instance, there is guidance which promotes environmentally friendly boating⁹⁵ and codes of conduct for most waterway activities⁹⁶ including the Paddlers Code⁹⁷. The Broads website also promotes cycling, walking and horse riding routes to avoid sensitive areas⁹⁸ and requires visitors to follow a dog walking code of conduct⁹⁹. These will have a mitigating effect upon recreational impacts.
- 7.3.14 As noted in Section 3.7 urbanisation effects are often considered through the application of a 400m buffer zone. In terms of urbanisation effects, there two residential mooring allocations and one tourism allocation which are located within 400m of a habitats site as listed below:
 - Policy POBRU6: Brundall Gardens up to six residential moorings less than 50m to the north of the Broads SAC, Broadland SPA and Broadland Ramsar – on the opposite side of the River Yare;
 - Policy PUBTHU1: Tourism Development at Hedera House, Thurne tourism uses approximately 130m to the south of the Broads SAC, Broadland SPA and Broadland Ramsar; and
 - Policy PUBSTA1: Land at Stalham Staithe (Richardson's Boatyard) up to ten residential moorings - approximately 254m to the north west of the Broads SAC, Broadland SPA and Broadland Ramsar.

⁹⁵ Available at: <u>https://www.broads-authority.gov.uk/boating/owning-a-boat/environmentally-friendly-boating</u> [Date Accessed: 30/09/24].

⁹⁶ Available at: <u>https://www.broads-authority.gov.uk/boating/navigating-the-broads</u> [Date Accessed: 30/09/24].

⁹⁷ Available at: <u>https://paddlerscode.info/#enjoy</u> [Date Accessed: 30/09/24].

⁹⁸ Available at: <u>https://www.visitthebroads.co.uk/discover-the-broads/boating</u> [Date Accessed: 30/09/24].

⁹⁹ Available at: <u>https://www.visitthebroads.co.uk/discover-the-broads/walking-and-cycling/bringing-your-dog</u> [Date Accessed: 30/09/24].

- 7.3.15 The residential mooring allocation at Brundall Gardens is on the opposite side of the River Yare and therefore urbanisation effects are unlikely to have an adverse impact on the integrity of the Broads SAC, Broadland SPA and Broadland Ramsar. Policy PUBDM15 (Natural Environment) will apply to all allocations, and any other windfall development which comes forward in the Local Plan. This policy also includes requirements for development to comply with the Habitats Regulations and ensures no adverse impacts on the site integrity of any habitats site either alone or in-combination.
- 7.3.16 As set out in **Chapter 7**, the Local Plan for the Broads does not remove the requirement for recreation projects to be subject to HRA through the Habitats Regulations. Policy PUBTHU1 and Policy PUBSTA1 therefore contain protective policy wording to secure the protection of habitats sites from development at these sites including the requirement of project level HRA.
- 7.3.17 Policies PUBSP8 (Accessibility and Transport), PUBSP9 (Recreational access around the Broads Area), and PUBDM29 (Transport, highways and access) aim to promote active travel and also recreation by introducing footpaths and cycleways across the Plan area and in particular at waterside locations. Depending on the location of such projects, these improvements have the potential to increase access to areas of the waterside which may be covered by habitats site designations and therefore increase reactional pressures. Each of these policies however contains provisions to ensure sensitive locations associated with habitats sites are avoided.
- 7.3.18 Taking into consideration the policy wording and mitigation secured through the Local Plan, it can be concluded that there will be no adverse recreational or urbanisation impact on the site integrity of any habitats site from increased development either alone or incombination.

8 Next Steps

8.1 Conclusions

- 8.1.1 The Local Plan for the Broads is not directly connected with or necessary to the management of any habitats site. Consideration was therefore given to potential links or causal connections between the effects of the Local Plan and habitats sites within the study area to identify Likely Significant Effects (LSEs). This exercise was undertaken through the collation of information for each habitats site and application of a 'source-pathway-receptor' model.
- 8.1.2 Taking no account of mitigation measures, the screening stage concluded that that the Local Plan has the potential to have LSEs at the following habitats sites:
 - Benacre to Easton Bavents SPA recreational LSEs;
 - Breckland SPA recreational LSEs;
 - Breckland SAC recreational LSEs;
 - Breydon Water SPA water quality/quantity, recreational and urbanisation LSEs;
 - Breydon Water Ramsar water quality/quantity, recreational and urbanisation LSEs;
 - Broads SAC air quality, water quality/quantity, recreational and urbanisation LSEs;
 - Broadland Ramsar air quality, water quality/quantity, recreational and urbanisation LSEs;
 - Broadland SPA air quality, water quality/quantity, recreational and urbanisation LSEs;
 - Dersingham Bog Ramsar recreational LSEs;
 - Great Yarmouth and North Denes SPA recreational and urbanisation LSEs;
 - Norfolk Valley Fens SAC water quantity and recreational LSEs;
 - North Norfolk Coast Ramsar recreational LSEs;
 - North Norfolk Coast SAC recreational LSEs;
 - North Norfolk Coast SPA recreational LSEs;
 - Outer Thames Estuary SPA urbanisation LSEs;
 - River Wensum SAC water quantity LSEs;
 - Roydon and Dersingham Bog SAC recreational LSEs;
 - Roydon Common Ramsar recreational LSEs;
 - The Wash and North Norfolk Coast SAC recreational LSEs;
 - The Wash Ramsar recreational LSEs;
 - The Wash SPA recreational LSEs; and
 - Winterton-Horsey Dunes SAC recreational and urbanisation LSEs.
- 8.1.3 The outputs of the screening assessment therefore triggered the requirement to undertake an AA. The AA explored the following matters in more detail looking at both alone and incombination impacts:
 - Impacts on designated features affected by a possible deterioration in air quality;
 - Impacts on water quality and quantity associated with increased levels of built development;

- Impacts associated with increased recreational pressure; and
- Impacts associated with urbanisation effects.
- 8.1.4 A range of potential threats and pressures that might be exacerbated by the Local Plan alone and in-combination were identified through the AA process. Protective policies set out in the Local Plan, alongside existing protection measures provided in high level strategic and planning policy frameworks and local operating procedures, were factored into the assessment process.
- 8.1.5 Taking into consideration these factors, the AA concluded that the Local Plan would have no adverse impact on site integrity at any habitats site, either alone or in-combination.

8.2 Next steps

- 8.2.1 The purpose of this report is to inform the HRA of the Local Plan using best available information.
- 8.2.2 The Authority, as the Competent Authority, has responsibility to make the Integrity Test, which can be undertaken in light of the conclusions set out in this report.
- 8.2.3 This report will be submitted to Natural England, the statutory nature conservation body, for formal consultation. The Authority must 'have regard' to Natural England's representations under the provisions of the Habitats Regulations prior to making a final decision as to whether they will 'adopt' the conclusions set out within this report as their own.

Appendix A: In-Combination Assessment

Councils, Plans and Policies	Plan Status	Summary of housing/employment – Key elements of the Local Plan that could cause in-combination effects	Summary of HRA findings	Potential in-combination Likely Significant Effect (LSE)
Greater Norwich Development Partnership	Broadland District Council, South Norfolk Council and Norwich City Council have formed the Greater Norwich Development Partnership (GNDP). The three councils adopted the Greater Norwich Local Plan 2018 to 2038 ¹ in March 2024.	The Local Plan proposes the delivery of 45,000 new homes and 33,000 new jobs.	An HRA ² was conducted in support of the adopted Local Plan. This concluded there would be no adverse impacts on the integrity of any habitats sites alone or in-combination.	This plan has the potential to act in- combination with the Local Plan through increased residential and employment development which may trigger in- combination air quality, hydrology and recreation LSEs.
North Norfolk District Council	The Council is currently developing a new Local Plan for the period up to 2036 ³ . The Plan is currently undergoing independent examination.	The Proposed Submission Version of the Local Plan proposes the delivery of 12,000 new homes.	An HRA ⁴ was conducted in support of the submission version of the Local Plan. This concluded there would be no adverse impacts on the integrity of any habitats sites alone or in-combination.	This plan has the potential to act in- combination with the Local Plan through increased residential and employment development which may trigger in-

¹ GNDP (2024) Greater Norwich Local Plan. Available at: <u>https://www.gnlp.org.uk/local-plan-examination-local-plan-examination-document-library/j-inspectors-report-and-adoption</u> [Accessed: 27/09/24].

2 The Landscape Partnership (2021) Habitats Regulations Assessment of published Proposed Submission Greater Norwich Local Plan. Available at: https://www.gnlp.org.uk/sites/gnlp/files/2021-10/E16845%20GNLP%20Reg%2019%20submission%20plan%20HRA%202021-07-07%20%28003%29.pdf [Accessed: 27/09/24].

³ North Norfolk District Council (2022) North Norfolk Local Plan: Proposed Submission Version. Available at: <u>https://www.north-norfolk.gov.uk/tasks/planning-policy/local-plan-new/</u> [Accessed: 27/09/24].

⁴ Footprint Ecology (2022) North Norfolk Local Plan HRA Submission Version. Available at: <u>https://www.north-norfolk.gov.uk/media/7456/habitat-regulations-assessment-north-norfolk-local-plan-reg-19-publication.pdf</u> [Accessed: 27/09/24].

Local Plan for the Broads – Publication HRA

LC-785_Broads Authority_Local Plan_HRA_Appendix A_3_031024SC.docx

Councils, Plans and Policies	Plan Status	Summary of housing/employment – Key elements of the Local Plan that could cause in-combination effects	Summary of HRA findings	Potential in-combination Likely Significant Effect (LSE)
				combination air quality, hydrology and recreation LSEs.
Great Yarmouth Borough Council	The Great Yarmouth Local Plan Part 2 2013 to 2030 ⁵ was adopted in December 2021. This includes amendments to the Core Strategy ⁶ which was adopted in 2015. The Council is currently preparing a new Local Plan for development over the period to 2041 ⁷ . The Regulation 18 Public Consultation ran from March to May 2024.	The current Local Plan proposes the delivery of 7,000 new homes.	 An HRA was conducted in support of the Regulation 18 version of the Local Plan. This concluded there would be no adverse impacts on the integrity of any habitats sites in relation to most impacts. However, it was not possible to rule out adverse effects on the following habitats sites: Air pollution from vehicle emissions at the following: The Broads SAC, Broadland SPA and Ramsar (direct or functionally linked habitats; birds / invertebrates). Great Yarmouth North Denes SPA (functionally linked habitat only; birds) Outer Thames Estuary SPA (direct or functionally linked habitats; birds). Breydon Water SPA and Ramsar (direct or functionally linked habitats; birds). Greater Wash SPA (direct or functionally linked habitats; birds). Benacre to Easton Bavents SPA (functionally linked habitat only; birds). 	This plan has the potential to act in- combination with the Local Plan through increased residential and employment development which may trigger in- combination air quality, hydrology and recreation LSEs.

⁵ Great Yarmouth Borough Council (2021) Great Yarmouth Local Plan Part 2. Available at: <u>https://www.great-yarmouth.gov.uk/article/2489/Current-Local-Plan</u> [Accessed: 27/09/24].

⁶ Great Yarmouth Borough Council (2015) Great Yarmouth Local Plan Core Strategy. Available at: <u>https://www.great-yarmouth.gov.uk/media/1884/Adopted-Local-Plan-Core-Strategy-December-2015/pdf/Local Plan Core Strategy Adopted 2015 NF.pdf?m=1693477376143 [Accessed: 27/09/24].</u>

⁷ Great Yarmouth Borough Council (2024) Emerging Local Plan. Available at: <u>https://localplan.great-yarmouth.gov.uk</u>. [Accessed: 27/09/24].

Local Plan for the Broads – Publication HRA

LC-785_Broads Authority_Local Plan_HRA_Appendix A_3_031024SC.docx

Councils, Plans and Policies	Plan Status	Summary of housing/employment – Key elements of the Local Plan that could cause in-combination effects	Summary of HRA findings	Potential in-combination Likely Significant Effect (LSE)
			Abstraction for water supply at: The Broads SAC, Broadland SPA and Ramsar.	
East Suffolk District Council	East Suffolk Council came into effect in 2019, incorporating the former districts of Waveney District Council and Suffolk Coastal District Council. East Suffolk Council has therefore inherited the local development plans for each of these councils. The Waveney Local Plan 2014- 2036 ⁸ area lies adjacent to the Broads Authority boundary. The Plan was adopted in March 2019.	The current Local Plan for Waveney proposes 9,000 homes and 5,000 jobs.	An HRA ⁹ was undertaken to support the Waveney Local Plan. This concluded there would be no adverse impacts on the integrity of any habitats sites alone or in-combination.	This plan has the potential to act in- combination with the Local Plan through increased residential and employment development which may trigger in- combination air quality, hydrology and recreation LSEs.
Norfolk Minerals and Waste Local Plan Review	The Norfolk Minerals and Waste Plan Review is currently in preparation for the period up to 2038 ¹⁰ and was submitted to the Secretary of State in December 2023.	The Plan includes a spatial strategy for the allocation of new waste management facilities and areas for minerals development.	An HRA ¹¹ was prepared to support the Minerals and Waste Plan Review. This concluded there would be no adverse impacts on the integrity of any habitats sites alone or in-combination. However, the HRA noted that developers looking to abstract minerals would still need to apply for planning permission.	The combined impact of minerals allocations has potential to act in- combination with the Local Plan which has potential to trigger impacts for air quality and hydrology.

⁸ East Suffolk Council (2019) Waveney Local Plan. Available at: <u>https://www.eastsuffolk.gov.uk/assets/Planning/Waveney-Local-Plan/Adopted-Waveney-Local-Plan-including-Erratum.pdf</u> [Accessed: 27/09/24].

⁹ Hoskin, R. & Liley, D. 2018. Habitats Regulations Assessment of the Waveney Local Plan. Unpublished report for Waveney District Council.

¹⁰ Norfolk County Council (2022) Norfolk Minerals and Waste Local Plan Review. Available at: <u>https://www.norfolk.gov.uk/mineralsandwastelocalplanreview</u> [Accessed: 27/09/24].

¹¹ Norfolk County Council (2022) Norfolk Minerals and Waste Plan Habitats Regulations Assessment. Available at: <u>https://norfolk.oc2.uk/docfiles/53/FInal%20HRA%20together%20-reduced%20file%20size%20for%20web.pdf</u> [Accessed: 27/09/24].

Local Plan for the Broads - Publication HRA

LC-785_Broads Authority_Local Plan_HRA_Appendix A_3_031024SC.docx

Councils, Plans and Policies	Plan Status	Summary of housing/employment – Key elements of the Local Plan that could cause in-combination effects	Summary of HRA findings	Potential in-combination Likely Significant Effect (LSE)
Suffolk Minerals and Waste Local Plan	The Suffolk Minerals and Waste Plan for the period up until 2036 ¹² was adopted in July 2020.	The Plan includes a spatial strategy for the allocation of new waste management facilities and areas for minerals development.	An HRA ¹³ was prepared to support the Minerals and Waste Plan. This concluded there would be no adverse impacts on the integrity of any habitats sites alone or in- combination.	The combined impact of waste allocations has potential to act in- combination with the Local Plan which has potential to trigger impacts for air quality and hydrology.
Norfolk County Council Local Transport Plan	The Norfolk Local Transport Plan 4 Strategy 2021 – 2036 ¹⁴ was adopted in July 2022.	The Local Transport Plan sets out a series of strategies and policies that aim to address issues related to air quality and transport infrastructure.	An HRA ¹⁵ was prepared to support the Norfolk Local Transport Plan. This concluded there would be no adverse impacts on the integrity of any habitats sites alone or in-combination. Mitigation measures set out specific project- level HRA requirements for schemes set out within the policies.	The combined impact of transport growth has potential to act in- combination with the Local Plan which has potential to trigger impacts for traffic related air quality.
Suffolk County Council Local Transport Plan	Suffolk County Council has adopted a Local Transport Plan 2011 – 2031 ¹⁶ .	The Local Transport Plan sets out a series of strategies and policies that aim to address issues related to air	An HRA ¹⁷ was prepared to support the Suffolk Local Transport Plan. This concluded there would be no adverse impacts on the integrity	The combined impact of transport growth has potential to act in-

¹² Suffolk County Council (2020) Suffolk Minerals and Waste Plan. Available at: <u>https://www.suffolk.gov.uk/planning-waste-and-environment/minerals-and-waste-policy/suffolk-minerals-and-waste-policy/suffolk-minerals-and-waste-development-scheme</u> [Date accessed: 27/09/24].

¹³ Suffolk County Council (2019) Suffolk Minerals and Waste Plan Modifications Habitats Regulations Assessment. Available at: <u>https://www.suffolk.gov.uk/asset-library/imported/smwlp-modifications-hra-sept-2019.pdf</u> [Date accessed 27/09/24].

14 Norfolk County Council (2022) Local Transport Plan. Available at: https://www.norfolk.gov.uk/localtransportplan [Date accessed: 27/09/24].

15 WSP. June 2021. Norfolk Local Transport Plan 4 Strategy 2021- 2036: Habitats Regulations Screening And Appropriate Assessment. Available at: https://www.norfolk.gov.uk/localtransportplan [Date accessed: 27/09/24].

¹⁶ Suffolk County Council (2011) Suffolk County Council Local Transport Plan. Available at: <u>https://www.suffolk.gov.uk/roads-and-transport/transport-planning/transport-planning-strategy-and-plans?nodeld=f87fcf06-0383-5bf4-91c9-936ee5d7e16e&entryld=1acccd42-c53c-5753-ad60-0efcc29d1e33 [Date accessed: 30/09/24].</u>

¹⁷ Suffolk County Council (2010) Regulation 61 Assessment for Suffolk Local Transport Plan 3. Available at: <u>https://www.suffolk.gov.uk/asset-library/imported/ltp-strategic-hra.pdf</u> [Date accessed: 30/09/24].

Local Plan for the Broads – Publication HRA

LC-785_Broads Authority_Local Plan_HRA_Appendix A_3_031024SC.docx

Councils, Plans and Policies	Plan Status	Summary of housing/employment – Key elements of the Local Plan that could cause in-combination effects	Summary of HRA findings	Potential in-combination Likely Significant Effect (LSE)
		quality and transport infrastructure, split into two parts. Part 1 outlines a 20-year strategy including long-term plans for the transport network, and Part 2 acts as a four year implementation plan to address issues identified in Part 1.	of any habitats sites alone or in-combination. As a result of the HRA, mitigations were set out within the Local Transport Plan prior to its adoption, to avoid any likely significant effects.	combination with the Local Plan which has potential to trigger impacts for traffic related air quality.
Anglian River Basin Management Plan (RBMP)	The Anglian RBMP ¹⁸ was updated in December 2022.	The Plan provides an overview of river basin planning in England and Wales for the Anglian River Basin District. It includes objectives for each water body and a summary of the measures necessary to reach those objectives.	The RBMP was supported by an HRA ¹⁹ . It concluded no adverse impacts on the integrity of any habitats sites either alone or incombination.	The RBMP actions are focused on water body and water dependent habitats site improvements. Whilst development activities arising from Local Development Plans (including the Local Plan) may inhibit the ability of the RBMP to achieve objectives relating to habitats site protected areas, the overall effect of the RBMP is to promote management towards Good Ecological Status (GES).

¹⁸ Environment Agency (2022) Anglian river basin district River basin management plan. Available at: https://www.gov.uk/guidance/anglian-river-basin-district-river-basin-management-planupdated-2022 [Date accessed: 30/09/24].

¹⁹ Environment Agency (2023) Habitats regulations assessment: non-technical summary. Available at: https://www.gov.uk/government/publications/anglian-river-basin-district-flood-riskmanagement-plan/habitats-regulations-assessment-non-technical-summary [Date accessed: 30/09/24].

Local Plan for the Broads - Publication HRA

LC-785_Broads Authority_Local Plan_HRA_Appendix A_3_031024SC.docx

Councils, Plans and Policies	Plan Status	Summary of housing/employment – Key elements of the Local Plan that could cause in-combination effects	Summary of HRA findings	Potential in-combination Likely Significant Effect (LSE)
Anglian Water – Water Resource Management Plan	An updated Water Resource Management Plan ²⁰ for Anglian Water was approved by the government and published in 2024.	The WRMP24 sets out how Anglian Water will maintain a sustainable and secure supply of drinking water over the plan period.	The WRMP was supported by an HRA ²¹ . It concluded no adverse impacts on the integrity of any habitats sites either alone or incombination, so long as adjustments are made to the application of measures described in the individual assessments.	This plan aims to protect the water environment and takes account for future water demand. It is unlikely that the WRMP will have alone or in- combination effects on the water environment.
Essex and Suffolk Water – Water Resource Management Plan	An updated (revised) Water Resource Management Plan ²² for Essex and Suffolk Water was published in 2024.	The WRMP sets out how Essex and Suffolk Water will continue to deliver clean, clear drinking water in the future, even in the most severe droughts.	An HRA was not publicly available on the WRMP website at the time of writing.	This plan aims to protect the water environment and takes account for future water demand. It is unlikely that the WRMP will have alone or in- combination effects on the water environment.
Anglian Water – Drought Plan	The Anglian Water Drought Plan ²³ was published in April 2022.	The Drought Plan outlines the operational steps that will be conducted if we face a drought in the next 5 years. It describes how supplies will be enhanced, demands managed, and environmental impacts	An HRA ²⁴ was prepared in support of the Drought Plan. It concluded no adverse impacts on the integrity of any habitats site either alone or in-combination.	This plan aims to protect the water environment in times of drought. It is unlikely that the WRMP will have alone or in-

²⁰ Anglian Water (2024) Water Resources Management Plan. Available at: <u>https://www.anglianwater.co.uk/siteassets/household/about-us/wrmp/revised-draft-wrmp24-main-report-v2.pdf</u> [Date accessed: 30/09/24].

²¹ Mott MacDonald (2023) Anglian Water Revised Draft Water Resource Management Plan 2024 Environmental Report Sub-Report A: Habitats Regulations Assessment (HRA). Available at: https://www.anglianwater.co.uk/SysSiteAssets/household/about-us/wrmp/revised-draft-wrmp24-environmental-report-sub-report-a---hra.pdf [Accessed 30/09/24].

²² Essex and Suffolk Water (2024) Revised Water Resources Management Plan 2024: Summary. Available at: <u>https://www.eswater.co.uk/services/water/revised-draft-water-resources-management-plan-2024/</u> [Date accessed: 30/09/24].

²³ Anglian Water (2022) Drought Plan. Available at: <u>https://www.anglianwater.co.uk/corporate/strategies-and-plans/drought-plan/</u> [Date accessed: 30/09/24].

²⁴ Ricardo (2022) Anglian Water Drought Plan 2022. Habitat Regulations Assessment. Available at: <u>https://www.anglianwater.co.uk/SysSiteAssets/household/about-us/aws-drought-plan-</u> 2022---hra.pdf [Accessed 30/09/24]..

Local Plan for the Broads – Publication HRA

LC-785_Broads Authority_Local Plan_HRA_Appendix A_3_031024SC.docx

Councils, Plans and Policies	Plan Status	Summary of housing/employment – Key elements of the Local Plan that could cause in-combination effects	Summary of HRA findings	Potential in-combination Likely Significant Effect (LSE)
		minimised. It proposes ongoing leakage reduction measures, water efficiency and monitoring and metering activities.		combination effects on the water environment.
Essex and Suffolk Water – Drought Plan	The Draft Essex and Suffolk Water Drought Plan ²⁵ was published in 2024.	The Drought Plan outlines the operational steps that will be conducted if we face a drought in the next 5 years. It describes how supplies will be enhanced, demands managed, and environmental impacts minimised. It proposes ongoing leakage reduction measures, water efficiency and monitoring and metering activities.	An HRA was not publicly available on the Drought website at the time of writing.	This plan aims to protect the water environment in times of drought. It is unlikely that the WRMP will have alone or in- combination effects on the water environment.
The Broads Plan ²⁶	The current Broads Plan covers the period 2022-27.	The Broads Plan sets out a long-term vision and strategic objectives to benefit the landscape, environment, local communities and visitors. It is a high-level overarching plan and draws together and guides a wide range of plans, programmes and policies relevant to the area.	The Broads Plan HRA ²⁷ took into consideration the hierarchical nature of plan making and existing protection measures are set out in high level strategic policy frameworks and strategic mitigation strategies that serve to help overcome the identified potential adverse effects. Local protective policy frameworks such as the Broads Authorities Environmental Standard Operating Procedures and codes of conduct were also relevant. The HRA made a series of recommendations during the development of the Broads Plan aimed at strengthening the plan's wording to ensure adequate policy protection is provided. The	The Broads Plan sets out the overarching framework for other plans in the Broads Authority area. The protective policy wording within it will have a positive impact in combination with the Local Plan upon habitats sites.

²⁵ Essex and Suffolk Water (2022) Draft Drought Plan. Available at: <u>https://www.nwg.co.uk/globalassets/corporate/environment-pdfs/drought-plan/esw/drought-management-plan-summary-esw-final.pdf</u> [Date accessed: 30/09/24].

²⁷ Lepus Consulting (2022) Habitats Regulations Assessment of the Broads Plan.

²⁶ The Broads Authority (2022) Broads Plan. Available at: <u>https://www.broads-authority.gov.uk/about-us/how-we-</u> work/strategy#:~:text=The%20Sustainable%20Tourism%20Strategy%20(2016,closely%20with%20the%20Broads%20Authority. [Date Accessed: 03/10/24].

Local Plan for the Broads – Publication HRA

LC-785_Broads Authority_Local Plan_HRA_Appendix A_3_031024SC.docx

Councils, Plans and Policies	Plan Status	Summary of housing/employment – Key elements of the Local Plan that could cause in-combination effects	Summary of HRA findings	Potential in-combination Likely Significant Effect (LSE)
			HRA concluded no adverse impact on site integrity at any habitats site.	
The Broads Sustainable Tourism Strategy (2016 – 2020)	The Broads Sustainable Tourism Strategy ²⁸ was published in 2016 and is currently under review.	Tourism has the potential to increase navigational and recreational pressures upon inland waterways and also at coastal sites a number of which are designated as habitats sites or have the potential to provide supporting habitat.	An HRA ²⁹ was prepared by Lepus to support the updated version of the Sustainable Tourism Strategy currently in preparation. It concluded no adverse impacts on the integrity of any habitats site either alone or in- combination.	This strategy aims to guide how tourism is development and managed in the Broads. The protective policy wording within it will have a positive impact in combination with the Local Plan upon habitats sites which are vulnerable to recreational impacts in particular.
The Broads. Waterways Management Strategy and Action Plan 2022/23 - 2026/27 ³⁰	The Waterways Management Strategy was updated and published in 2022.	The strategy provides a five-year action plan and a framework for sustainable and cost effective management of the Broads navigable waterways.	The HRA ³¹ prepared in support of this Strategy took into consideration the hierarchical nature of plan making and existing Environmental Standard Operating Procedures which apply to project level work in the Broads in relation to waterway management. The Appropriate Assessment concluded that taking these into account the Strategy would have no adverse impact on site integrity at any habitats site either alone or in-combination.	The protective policy wording within this Strategy will have a positive impact in combination with the Local Plan upon water habitats sites.

²⁸ The Tourism Company. 2016. Sustainable Tourism in the Broads. Available at: <u>https://www.broads-authority.gov.uk/___data/assets/pdf_file/0023/226247/Sustainable-Tourism-in-the-</u> <u>Broads-2016-20-May-2016.pdf</u> [Date Accessed: 03/10/24].

²⁹ Lepus Consulting (2024). Habitats Regulations Assessment (HRA) of the Strategy for Sustainable Tourism in the Broads 2024-2029.

³⁰ The Broads Authority (2022) Waterways Management Strategy and Action Plan 2022/23 - 2026/27. Available at: <u>https://www.broads-authority.gov.uk/about-us/how-we-</u>work/strategy#:~:text=The%20Sustainable%20Tourism%20Strategy%20(2016,closely%20with%20the%20Broads%20Authority. [Date Accessed: 03/10/24].

³¹ Lepus Consulting (2022) Habitats Regulations Assessment of The Broads Authority Waterways Management Strategy.

Appendix B: Habitats site conservation objectives, qualifying features, threats and pressures

The Broads SAC¹

Conservation objectives:

- Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;
- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Qualifying Features:

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

H3150. Natural eutrophic lakes with Magnopotamion or *Hydrocharition*-type vegetation; Naturally nutrient-rich lakes or lochs which are often dominated by pondweed

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

H7140. Transition mires and quaking bogs; Very wet mires often identified by an unstable `quaking` surface H7210. Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*; Calcium-rich fen dominated by great fen sedge (saw sedge)*

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

H91E0. Alluvial forests with Alnus glutinosa and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion*

albae); Alder woodland on floodplains*

S1016. Vertigo moulinsiana; Desmoulin's whorl snail

S1355. Lutra lutra; Otter

S1903. Liparis loeselii, Fen orchid

S4056. Anisus vorticulus; Little whorlpool ram's-horn snail

* denotes a priority natural habitat or species (supporting explanatory text on following page)

Threats and pressures at habitats site which may be affected by the Local Plan²:

- Water Pollution
- Hydrological changes
- Water Abstraction
- Public Access / Disturbance
- Air Pollution

Broadland SPA³

Conservation objectives:

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

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

¹Natural England (2014) The Broads SAC Conservation Objectives .Available at:

https://publications.naturalengland.org.uk/publication/6190476679970816 [Date Accessed:12/01/24].

² Natural England (2014) Broadlands Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/5444118129934336 [Date Accessed:16/01/24].

³ Natural England (2014) Broadland SPA Conservation Objective. Available at: https://publications.naturalengland.org.uk/publication/5310905998901248 [Date Accessed: 12/01/24].

Broadland SPA³

Qualifying Features:

- A021 *Botaurus stellaris*, Great bittern (Breeding) A037 *Cygnus columbianus bewickii*, Bewick's swan (Non-breeding)
- A038 Cygnus cygnus, Whooper swan (Non-breeding)
- A050 *Anas penelope*; Eurasian wigeon (Non-breeding)
- A051 *Anas strepera*; Gadwall (Non-breeding)

A056 Anas clypeata; Northern shoveler (Non-breeding)

A081 *Circus aeruginosus*; Eurasian marsh harrier (Breeding)

A082 *Circus cyaneus*, Hen harrier (Non-breeding)

A151 *Philomachus pugnax*; Ruff (Non-breeding)

Threats and pressures at habitats site which may be affected by the Local Plan⁴:

- Water Pollution
- Hydrological changes
- Water Abstraction
- Public Access / Disturbance
- Air Pollution

Broadland Ramsar⁵

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

Ramsar Criterion	Justification for the application of each criterion		
2	The site supports a number of rare species and habitats within the biogeographical zone context, including the following Habitats Directive Annex I features:		
	 H7210 Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> Calcium-rich fen dominated by great fen sedge (saw sedge). H7230 Alkaline fens Calcium-rich springwater-fed fens. H91E0 Alluvial forests with <i>Alnus glutinosa</i> and Fraxinus excelsior (<i>Alno-Padion, Alnion incanae, Salicion albae</i>) Alder woodland on floodplains Annex II species S1016 <i>Vertigo moulinsiana</i> Desmoulin`s whorl snail S1355 <i>Lutra lutra</i> Otter S1903 <i>Liparis loeselii</i> Fen orchid. 		
6	British Red Data Book plants and 136 British Red Data Book invertebrates.Qualifying Species/populations (as identified at designation): Species with peak counts in		
	 winter: Tundra swan, <i>Cygnus columbianus bewickii</i>, NW Europe - 196 individuals, representing an average of 2.4% of the GB population (5-year peak mean 1998/9- 2002/3) Eurasian wigeon, <i>Anas penelope</i>, NW Europe - 6769 individuals, representing an average of 1.6% of the GB population (5-year peak mean 1998/9-2002/3) Gadwall, <i>Anas strepera strepera</i>, NW Europe - 545 individuals, representing an average of 3.1% of the GB population (5-year peak mean 1998/9- 2002/3) 		

⁴ Natural England (2014) Broadland Site Improvement Plan. Available at:

https://publications.naturalengland.org.uk/publication/5444118129934336 [Date Accessed:16/01/24].

⁵ JNCC (2008) Information Sheet on Ramsar Wetlands. Broadlands Ramsar. Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11010.pdf [Date Accessed:17/01/24].

Justification for the application of each criterion		
Northern shoveler, Anas clypeata, NW & C Europe - 247 individuals, representing an		
average of 1.6% of the GB population (5-year peak mean 1998/9- 2002/3)		
Species/populations identified subsequent to designation for possible future consideration under criterion 6.		
Species with peak counts in winter:		
Pink-footed goose, <i>Anser brachyrhynchus</i> , Greenland, Iceland/UK - 4263 individuals,		
representing an average of 1.7% of the population (5-year peak mean 1998/9-2002/3)		
• Greylag goose, Anser anser anser, Iceland/UK, Ireland - 1007 individuals, representing an		
average of 1.1% of the population (Source period not collated)		
Contemporary data and information on waterbird trends at this site and their regional (sub-		
national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually		

Threats and Pressures at habitats site which may be affected by the Local Plan⁶:

- Water Pollution
- Hydrological changes
- Water Abstraction
- Public Access / Disturbance
- Air Pollution

Breydon Water SPA⁷

Conservation objectives:

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

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

Qualifying features:

A037 Cygnus columbianus bewickii; Bewick's swan (Non-breeding)

- A132 Recurvirostra avosetta; Pied avocet (Non-breeding)
- A140 Pluvialis apricaria; European golden plover (Non-breeding)
- A142 Vanellus vanellus, Northern lapwing (Non-breeding)
- A151 Philomachus pugnax; Ruff (Non-breeding)
- A193 Sterna hirundo; Common tern (Breeding)A Waterbird assemblage

Threats and pressures at habitats site which may be affected by the Local Plan⁸:

- Public Access / Disturbance
- Hydrological changes

https://publications.naturalengland.org.uk/publication/5444118129934336 [Date Accessed:16/01/24].

⁶ Natural England (2014) Broadlands Site Improvement Plan. Available at:

⁷ Natural England (2014) Breydon Water SPA Conservation Objectives. Available at: <u>https://publications.naturalengland.org.uk/publication/6376690053808128</u> [Date Accessed:12/01/24].

⁸ Natural England (2014) Breydon Water SPA Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/6364048115367936 [Date Accessed: 16/01/24].

Breydon Water Ramsar⁹

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

Ramsar Criterion	Justification for the application of each criterion	
5	Assemblages of international importance: Species with peak counts in winter: 68175 waterfowl (5-year peak mean 1998/99-2002/2003)	
6	 Species/populations identified subsequent to designation for possible future consideration under criterion 6. Species with peak counts in winter: Pink-footed goose, <i>Anser brachyrhynchus</i>, Greenland, Iceland/UK - 5816 individuals, representing an average of 2.4% of the population (5-year peak mean 1998/9-2002/3) Eurasian wigeon, <i>Anas penelope</i>, NW Europe- 15624 individuals, representing an average of 1% of the population (5-year peak mean 1998/9- 2002/3) Northern shoveler, <i>Anas clypeata</i>, NW & C Europe - 478 individuals, representing an average of 1.1% of the population (5-year peak mean 1998/9- 2002/3) European golden plover, <i>Pluvialis apricaria apricaria</i>, <i>P. a. altifrons</i> Iceland & Faroes/E Atlantic - 10656 individuals, representing an average of 1.1% of the population (5-year peak mean 1998/9-2002/3) Black-tailed godwit, <i>Limosa limosa islandica</i>, Iceland/W Europe - 1100 individuals, representing an average of 3.1% of the population (5-year peak mean 1998/9-2002/3) Contemporary data and information on waterbird trends at this site and their regional (subnational) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. 	

Threats and Pressures at habitats site which may be affected by the Local Plan¹⁰:

No identified threats or pressures to Braydon Water Ramsar

Outer Thames Estuary SPA¹¹

Conservation objectives:

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

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

Qualifying features:

A001 Gavia stellata; Red-throated diver (Non-breeding)

A193 Sterna hirundo; Common tern (Breeding)

A195 Sternula albifrons, Little tern (Breeding)

¹¹Natural England (2014) Outer Thames Estuary SPA Conservation Objectives. Available at: https://publications.naturalengland.org.uk/publication/4927106139029504 [Date Accessed: 12/01/24].

⁹ JNCC (2008) Information Sheet on Ramsar Wetlands. Breydon Water Ramsar. Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11008.pdf [Date Accessed: 04/01/24].

¹⁰ JNCC (2008) Information Sheet on Ramsar Wetlands. Breydon Water Ramsar https://jncc.gov.uk/jncc-assets/RIS/UK11008.pdf [Date Accessed: 04/01/24].

Threats and pressures at habitats site which may be affected by the Local Plan¹²:

Within the Site improvement Plan there are not threats or pressures.

Great Yarmouth and North Denes SPA¹³

Conservation objectives:

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

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

Qualifying features:

A195 Sterna albifrons; Little tern (Breeding)

Threats and pressures at habitats site which may be affected by the Local Plan¹⁴:

- Public Access / Disturbance
- Hydrological Changes
- Air Pollution

Winterton – Horsey Dunes SAC¹⁵

Conservation objectives:

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

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

Qualifying features:

H2110. Embryonic shifting dunes

H2120. Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram

H2150. Atlantic decalcified fixed dunes (Calluno-Ulicetea)*

H2190. Humid dune slacks

* denotes a priority natural habitat or species

Threats and pressures at habitats site which may be affected by the Local Plan¹⁶:

- Public Access / Disturbance
- Hydrological Changes
- Air Pollution

¹² Natural England (2014) Outer Thames Estuary Site Improvement Plan. Available at:

https://publications.naturalengland.org.uk/publication/4668757523824640 [Date Accessed:16/01/24].

¹³ Natural England (2014) Great Yarmouth and North Denes SPA Conservation Objectives. Available at: https://publications.naturalengland.org.uk/publication/5165293655556096 [Date Accessed:12/01/24].

¹⁴ Natural England (2014) Great Yarmouth Winterton Horsey Site Improvement Plan (to cover Great Yarmouth North Denes SPA and Winterton-Horsey Dunes SAC). Available at: http://publications.naturalengland.org.uk/file/6277135286665216 [Date Accessed: 16/01/24].

¹⁵ Natural England (2014) Winterton – Horsey Dunes SAC Conservation Objectives. Available at: https://publications.naturalengland.org.uk/publication/5518326646177792 [Date Accessed:12/01/24].

¹⁶ Natural England (2018) Great Yarmouth Winterton Horsey Site Improvement Plan (to cover Great Yarmouth North Denes SPA and Winterton-Horsey Dunes SAC). Available at: http://publications.naturalengland.org.uk/file/6277135286665216 [Date Accessed: 04/01/24].

Norfolk Valley Fens SAC¹⁷

Conservation objectives:

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

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

Qualifying features:

H4010. Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath H4030. European dry heaths

H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (FestucoBrometalia); Dry grasslands and scrublands on chalk or limestone

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

H7210. Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*; Calcium-rich fen dominated by great fen sedge (saw sedge)*

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

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

S1014. Vertigo angustior; Narrow-mouthed whorl snail

S1016. Vertigo moulinsiana; Desmoulin`s whorl snail

* denotes a priority natural habitat or species

Threats and pressures at habitats site which may be affected by the Local Plan¹⁸:

- Hydrological changes
- Water Pollution
- Water Abstraction
- Air Pollution

The Wash and North Norfolk Coast SAC¹⁹

Conservation objectives:

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

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

Qualifying features:

H1150. Coastal lagoons*

H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves H1420. Mediterranean and thermo-Atlantic *halophilous* scrubs (*Sarcocornetea fruticosi*); Mediterranean saltmarsh scrub

H2110. Embryonic shifting dunes

https://publications.naturalengland.org.uk/publication/6684666086031360 [Date Accessed:16/01/24].

¹⁸ Natural England (2014) Norfolk Valley Fens Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/6261291761008640 [Date Accessed: 16/01/24].

¹⁹ Natural England (2017) The Wash & North Norfolk Coast SAC Conservation Objectives. Available at: https://publications.naturalengland.org.uk/publication/5950176598425600 [Date Accessed: 16/01/24].

¹⁷ Natural England (2014) Norfolk Valley Fens SAC Conservation Objectives. Available at:

The Wash and North Norfolk Coast SAC¹⁹

H2120. Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram

H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland*

H2190. Humid dune slacks

S1355. Lutra lutra; Otter

S1395. Petalophyllum ralfsii, Petalwort

* denotes a priority natural habitat or species

Threats and Pressures at habitats site which may be affected by the Local Plan²⁰:

- Public Access / Disturbance
- Air Pollution

North Norfolk Coast SAC²¹

Conservation objectives:

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

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

Qualifying features:

H1150. Coastal lagoons*

H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves H1420. Mediterranean and thermo-Atlantic *halophilous* scrubs (*Sarcocornetea fruticosi*); Mediterranean saltmarsh scrub

H2110. Embryonic shifting dunes

H2120. Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram

H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland*

H2190. Humid dune slacks

S1355. Lutra lutra; Otter

S1395. Petalophyllum ralfsii, Petalwort

* denotes a priority natural habitat or species

Threats and Pressures at habitats site which may be affected by the Local Plan²²:

- Public Access / Disturbance
- Air Pollution

North Norfolk Coast SPA²³

Conservation objectives:

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

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely

²⁰ Natural England (2014) The Wash and North Norfolk Coast Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/5327498292232192 [Date Accessed: 16/01/24].

²¹ Natural England (2014) North Norfolk Coast SAC Conservation Objectives. Available at: https://publications.naturalengland.org.uk/publication/6270240262455296 [Date Accessed: 16/01/24].

²² Natural England (2014) The Wash and North Norfolk Coast Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/5327498292232192 [Date Accessed: 16/01/24].

²³ Natural England (2014) North Norfolk Coast SPA Conservation Objectives. Available at: https://publications.naturalengland.org.uk/publication/4732349359063040 [Date Accessed:16/01/24].

North Norfolk Coast SPA²³

- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site

Qualifying features:

A021 Botaurus stellaris; Great bittern (Breeding)

- A040 Anser brachyrhynchus; Pink-footed goose (Non-breeding)
- A046a Branta bernicla bernicla; Dark-bellied brent goose (Non-breeding)
- A050 Anas penelope; Eurasian wigeon (Non-breeding)

A081 *Circus aeruginosus*; Eurasian marsh harrier (Breeding)

A084 *Circus pygargus*; Montagu's harrier (Breeding)

A132 *Recurvirostra avosetta*; Pied avocet (Breeding)

- A143 Calidris canutus; Red knot (Non-breeding)
- A191 Sterna sandvicensis; Sandwich tern (Breeding)
- A193 Sterna hirundo; Common tern (Breeding)

A195 Sterna albifrons, Little tern (Breeding) Waterbird assemblage

Threats and Pressures at habitats site which may be affected by the Local Plan²⁴:

- Public Access / Disturbance
- Air Pollution

North Norfolk Ramsar²⁵

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

Ramsar Criterion	Justification for the application of each criterion		
1	The site is one of the largest expanses of undeveloped coastal habitat of its type in Europe. It is a particularly good example of a marshland coast with intertidal sand and mud, saltmarshes, shingle banks and sand dunes. There are a series of brackish-water lagoons and extensive areas of freshwater grazing marsh and reed beds.		
2	Supports at least three British Red Data Book and nine nationally scarce vascular plants, one British Red Data Book lichen and 38 British Red Data Book invertebrates.		
5	Assemblages of international importance: Species with peak counts in winter: 98462 waterfowl (5-year peak mean 1998/99-2002/2003)		
6	 Qualifying Species/populations (as identified at designation): Species regularly supported during the breeding season: Sandwich tern, <i>Sterna (Thalasseus) sandvicensis sandvicensis</i>, W Europe - 4275 apparently occupied nests, representing an average of 7.7% of the breeding population (Seabird 2000 Census) Common tern, <i>Sterna hirundo hirundo</i>, N & E Europe - 408 apparently occupied nests, representing an average of 4% of the GB population (Seabird 2000 Census) Little tern, <i>Sterna albifrons albifrons</i>, W Europe - 291 apparently occupied nests, representing an average of 2.5% of the breeding population (Seabird 2000 Census) Species with peak counts in spring/autumn: Red knot, <i>Calidris canutus islandica</i>, W & Southern Africa (wintering) - 30781 individuals, representing an average of 6.8% of the population (5-year peak mean 1998/9-2002/3) 		
	Species with peak counts in winter.		

²⁴ Natural England (2014) The Wash And North Norfolk Coast Site Improvement Plans. Available at: https://publications.naturalengland.org.uk/publication/5327498292232192 [Date Accessed: 16/01/24].

²⁵ JNCC (2008) Information Sheet on Ramsar Wetlands. North Norfolk Ramsar. Available at https://jncc.gov.uk/jncc-assets/RIS/UK11048.pdf [Date Accessed:17/01/24].

	• Pink-footed goose, Anser brachyrhynchus, Greenland, Iceland/UK - 16787 individuals,
	representing an average of 6.9% of the population (5-year peak mean 1998/9-2002/3)
	• Dark-bellied brent goose, Branta bernicla bernicla, - 8690 individuals, representing an
	average of 4% of the population (5-year peak mean 1998/9- 2002/3)
	• Eurasian wigeon, <i>Anas penelope</i> , NW Europe - 17940 individuals, representing an average
	of 1.1% of the population (5-year peak mean 1998/9-2002/3)
	• Northern pintail, Anas acuta, NW Europe - 1148 individuals, representing an average of
	1.9% of the population (5-year peak mean 1998/9-2002/3)
	Species/populations identified subsequent to designation for possible future consideration
	under criterion 6.
	Species with peak counts in spring/autumn:
	• Ringed plover, <i>Charadrius hiaticula</i> , Europe/Northwest Africa - 1740 individuals,
	representing an average of 2.3% of the population (5-year peak mean 1998/9-2002/3)
	• Sanderling, <i>Calidris alba</i> , Eastern Atlantic - 1303 individuals, representing an average of
	1% of the population (5-year peak mean 1998/9- 2002/3)
	• Bar-tailed godwit, Limosa lapponica lapponica, W Palearctic - 3933 individuals,
	representing an average of 3.2% of the population (5-year peak mean 1998/9-2002/3)
	Contemporary data and information on waterbird trends at this site and their regional (sub-
	national) and national contexts can be found in the Wetland Bird Survey report, which is
	updated annually.
L	

Threats and Pressures at habitats site which may be affected by the Local Plan:

No threats or pressures were identified for North Norfolk Coast Ramsar.

River Wensum SAC²⁶

Conservation objectives:

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

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

Qualifying features:

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

S1016. *Vertigo moulinsiana*; Desmoulin`s whorl snail

S1092. Austropotamobius pallipes; White-clawed (or Atlantic stream) crayfish

S1096. Lampetra planeri; Brook lamprey

S1163. Cottus gobio; Bullhead

Threats and Pressures at habitat site which may be affected by the Local Plan²⁷:

• Water Pollution and Abstraction

²⁶ Natural England (2014) River Wensum SAC Conservation Objectives. Available at: https://publications.naturalengland.org.uk/publication/6039440396910592 [Date Accessed: 18/01/24].

²⁷ Natural England (2014) River Wensum SAC Site Improvement Plan. Available at:

https://publications.naturalengland.org.uk/publication/6720168281505792 [Date Accessed:18/01/24].

Ramsar Criterion	Justification for the application of each criterion	
1	The site is an extensive example of spring-fed lowland base-rich valley, remarkable for its lack of fragmentation.	
2	The site supports many rare and scarce invertebrates, including a population of the fen raft spider <i>Dolomedes plantarius</i> .	
3	The site supports many rare and scarce invertebrates, including a population of the fen raft spider <i>Dolomedes plantarius.</i> The diversity of the site is due to the lateral and longitudinal zonation of the vegetation types characteristic of valley mires.	

Threats and Pressures at habitats site which may be affected by the Local Plan:

No threats or pressures were identified for Redgrave and South Lopham Fens Ramsar.

Breckland SPA²⁸

Conservation objectives:

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

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

Qualifying features:

A133 *Burhinus oedicnemus*, Stone-curlew (Breeding) A224 *Caprimulgus europaeus*, European nightjar (Breeding)

A246 Lullula arborea; Woodlark (Breeding)

Threats and Pressures at habitat site which may be affected by the Local Plan²⁹:

- Water Pollution
- Air Pollution
- Public Access and disturbance
- Habitat Fragmentation

Breckland SAC³⁰

Conservation objectives:

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

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

Qualifying features:

H2330. Inland dunes with open *Corynephorus* and *Agrostis* grasslands; Open grassland with grey-hair grass and common bent grass of inland dunes

H3150. Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation; Naturally nutrient-rich lakes or lochs which are often dominated by pondweed

²⁸ Natural England (2014) Breckland SPA Conservation Objectives. Available at:

https://publications.naturalengland.org.uk/publication/4572292419944448 [Date Accessed:18/01/24].

²⁹ Natural England (2014) Breckland SPA Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/5075188492271616 [Date Accessed: 18/01/24].

³⁰ Natural England (2014) Breckland SAC Conservation Objectives. Available at:

https://publications.naturalengland.org.uk/publication/6145904885104640 [Date Accessed:18/01/24].

H4030. European dry heaths

H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*FestucoBrometalia*); Dry grasslands and scrublands on chalk or limestone

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

S1166. Triturus cristatus, Great crested newt

* denotes a priority natural habitat or species

Threats and Pressures at habitat site which may be affected by the Local Plan³¹:

- Water Pollution
- Air Pollution
- Public Access and disturbance
- Habitat Fragmentation

Roydon and Dersingham Bog SAC³²

Conservation objectives:

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

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

Qualifying features:

H4010. Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath H4030. European dry heaths

H7150. Depressions on peat substrates of the *Rhynchosporion*

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

- Hydrological changes
- Air Pollution
- Water Pollution

Dersingham Bog Ramsar³⁴

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

Ramsar Criterion	Justification for the application of each criterion
2	Ramsar criterion 2 Supports an important assemblage of invertebrates - nine British Red Data Book species have been recorded.

³¹ Natural England (2014) Breckland SAC Site Improvement Plan. Available at:

https://publications.naturalengland.org.uk/publication/5075188492271616 [Date Accessed: 18/01/24].

³² Natural England (2014) Roydon Common and Dersingham Bog SAC Conservation Objectives. Available at: https://publications.naturalengland.org.uk/publication/4858619669512192 [Date Accessed:18/01/24].

³³ Natural England (2014) Roydon Common and Dersingham Bog SAC Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/4809467120058368 [Date Accessed: 18/01/24].

³⁴ JNCC (2008) Information Sheet on Ramsar Wetlands. Dersingham Bog Ramsar. Available at: https://jncc.gov.uk/jnccassets/RIS/UK11019.pdf [Date Accessed: 17/01/24]

Threats and Pressures at habitats site which may be affected by the Local Plan:

No threats or pressures were identified for Roydon and Dersingham Bog Ramsar.

Roydon Common Ramsar³⁵

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

Ramsar Criterion	Justification for the application of each criterion
2	Ramsar criterion 2 Supports an important assemblage of invertebrates - nine British Red Data Book species have been recorded.

Threats and Pressures at habitats site which may be affected by the Local Plan:

No threats or pressures were identified for Roydon Common Ramsar.

Benacre to Easton Bavents SPA³⁶

Conservation objectives:

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

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

Qualifying features:

A021 Botaurus stellaris; Great bittern (Breeding)

A081 Circus aeruginosus; Eurasian marsh harrier (Breeding)

A195 Sterna albifrons; Little tern (Breeding)

Threats and pressures at habitat site which may be affected by the Local Plan³⁷:

- Public Access / Disturbance
- Water Pollution

The Wash SPA³⁸

Conservation objectives:

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

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features

³⁵ JNCC (2008) Information Sheet on Ramsar Wetlands. Roydon Common Ramsar. Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11061.pdf [Date Accessed: 17/01/24]

³⁶ Natural England (2014) Benacre to Easton Bevent SPA Conservation Objective. Available at: https://publications.naturalengland.org.uk/publication/4750287944286208 [Date Accessed: 16/01/24]

³⁷ Natural England (2014) Benacre to Easton Bavents Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/4812476415737856 [Date Accessed:16/01/24].

³⁸ Natural England (2014) The Wash SPA Conservation Objectives. Available at: <u>https://publications.naturalengland.org.uk/publication/5747661105790976</u> [Date Accessed: 16/01/24].

The Wash SPA³⁸

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

Qualifying features:

A037 Cygnus columbianus bewickii; Bewick's swan (Non-breeding) A040 Anser brachyrhynchus, Pink-footed goose (Non-breeding) A046a Branta bernicla bernicla; Dark-bellied brent goose (Non-breeding) A048 Tadorna tadorna; Common shelduck (Non-breeding) A050 Anas penelope; Eurasian wigeon (Non-breeding) A051 Anas strepera; Gadwall (Non-breeding) A054 Anas acuta; Northern pintail (Non-breeding) A065 Melanitta nigra; Black (common) scoter (Non-breeding) A067 Bucephala clangula; Common goldeneye (Non-breeding) A130 Haematopus ostralegus; Eurasian oystercatcher (Non-breeding) A141 Pluvialis squatarola; Grey plover (Non-breeding) A143 Calidris canutus; Red knot (Non-breeding) A144 Calidris alba; Sanderling (Non-breeding) A149 Calidris alpina alpina; Dunlin (Non-breeding) A156 Limosa limosa islandica; Black-tailed godwit (Non-breeding) A157 Limosa lapponica; Bar-tailed godwit (Non-breeding) A160 *Numenius arquata*: Eurasian curlew (Non-breeding) A162 Tringa totanus; Common redshank (Non-breeding) A169 Arenaria interpres; Ruddy turnstone (Non-breeding) A193 Sterna hirundo; Common tern (Breeding) A195 Sterna albifrons; Little tern (Breeding) Waterbird assemblage Threats and Pressures at habitat site which may be affected by the Local Plan³⁹: Public Access / Disturbance .

- Coastal Squeeze
- Air Pollution: impact of atmospheric nitrogen deposition

The Wash Ramsar⁴⁰

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

Ramsar Criterion	Justification for the application of each criterion	
1	The Wash is a large shallow bay comprising very extensive saltmarshes, major intertidal banks of sand and mud, shallow water and deep channels.	
3	Qualifies because of the inter-relationship between its various components including saltmarshes, intertidal sand and mud flats and the estuarine waters. The saltmarshes and the plankton in the estuarine water provide a primary source of organic material which, together with other organic matter, forms the basis for the high productivity of the estuary.	
5	Assemblages of international importance: Species with peak counts in winter: 292541 waterfowl (5-year peak mean 1998/99-2002/2003)	
6	Species/populations occurring at levels of international importance.	

³⁹ Natural England (2018) The Wash SPA Site Improvement Plan. Available at:

https://publications.naturalengland.org.uk/publication/5327498292232192 [Date Accessed: 04/01/24].

⁴⁰ JNCC (2008) Information Sheet on Ramsar Wetlands. The Wash. Available at: <u>https://jncc.gov.uk/jncc-assets/RIS/UK11072.pdf</u> [Date Accessed: 16/02/24].

Ramsar Criterion	Justification for the application of each criterion
	Qualifying Species/populations (as identified at designation):
	Species with peak counts in spring/autumn:
	• Eurasian oystercatcher, <i>Haematopus ostralegus ostralegus</i> , Europe & NW Africa -wintering 15616 individuals, representing an average of 1.5% of the population (5-year peak mean 1998/9-2002/3)
	• Grey plover, <i>Pluvialis squatarola</i> , E Atlantic/W Africa -wintering 13129 individuals, representing an average of 5.3% of the population (5-year peak mean 1998/9-2002/3 - spring peak)
	 Red knot, <i>Calidris canutus islandica</i>, W & Southern Africa (wintering) 68987 individuals, representing an average of 15.3% of the population (5-year peak mean 1998/9-2002/3)
	• Sanderling, <i>Calidris alba</i> , Eastern Atlantic 3505 individuals, representing an average of 2.8% of the population (5-year peak mean 1998/9-2002/3)
	• Eurasian curlew, <i>Numenius arquata arquata, N. a. arquata</i> Europe (breeding) 9438 individuals, representing an average of 2.2% of the population (5-year peak mean 1998/9-2002/3)
	• Common redshank, <i>Tringa totanus totanus</i> , 6373 individuals, representing an average of 2.5% of the population (5-year peak mean 1998/9-2002/3)
	 Ruddy turnstone, Arenaria interpres interpres, NE Canada, Greenland/W Europe & NW Africa 888 individuals, representing an average of 1.7% of the GB population (5-year peak mean 1998/9- 2002/3)
	Species with peak counts in winter:
	 Pink-footed goose, <i>Anser brachyrhynchus</i>, Greenland, Iceland/UK 29099 individuals, representing an average of 12.1% of the population (5-year peak mean 1998/9-2002/3) Dark-bellied brent goose, <i>Branta bernicla bernicla</i>, 20861 individuals, representing an
	 average of 9.7% of the population (5-year peak mean 1998/9-2002/3) Common shelduck, <i>Tadorna tadorna</i>, NW Europe 9746 individuals, representing an average of 3.2% of the population (5-year peak mean 1998/9-2002/3)
	 Northern pintail, <i>Anas acuta</i>, NW Europe 431 individuals, representing an average of 1.5% of the GB population (5-year peak mean 1998/9- 2002/3)
	Dunlin, <i>Calidris alpina alpina</i> , W Siberia/W Europe 36600 individuals, representing an average of 2.7% of the population (5-year peak mean 1998/9-2002/3)
	Bar-tailed godwit, <i>Limosa lapponica lapponica</i> , W Palearctic 16546 individuals, representing an average of 13.7% of the population (5-year peak mean 1998/9-2002/3) Species/populations identified subsequent to designation for possible future consideration
	under criterion 6.
	 Species with peak counts in spring/autumn: Ringed plover, <i>Charadrius hiaticula</i>, Europe/Northwest Africa 1500 individuals, representing an average of 2% of the population (5-year peak mean 1998/9- 2002/3) Black tailed apdwit. <i>Limaga limaga ingadina</i>. Jeoland (W. Europa 6840 individuals.)
	 Black-tailed godwit, <i>Limosa limosa islandica</i>, Iceland/W Europe 6849 individuals, representing an average of 19.5% of the population (5-year peak mean 1998/9-2002/3) Species with peak counts in winter:
	• European golden plover, <i>Pluvialis apricaria apricaria, P. a. altifrons</i> Iceland & Faroes/E Atlantic 22033 individuals, representing an average of 2.3% of the population (5-year peak mean 1998/9-2002/3)
	• Northern lapwing, <i>Vanellus vanellus</i> , Europe - breeding 46422 individuals, representing an average of 1.3% of the population (5-year peak mean 1998/9-2002/3)
	Contemporary data and information on waterbird trends at this site and their regional (sub- national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually.

Threats and Pressures at habitats site which may be affected by the Local Plan:

No threats or pressures were identified for The Wash Ramsar.

Appendix C: Screening of the Publication Local Plan for the Broads

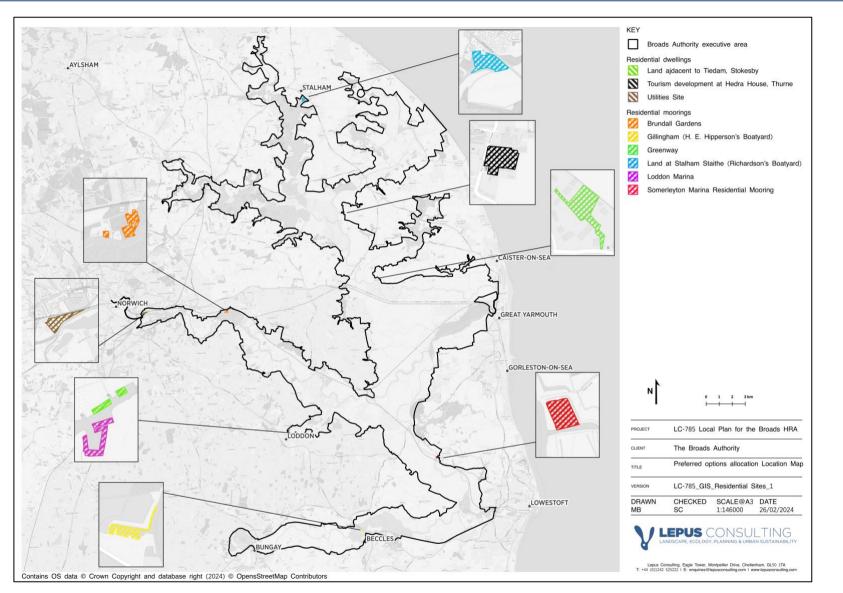


Figure C.1: Preferred Options allocation location map

Chapter 1 – 9

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
n/a	These chapters provide administrative text, background and context for the Local Plan.	Screen Out Administrative text

Chapter 10: Vision and Objectives

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
Vision	The vision provides general aspirations for the Borough over the Plan period.	Screen Out Category A
Objectives	Strategic objectives central to achieving the delivery of the vision for the Broads Authority, centred around the community, the economy and the environment. These are general aspirations for the Local Plan.	Screen Out Category A

Chapter 11: The rest of the Publication version Local plan

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
n/a	This chapter locates proposed policies in the Local Plan.	Screen Out Administrative text

Chapter 12: Sustainable development in the Broads

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM1 – Major Development in the Broads	This policy defines 'major development' and sets out the requirements for proposals. It does not allocate any development or trigger any change. As such, this policy is unlikely to have an LSE on any habitats site.	Screen Out Category B
PUBDM2 – Embodied Carbon	This policy is a Plan wide environmental protection policy in relation to embodied carbon. It encourages development to reduce embodied carbon content through materials, avoiding demolition, the circular economy and the calculation of whole-lifecycle carbon emissions. The policy does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE on any Habitats site and will not be considered further in the HRA process.	Screen Out Category D

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM3 – Pollution and Hazards in development and protecting environmental quality	This policy is a Plan wide environmental protection policy requiring all development proposals to protect the quality of the environment. Proposals must comply with statutory environmental quality standards and demonstrate that development will not cause adverse impacts. The policy does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE on any Habitats site and will not be considered further in the HRA process.	Screen Out Category D

Chapter 13: Climate Change

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
Policy PUBSP1 — Responding to the Climate Emergency	This policy is a Plan wide environmental protection policy focusing on climate change. The policy sets out requirements for development to reduce greenhouse gas emissions and adapt to climate change throughout its lifetime. The Authority will support proposals that help combat climate change. It does not allocate any development or trigger any change. This policy is unlikely to have LSE on any habitats site itself and will not be considered further in the HRA process.	Screen Out Category D
Policy PUBDM4 – Climate change adaption and resilience checklist	This policy is a Plan wide environmental protection policy which requires certain development proposals to demonstrate how climate change has been accounted for through design by submitting a Climate Smart Checklist. It does not allocate any development or trigger any change which would impact a Habitats site. As such this policy is unlikely to have an LSE on any habitats site itself and would not be considered further in the HRA process.	Screen Out Category D

Chapter 14: Water use and quality

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM5 – Water quality and foul drainage	This policy is a Plan wide environmental protection policy to protect water quality and quantity. Development will be permitted where it will not have an adverse impact on surface and ground waterbodies. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have LSEs and will be screened out of the HRA process.	Screen Out Category D
PUBDM6 – Boat wash–down facilities	This policy protects water quality by preventing anti fouling paint residues entering the water system and stopping the spread of invasive species. It requires a designated area with adequate facilities for the wash-down of vessels to. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have LSEs and will be screened out of the HRA process.	Screen Out Category D

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM7 – Water efficiency and re- use	This policy requires all new development to have a water demand at minimum equivalent to 110l/person/day and for all non-domestic buildings to be water efficient. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have LSEs and will be screened out of the HRA process.	Screen Out Category D

Chapter 15: Flooding

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP2 – Strategic flood risk policy	This policy is a Plan wide environmental protection policy in relation to flood risk. It sets out criteria for all new development including the incorporation of suitable surface water drainage mitigation measures and location to minimise flood risk from all sources. It does not allocate any development or trigger any change which would impact a Habitats site. As such this policy is unlikely to have LSEs on any habitats site itself and will not be considered further in the HRA process.	Screen Out Category D
PUBDM8 – Development and flood risk	This policy is a Plan wide environmental protection policy in relation to flood risk. It sets out the requirements of development located within areas at risk of floods and the Site-Specific Flood Risk Assessment. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have LSEs on any Habitats site itself and will not be considered further in the HRA process.	Screen Out Category D
PUBDM9 – Surface water run-off	This policy is a Plan wide environmental protection policy in relation to surface water run-off. It requires all development proposals to incorporate appropriate measures to attenuate surface water run off. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have LSEs on any Habitats site itself and will not be considered further in the HRA process.	Screen Out Category D

Chapter 16: Open space, play and allotments

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM10 – Open space on land, play space, sports fields and allotments	This policy protects existing open space and requires the provision of new open space to reduce recreation pressure on sensitive designated wildlife sites. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F

Chapter 17: Green and blue infrastructure and Public Rights of Way

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM11 – Green and blue Infrastructure and Public Rights of Way	This policy requires green infrastructure (GI) and blue infrastructure (BI) to be central to the design of schemes. Proposals must enhance and integrate with the local GI and BI and Public Rights of Way (PRoW) and access will be protected, enhanced and promoted. The promotion of new PRoW and access will need to be mindful of potential LSEs from increased recreational pressure at sensitive habitats sites depending on location – to be assessed on a site-by-site basis. This policy will therefore be screened into the HRA process.	Screen In Category I

Chapter 18: Soils

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP3 - Soils	This policy sets out criteria to ensure the protection of soils. It is a Plan wide environmental protection policy and does not allocate any development or trigger any change. As such this policy is unlikely to have LSEs on any habitats site and will be screened out of the HRA process.	Screen Out Category D
PUBDM12 – Peat soils	This policy protects, enhances and preserves peat soil sites. It is a Plan wide environmental protection policy and does not allocate any development or trigger any change. As such this policy is unlikely to have LSEs on any habitats site and will be screened out of the HRA process.	Screen Out Category D

Chapter 19: Heritage and historic assets

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP4 – Historic Environment	This policy seeks to protect and enhance the historic environment of the Broads. It will not trigger any development or change. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBDM13 – Heritage Assets	This policy sets out the expectations of all development to protect, preserve or enhance the significance and setting of historic, cultural and architectural heritage assets and elements that give Broads its distinctive character. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F
PUBDM14 – Re-use, Conversion or Change of Use of Historic Buildings	This policy provides criteria for the re-use, conversion or change of a designated or non-designated heritage asset. For the re-use of non-designated heritage assets, employment, recreation and tourism uses will be the next preference. Should re-uses relate to residential / tourism development there may be an in-combination LSE with other plans and projects on a habitats site in terms of increased recreational and nutrient impacts. Taking a precautionary approach this policy will therefore be screened into the HRA process for further consideration.	Screen In Category L

Chapter 20: Natural Environment

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP5 – Biodiversity	This policy requires development to be planned around the protection and enhancement of nature. It sets out the requirements if development, including to protect the value and integrity of nature conservation objectives, provide biodiversity net gains and incorporate biodiversity features within development proposals. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have LSEs and will be screened out of the HRA process.	Screen Out Category D
PUBDM15 – Natural Environment	This policy sets out requirements of development in terms of the natural environment, including minimising the fragmentation of Habitats, adhering to the mitigation hierarchy, and assist in the delivery of Local Nature Recovery Strategies. This policy is a Plan wide environmental protection policy in respect of protected sites. It does not allocate any development or trigger any change which would impact a habitats site.	Screen Out Category D
PUBDM16 – Biodiversity Net Gain	This policy requires all development types to achieve a minimum of 10% Biodiversity Net Gain on site. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have LSEs and will be screened out of the HRA process.	Screen Out Category D
PUBDM17 – Mitigating Recreational Impacts	This policy secures mitigation for recreational impacts at Habitats sites to ensure compliance with Norfolk and Suffolk Recreational disturbance Avoidance and Mitigation Strategy (RAMS) schemes. It provides mitigation wording and will therefore be screened into the HRA process.	Screen In Category M
PUBDM18 – Mitigating Nutrient Enrichment Impacts	This policy requires development for overnight accommodation within the Broads SAC or Ramsar sites to not increase nutrient loads. The policy secures mitigation for nutrient impacts at Habitats sites and therefore will therefore be screened into the HRA process.	Screen In Category M
PUBDM19 – Trees, woodlands, hedges, scrub and shrubs and development	This policy protects trees, woodlands and significant hedge and shrub masses and areas of scrub that make a positive landscape contribution or are of ecological importance. It sets out the criteria of development requiring the loss of trees, woodlands, hedgerows, shrub or scrub.	Screen Out Category D

Chapter 21: Renewable energy

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM20 – Energy demand and performance of new buildings (including extensions)	This policy sets out the requirements of development in terms of energy use and efficiency. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE on any Habitats site and will not be considered further in the HRA process.	Screen Out Category F

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM21 – Renewable and low carbon energy	This policy sets out the requirements of renewable/low carbon energy proposals including their scale, design and impact. Renewable energy has the potential to have an adverse impact upon mobile features for which several Habitats sites are designated e.g. birds. Selection of any sites for allocation will need to ensure compliance with the criteria set out in this policy and best practice guidance such as: Natural England (2017) Evidence review of the impact of solar farms on birds, bats, and general ecology (NEER 012) ¹ . RSPB (2017) Solar Power Briefing Note. ² This policy does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to directly have LSEs and will be screened out of the HRA process.	Screen In Category D

Chapter 22: Landscape character

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP6 – Landscape character	This policy conserves and enhances the high quality, diverse and distinct landscapes and seascapes of the Broads. It requires development proposals to ensure the location or intensity of the use is appropriate to the character of the Broads. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category D
PUBDM22 – Development and landscape	This policy requires development to conserve and enhance the key positive landscape characteristics of the Broads. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category D
PUBDM23 – Land raising	This policy requires proposals to raise land to justify the approach and will not be permitted if they have adverse effects which cannot be satisfactorily mitigated. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F
PUBDM24 – Excavated material	This policy sets criteria regarding excavated material. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F

¹ Natural England (2017) Evidence review of the impacts if solar farms on birds, bats and general ecology 2016 (NEER012). Available at: http://publications.naturalengland.org.uk/publication/6384664523046912 [Date Accessed: 22/02/24].

²RSBP (2023) Working with solar developments to tackle the climate and ecological emergencies. Available at: https://community.rspb.org.uk/ourwork/b/actionfornature/posts/working-with-solar-developments-to-tackle-the-climate-and-ecological-emergencies [Date Accessed: 22/02/24].

PUBDM25 – Utilities infrastructure development	This policy sets out criteria which must be met for utilities infrastructure and associated development. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F
PUBDM26 – Protection and enhancement of settlement fringe landscape character	This policy aims to protect the distinctive characteristics and special qualities of the Broads landscape. It sets out the criteria for development within settlement fringe areas. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F

Chapter 23: Amenity

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM27 - Amenity	The policy sets out the requirements of new development to provide high standards of amenities to ensure a suitable living environment. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F

Chapter 24: Tranquillity and Light Pollution

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP7 – Tranquillity in the Broads	This policy is a Plan wide environmental protection policy to protect and conserve tranquillity in the Broads. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and will be screened out of the HRA process.	Screen Out Category D
PUBDM28 – Light pollution, dark skies and nocturnal character	This policy conserves and enhances the tranquillity, nocturnal character and dark sky experience of the Broads. All developments must ensure they do not add to light pollution. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and will be screened out of the HRA process.	Screen Out Category D

Chapter 25: Transport

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP8 – Accessibility and Transport	This policy promotes the reduction of travel, use of alternative forms of transport (e.g. public and electric) and active travel options. It will have a positive impact upon air quality at habitats sites. It does however contain wording which notes 'The improvement of access to and views of the waterside by the introduction of additional footpaths and cycle ways;'. This may increase access to areas of the waterside which may be part of Habitats site designations – depending on location. LSEs are therefore possible, and this policy will be screened into the HRA assessment for further consideration. It is noted that protective policy wording is also included to mitigate for these impacts on habitats sites which will be considered in the HRA process.	Screen In Category M and L

Broads Authority Local Plan Habitats Regulations Assessment

LC-785_Broads Authority_Local Plan_HRA_Appendix C_5_101024SC.docx

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP9 – Recreational access around the Broads Area	This policy promotes access to waterside areas which may be designated as habitats sites. This policy will therefore be screened into the HRA process. Wording is included which only permits improved access where adverse impacts on the natural and historic environment have been considered and addressed in line with other policies in this Local Plan. LSEs are therefore possible, and this policy will be screened into the HRA assessment for further consideration. It is noted that protective policy wording is also included to mitigate for these impacts on habitats sites which will be considered in the HRA process.	Screen In Category M and L
PUBDM29 – Transport, highways and access	This policy promotes the reduction of travel, use of alternative forms of transport (e.g. public and electric) and active travel options. It will have a positive impact upon air quality at Habitats sites. It does however contain wording which supports improvement of access to the waterside. This may increase access to areas of the waterside which may be covered by habitats sites designations – depending on location. LSEs are therefore possible, and this policy will be screened into the HRA assessment for further consideration. It is noted that protective policy wording is also included to mitigate for these impacts which will also be considered in the HRA process.	Screen In Category M and L
PUBDM30 – Recreation facilities parking areas	This policy sets out requirements in terms of parking facilities. It supports limited parking and as such, depending on location of car parks, may have an LSE at a habitats site. This policy will be screened into the HRA assessment for further consideration. It is noted that protective policy wording is also included to mitigate for these impacts which will also be considered in the HRA process.	Screen In Category M and L

Chapter 26: The Broads economy

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP10 – A prosperous local economy	This policy supports proposals that contribute towards sustainable economic growth, prosperity and employment. It sets out how the Authority will support and strengthen the local and rural economy. Therefore, this policy will be screened into the HRA assessment for further consideration. It is noted that protective policy wording is also included to mitigate for these impacts which will also be considered in the HRA process.	Screen In Category L
PUBDM31 – New employment development	This policy sets out the criteria for new employment use (classes B2, B8 and E(g)) proposals. This policy does not allocate any employment sites and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F
PUBDM32 – Protecting general employment	This policy protects current employment uses. It sets general acceptability criteria where change may be supported. It does not trigger development or a change. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM33 – Farm diversification	This policy permits farm diversification / new development / farm shops provided several criteria are met. It does not allocate development itself or trigger any direct change. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F
PUBSP11 – Waterside sites	This policy sets out the criteria for maintaining the network of waterside sites in employment and commercial use. This policy does not allocate any employment sites and therefore does not trigger any change or development directly. It sets a list of criteria to protect employment and commercial waterside sites. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F
PUBDM34 – Development on waterside in employment or commercial use, including boatyards	This policy does not allocate any employment sites and therefore does not trigger any change or development directly. It supports development of new boatsheds and other buildings at waterside sites to meet operational requirements, subject to several criteria. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F

Chapter 27: Retail

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM35 – Retail development in the Broads	This policy supports maintaining and enhancing the vitality and viability of centres. It sets out the criteria for retail development proposals. Therefore, this policy will be screened into the HRA assessment for further consideration. It is noted that protective policy wording is also included to mitigate for these impacts which will also be considered in the HRA process.	Screen In Category L

Chapter 28: Sustainable tourism

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP12 – Sustainable tourism	This policy supports the creation, enhancement and expansion of high quality and inclusive tourism. This policy sets requirements for sustainable tourism and related infrastructure. Tourism development has the potential to have a likely significant recreational impact upon several sensitive habitats sites. As such this policy will be screened into the HRA process.	Screen In Category L
PUBDM36 – Sustainable tourism and recreation development	This policy does not allocate any employment sites and therefore does not trigger any change or development directly. It sets a list of criteria that applications for employment must meet in order to be supported. As such this policy is unlikely to have an LSE on any habitats site and therefore has been screened out of the HRA process.	Screen Out Category F

PUBDM37 – Holiday / tourism accommodation – new provision and retention	This policy sets requirements in relation to holiday / tourism accommodation and protects existing development. It does not allocated development or trigger any change which would have an LSE on any habitats site and therefore has been screened out of the HRA process.	Screen Out Category F
---	--	--------------------------

Chapter 29: Navigation

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP13 – Navigable water space	This policy will maintain and enhance navigable / recreational water spaces and provide opportunities for extension or creation of new water spaces. Given that watercourses link the Broads SAC, Broadlands SPA and Ramsar sites, this policy has the potential to have downstream LSEs on habitats sites and will be screened into the HRA process.	Screen In Category L
PUBDM38 – Access to the water	This policy permits development that supports and encourages the use of waterways subject to requirements. Given that waterways are designated as part of the Broads SAC, Broadlands SPA and Ramsar sites, this policy has the potential to have an LSE on habitats sites and will be screened into the HRA process.	Screen In Category L
PUBDM39 – Bank stabilisation	This policy sets criteria for development proposals which require bank stabilisation. Given that waterways are designated as part of the Broads SAC, Broadlands SPA and Ramsar sites, this policy has the potential to have LSEs on habitats sites and will be screened into the HRA process.	Screen In Category L
PUBSP14 – Mooring provision	This policy encourages the provision of short term visitor moorings and sets out requirements for mooring proposals. Given that waterways are designated as part of the Broads SAC, Broadlands SPA and Ramsar sites, this policy has the potential to have an LSE on habitats sites and will be screened into the HRA process.	Screen In Category L
PUBDM40 – Moorings, mooring basins and marinas	This policy permits new moorings where they contribute to the network of facilities around the Broads system and sets out requirements for new or replacement mooring proposals. Given that waterways are designated as part of the Broads SAC, Broadlands SPA and Ramsar sites, this policy has the potential to have an LSE on a habitats site and will be screened into the HRA process.	Screen In Category L
PUBDM41 – The impact of replacement quay heading on navigation	This policy permits the replacement of quay headings on waterways less than 30m in width on a case-by- case basis and subject to assessment. Any in-river work has the potential to have an LSE on downstream habitats sites e.g. Broads SAC, Broadland SPA and Ramsar. As such this policy will be screened into the HRA process.	Screen In Category L
PUBDM42 – Materials used for quay heading, capping and waling, small bridges, viewing platforms, landing stagings and boardwalks as well as piling	This policy sets requirement in respect of the use of materials. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and would not be considered further in the HRA process.	Screen Out Category F

Chapter 30: Housing and residential moorings

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
POSP15 – Residential development	This policy sets out a list of criteria which would apply to any replacement dwellings. It does not in itself trigger any development or change and will therefore have no LSE. As such it will be screened out of the HRA process.	Screen Out Category F
PUBDM43 – Affordable housing	This policy sets out requirements for affordable housing. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBDM44 – Residential development within defined Development Boundaries	This policy sets out the spatial strategy of the Development Plan. These areas are located close to / upstream of several habitats sites. As such development would have the potential to have an LSE and this policy will be screened into the HRA process.	Screen In Category L
PUBDM45 – Gypsy, Traveller and Travelling Show people	This policy supports development proposals for the provision of permanent or transit accommodation. This policy contains mitigation wording which relates to the protection of habitats sites. As such this policy will be screened into the HRA process for further consideration.	Screen In Category L
PUBDM46 — New residential moorings	This policy sets out the delivery of 48 residential moorings. The policy sets out a list of criteria which such development must meet in order to be permitted. Any new mooring would have the potential to have an LSE upon habitats sites and therefore this policy would be screened into the HRA process.	Screen In Category L
PUBDM47 – Permanent and temporary dwellings for rural enterprise workers	This policy sets out the criteria of the development of new dwellings/residential moorings for rural enterprise workers outside the defined development boundaries. It does not in itself trigger any development or change and will therefore have no LSE. As such it will be screened out of the HRA process	Screen Out Category F
PUBDM48 — Elderly and specialist needs housing	This policy supports proposals for the development of or change to elderly or specialist needs housing subject to criteria. It does not in itself trigger any development or change and will therefore have no LSE. As such it will be screened out of the HRA process	Screen Out Category F
PUBDM49 – Residential ancillary accommodation	This policy sets out a list of criteria which would apply to any residential ancillary accommodation. It does not in itself trigger any development or change and will therefore have no LSE. As such it will be screened out of the HRA process	Screen Out Category F
PUBDM50 – Replacement dwellings	This policy sets out a list of criteria which would apply to any replacement dwellings. It does not in itself trigger any development or change and will therefore have no LSE. As such it will be screened out of the HRA process.	Screen Out Category F

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM51 – Custom/self-build	This policy outlines criteria for custom/self-build dwelling proposals and indicates that they will be 'considered' in accordance with the Local Plan. It encourages developers of multi-dwelling sites to set aside plots for custom/self-build dwellings. It does not in itself trigger any development or change and will therefore have no LSE. As such it will be screened out of the HRA process	Screen Out Category F

Chapter 31: Design

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP16 – Strategic Design Policy	This policy protects and enhances the distinctive built and landscape character of the Broads. It requires development proposals to be of a high quality and resilient to climate change. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBDM52 – Design	This policy sets out design requirements for residential extensions. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and will be screened out of the HRA process.	Screen Out Category F
Policy PUBDM52A - Proposals for residential extensions	This policy sets out design requirements for development. It requires development to be of a high standard and integrate effectively with the surroundings. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBDM53 – Source of heating	This policy sets requirements for the heating of new buildings. It encourages the heating system to be as high up the heating method hierarchy as is feasible. It does not allocate any development or trigger any change. As such this policy is unlikely to have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBDM54 – Heat resilient design	This policy sets out the design requirements of new buildings to prevent and minimise the impacts of overheating in the built environment. It does not allocate any development or trigger any change. As such this policy is unlikely to have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBDM55 – Non-residential development and BREEAM	This policy sets out the minimum BREEAM standard non-residential development must achieve. It does not allocate any development or trigger any change which would impact a Habitats site. As such this policy is unlikely to have an LSE on any habitats site itself and would not be considered further in the HRA process.	Screen Out Category F
PUBDM56 – Electric Vehicles (EV) Charging Points – fire safety, design, location, and lighting	This policy welcomes the installation of EV charging points and sets out their requirements. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE and will be screened out of the HRA process.	Screen Out Category F

PUBDM57 – Fibre to the Premises (FTTP)	This policy relates to provision of fibre connections to the premises. It does not allocate any development or trigger any change which would impact a Habitats site. As such this policy is unlikely to have an LSE on any habitats site itself and will not be considered further in the HRA process.	Screen Out Category F
---	---	--------------------------

Chapter 32: Visitor and community facilities and services

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSP17 – Community facilities	This policy protects community facilities and supports new facilities where there is justification. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and will not be considered further in the HRA process.	Screen Out Category F
PUBDM58 – Visitor and community facilities and services	This policy sets criteria for the change of use of existing community facilities and for new facilities. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and will not be considered further in the HRA process.	Screen Out Category F

Chapter 33: Health and wellbeing

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM59 – Designing places for healthy lives	This policy supports development which promote healthy choices and behaviours and reduce health inequalities. It does not allocate or trigger any development or a change. As such this policy is unlikely to have an LSE on any habitats site and would not be considered further in the HRA process.	Screen Out Category F

Chapter 34: Planning obligations / developer contribution

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM60 – Planning obligations and developer contributions	This policy seeks contributions from developments to serve the development and its occupants where development will introduce additional pressure on the Broads Authority Executive Area. It includes contributions to address nutrient neutrality and recreational impacts. The policy does not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F

Chapter 35: Other Development Management policies

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDM61 – Advertisement and signs	This policy sets out the requirements of advertisements and signs to have regard to the character of the area. This policy will not trigger new development or a change with an LSE on any habitats site.	Screen Out Category F
PUBDM62 – Re-use, conversion or change of use of buildings	This policy supports the re-use, conversion or change to use of buildings and structures to employment, tourism, recreation and community uses subject to criteria. It does not allocate any development or trigger any change which would impact a Habitats site. As such this policy is unlikely to have an LSE and will not be considered further in the HRA process.	Screen Out Category F
PUBDM63 – Leisure plots, amenity plots, conservation plots and mooring plots	This policy sets restrictions and protection for leisure plots, amenity plots, conservation plots and mooring plots. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and will not be considered further in the HRA process.	Screen Out Category F

Chapter 36: Site specific policies

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
2/2	Introduction text to site specific policies	Screen Out
n/a		Category A

Chapter 37: Acle

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBACL1 – Acle Cemetery extension	This policy supports the extension of the cemetery at Acle. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBACL2 – Acle Playing Field extension	This policy allocates land for the extension of the playing field at Acle Recreation Centre. It does not allocate any development or trigger any change which would impact a habitats site. As such this policy is unlikely to have an LSE and will be screened out of the HRA process.	Screen Out Category F

Chapter 38: Brundall Riverside

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBBRU1 – Riverside chalets and mooring plots	This policy outlines the management of riverside chalet and mooring plots to retain its contribution to the river scene. It limits further development and sets out the factors for which permission will not be granted. The policy also sets out the criteria of extensions to existing buildings and replacement buildings. This policy does not allocate any development or change which would trigger an LSE at a European site.	Screen Out Category F
PUBBRU2 – Riverside Estate Boatyards, etc., including land adjacent to railway line	This policy supports the development and retention of boatyards. It outlines the requirements of proposals including biodiversity enhancements and flood risk resilience. This policy does not allocate any development or change which would trigger an LSE at a European site.	Screen Out Category F
PUBBRU3 – Brundall Mooring Plots	The aim of this policy is to protect this area for mooring plots. The policy will not trigger any development or change itself. It does not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBBRU4 – Brundall Marina	This policy aims to protect Brundall Marina for marina, boatyard, and related uses. The policy will not trigger any development or change itself but welcomes the provision of an appropriate number of visitor moorings. It sets out criteria which development must meet if taken forward in this area and supports the development of marina related development. It does not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBBRU5 – Land east of the White Heron Public House	This policy outlines that built development will generally not be permitted to help conserve trees, biodiversity and visual amenity of the area. It does not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBBRU6 — Brundall Gardens Marina Residential Moorings	This policy supports additional residential mooring proposals (of up to eight in total). It sets out the requirements for these sites. Given the location of this site on the banks of the River Yare and its location adjacent to the Broads SAC, Broadland SPA and Ramsar site and within the Broads nutrient neutrality and GIRAMS area – any residential moorings will need to take account of protective policy wording set out in the Local Plan. This is noted within the policy itself which sets out requirements for HRA. This policy will be screened into the HRA process as it has the potential for LSEs.	Screen In Category L

Chapter 39: Cantley

Policy Name Summary of Policy and Identification of LSEs Screening Conclu	sion
---	------

PUBCAN1 – Cantley Sugar Factory	This policy defines the site is defined as an employment site. This policy supports development at the factory site which secures and enhances the sugar works' contribution to the economy of the Broads and wider area. It is noted that the factory is not located within the Broads SAC nutrient neutrality catchment area and will not allocate any residential development. It does not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
---------------------------------	--	--------------------------

Chapter 40: Chedgrave

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBCHE1 – Greenway Marine residential moorings	This policy supports up to five additional residential moorings subject to criteria. Given the location of the moorings on the banks of the River Chet and its location adjacent to the Broads SAC, Broadland SPA and Ramsar site this policy will be screened into the HRA process as it has the potential for LSEs.	Screen In Category L

Chapter 41: Dilham

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDIL1 – Dilham Marina (Tyler's Cut Moorings)	This policy protects Dilham Marina for the continued use for mooring of boats and uses incidental to that activity. It does not allow for residential moorings. It will not trigger any development or change itself. As such, this policy is unlikely to have an LSE on any habitats site. It will be screened out of the HRA process.	Screen Out Category F

Chapter 42: Ditchingham Dam

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBDIT1 – Maltings Meadow Sports Ground, Ditchingham	This policy aims to protect sports facilities and sets criteria for proposals to improve existing and provide new facilities development. It does not trigger new development or change. As such, this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBDIT2 – Ditchingham Maltings Open Space, Habitat Area and Alma Beck	This policy allocates sites for protection as an open space and habitat area. These allocations as open space contribute to amenity, townscape and recreation and provide important pedestrian links. Habitat areas will be conserved and enhanced. This policy is a protective policy and allocates sites for protection. Therefore, it will be screened out of the HRA process.	Screen Out Category F

Chapter 43: Fleggburgh

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBFLE1 – Broadland Sports Club	This policy protects sports facilities and sets criteria for improvements or new facilities. It does not trigger new development or any change. As such, this policy is unlikely to have an LSE on any habitats site. It will be screened out of the HRA process.	Screen Out Category F

Chapter 44: Gillingham

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBGIL1 — Gillingham residential moorings (H.E. Hipperson's Boatyard)	This policy supports up to five additional residential moorings subject to criteria. The site is located upstream of several components of the Broads SAC, Broadlands SPA and Ramsar sites on the River Waveney. As such it has the potential to have an LSE and will be screened into the HRA process.	Screen In Category L

Chapter 45: Great Yarmouth

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBGTY1 – Marina Quays (Port of Yarmouth Marina)	This policy encourages use of the site for river and leisure users and appropriate redevelopment subject to criteria. It does not trigger new development or any change. As such, this policy is unlikely to have an LSE on any habitats site. It will be screened out of the HRA process.	Screen Out Category F

Chapter 46: Horning

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBHOR1 – Horning Car Parking	This policy retains this area of land for continued car park use. It does not trigger any new development or change which is likely to have a significant effect on any habitats site.	Screen Out Category F
PUBHOR2 – Horning Open Space (public and private)	This policy protects Horning Open Space from development for their contribution to character and landscape of Horning and amenity purposes. It does not trigger any new development or change which is likely to have a significant effect on any habitats site.	Screen Out Category F

Broads Authority Local Plan Habitats Regulations Assessment

LC-785_Broads Authority_Local Plan_HRA_Appendix C_5_101024SC.docx

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBHOR3 – Waterside plots	This policy protects the area from over-intensive development but encourages the maintenance/upgrading of existing buildings. It sets out the criteria for maintenance/upgrading proposals. It does not trigger new development or any change. As such, this policy is unlikely to have an LSE on any habitats site. It will be screened out of the HRA process.	Screen Out Category F
PUBHOR4 – Horning Sailing Club	This policy supports the continued use of the island for sailing facilities as well as the maintenance/upgrading of existing buildings subject to criteria. It does not trigger new development or any change. As such, this policy is unlikely to have an LSE on any habitats site. It will be screened out of the HRA process.	Screen Out Category F
PUBHOR5 – Crabbet's Marsh	This policy protects this area for its landscape and nature conservation value. All development will be resisted. As such, it does not trigger any development or change and would therefore not have an LSE and would be screened out of the HRA process.	Screen Out Category F
PUBHOR6 – Horning – Boatyard, etc. at Ferry Road and Ferry View Road	This policy does not allocate development in itself but provides a series of requirements that any new development should meet to protect the area from impacts. It does not trigger new development or any change. As such, this policy is unlikely to have an LSE on any habitats site. It will be screened out of the HRA process.	Screen Out Category F
PUBHOR7 – Woodbastwick Fen moorings	This policy conserves the area which will be kept generally free of development. The policy will not trigger any development or change itself. As such, this policy is unlikely to have an LSE on any habitats site and would be screened out of the HRA process.	Screen Out Category F
PUBHOR8 — Land on the corner of Ferry Road, Horning	This policy protects existing use at these units. It does not propose a change in use and therefore will not trigger any development or change itself. As such, this policy is unlikely to have an LSE on any habitats site and would be screened out of the HRA process.	Screen Out Category F

Chapter 47: Hoveton and Wroxham

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBHOV1 – Green infrastructure	This policy identifies, maintains and enhances Green Infrastructure (GI) in the Plan area. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBHOV2 – Station Road car park	This policy protects Station Road car park for continued car park use. It does not trigger any new development or change which is likely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBHOV3 – Brownfield land off station Road, Hoveton	This policy supports the redevelopment of the site for appropriate uses subject to criteria. It does not trigger new development or any change. As such, this policy is unlikely to have an LSE on any habitats site. It will be screened out of the HRA process.	Screen Out Category F
PUBHOV4 – BeWILDerwood Adventure Park	This policy supports ancillary development to meet the operational needs at the park subject to criteria. It does not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBHOV5 – Hoveton Village Centre and areas adjacent to the Village Centre	This policy supports residential use in the allocated areas subject to criteria. It also supports proposals for new retail and leisure growth for town centre uses subject to criteria. It does not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F

Chapter 48: Norwich

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBNOR1 – Utilities Site	This policy sets out the redevelopment of this area to realise its potential contribution to the strategic need of the wider Norwich area. The policy allocates the site for mixed-use development including approximately 250 dwellings. The redevelopment proposals will be supported subject to criteria. This policy will trigger development, as such it has the potential to have an LSE at habitats sites in the study area and will be considered further in the HRA.	Screen In Category L
PUBNOR2 – Riverside walk and cycle path	This policy seeks to safeguard land for a riverside walk and cycle path along the Wensum/Yare at Whitlingham Country Park to the southeast of Norwich. This footpath runs along the northern bank of the River Yare only in a short section to the north of the Whitlingham Great Broad. It is not located within or adjacent to any habitats site and therefore it is unlikely to have an LSE and would be screened out of the HRA process.	Screen Out Category F

Chapter 49: Ormesby St. Michael

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
-------------	--	-------------------------

PUBORM1 – Ormesby waterworks	This policy protects Ormesby treatment works from development to allow its continued functioning. Development required for its operation will be supported subject to requirement. It does not trigger any new development or change which is likely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
------------------------------	---	--------------------------

Chapter 50: Oulton Broad

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBOUL1 – Boathouse Lane Leisure Plots	This policy protects the rural and semi-natural character of the area, its contribution to the views from the Broad, and floodwater capacity. Development will be managed to support these aims. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site.	Screen Out Category F
PUBOUL2 – Oulton Board – Former Pegasus / Hamptons site	This policy allocates land for a boatyard and optional other uses (housing, recreation, entertainment, or employment uses where compatible with the boatyard use, road access, neighbouring uses, and flood risk). Whilst it is noted that this allocation has received planning permission, given its incorporation in the Local Plan and the fact that it has not been built out, this policy and allocation have been screened into the HRA process for further consideration as it has the potential to have an LSE on a habitats site.	Screen In Category L
PUBOUL3 — Oulton Broad District Shopping Centre	This policy permits New Town Centre Use Development subject to criteria and sets out the criteria for changes to ground floor premises within the shopping centre. It does not allocate any development or trigger any change specifically which would impact a habitats site would not be considered further in the HRA process.	Screen Out Category F

Chapter 51: Potter Heigham / Repps with Bastwick

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBPHRB1 – Bridge Area	This policy sets out the development and enhancements of the area around Potter Heigham Bridge for river related leisure and tourism subject to criteria. It does not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBPHRB2 – Waterside plots	This policy aims to conserve the area, and protect the area from over development and suburbanisation, while considering the maintenance and replacement of existing buildings. It does not trigger development or change which could cause an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBPHRB3 – Green Bank Zones	This policy does not permit development within the identified 'green bank zones' to conserve the remaining openness and rural character of the area. It does not trigger any development or change and will therefore not have an LSE and will be screened out of the HRA process.	Screen Out Category F

Chapter 52: St. Olaves

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSOL1 — Riverside area moorings	This policy aims to protect this riverside area for moorings. The policy will not trigger any development or change and will therefore not have an LSE and will be screened out of the HRA process.	Screen Out Category F

Chapter 53: Somerleyton

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSOM1 — Somerleyton Marina Residential Moorings	This policy supports the provision of up to 15 residential moorings subject to criteria. The site is in close proximity to several components of the Broads SAC, Broadlands SPA and Ramsar site. As such it has the potential to have an LSE and will be screened into the HRA process.	Screen In Category L

Chapter 54: Stalham

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSTA1 – Land at Stalham Staithe (Richardson's Boatyard)	This policy supports up to 10 residential moorings subject to criteria. The site is located adjacent to the Broadland SPA, The Broads SAC and Broadland Ramsar site. As such it has the potential to have an LSE and will be screened into the HRA process.	Screen In Category L

Chapter 55: Thorpe St. Andrew

Policy Name	Summary of Policy and Identification of LSEs	
PUBTSA1 – Cary's Meadow high-provide the provided and recreational use. It does not trigger new development or any change and is therefore unlikely		Screen Out Category F
PLIBTSA2 – Thorne Island		Screen Out Category F

Policy Name	Summary of Policy and Identification of LSEs	
PUBTSA3 – Griffin Lane – boatyards and industrial area	This policy supports environmental and landscape improvements in this area whilst protecting the existing dockyard and boatyard uses. It will not trigger any development or change and will therefore not have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBTSA4 – Bungalow Lane – mooring plots and boatyards	This policy permits extensions to existing buildings and replacement buildings subject to criteria. It will not trigger any development or change and will therefore not have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBTSA5 – River Green Open Space	This policy protects the area of River Green, allocated as open space, for its contribution to amenity, townscape and recreation. It will not trigger any development or change and will therefore not have an LSE and will be screened out of the HRA process.	Screen Out Category F

Chapter 56: Thurne

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBTHU1 – Tourism development at Hedera House, Thurne	This policy allocates Hedera House for tourism development and sets out the criteria for development proposals. Whilst it is noted that this allocation has received planning permission, given its incorporation in the Local Plan and the fact that it has not been built out, this policy and allocation have been screened into the HRA process for further consideration as it has the potential to have an LSE on a habitats site.	Screen In Category L

Chapter 57: Trowse and Whitlingham

Policy Name	Summary of Policy and Identification of LSEs	
PUBWHI1 — Whitlingham Country Park plus adjacent land	This policy supports development within the Country Park for sustainable recreation, leisure and visitor uses subject to criteria. It does however not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBWHI2 – Land at Whitlingham Lane	This policy supports the retention of the site as a boatyard. Proposals for a change of use are subject to criteria. This policy supports the appropriate reuse and enhancement of existing facilities at the former rowing club and boatyard at Whitlingham Lane. It does however not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F

Chapter 58: Non-Settlement Based Policies

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
PUBSSTRI – Trinity Broads	This policy protects the special nature, character, and tranquillity of the Trinity Broads. It will not trigger any development or change and will therefore not have an LSE and will be screened out of the HRA process.	
PUBSSUT – Upper Thurne	This policy protects the special nature, character, and tranquillity of the Upper Thurne. It will not trigger any development or change and will therefore not have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBSSPUBS – Pubs network	This policy identifies and protects public houses as key parts of a network of community, visitor, and boating facilities. It will not trigger any development or change and will therefore not have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBSSROADS – Main road network	This policy sets out requirements to protect the main road network. It will not trigger any development or change and will therefore not have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBSSTRACKS – Former rail trackways	This policy protects former railway track beds for their potential for walking, cycling, and/or horse-riding routes. It does however not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBSSSTATIONS – Railway stations / halts	This policy aims to protect use at several railway stations / halts as key parts of the local railway network. The Authority supports proposals subject to criteria. It will not trigger any development or change and will therefore not have an LSE and will be screened out of the HRA process.	Screen Out Category F
PUBSSSTAITHES - Staithes	This policy protects staithes from development, obstruction and encroachment. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBSSCOAST – The Coast	This policy conserves the Coastal area and its special nature, character and tranquillity for low-key quiet recreation and as a wild bird and seal refuge. Operational development will therefore not be permitted. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBSSMILLS – Drainage Mills	This policy supports proposals that maintain, repair and restore drainage mills and associated buildings subject to criteria It does however not allocate any development and therefore does not trigger any change or development directly. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F

Policy Name	Summary of Policy and Identification of LSEs	
PUBSSLGS – Local Green Space	This policy identifies and protects areas as Local Green Space. The policy will not trigger any development or change itself. As such this policy is unlikely to have an LSE on any habitats site and will be screened out of the HRA process.	Screen Out Category F
PUBSSA47 – Road schemes on the Acle Straight (A47T)	This policy commits the Authority to working proactively with promoters and designers of schemes/proposals for changes to the Acle Straight. Road scheme proposals are subject to criteria. This policy does not allocate any development and therefore will be screened out of the HRA process.	Screen Out Category F

Chapter 59: Implementation, monitoring, and review

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
n/a	Administrative text	Screen Out Administrative text

Chapter 60: Next steps

Policy Name	Summary of Policy and Identification of LSEs	Screening Conclusion
n/a	Administrative text	Screen Out Administrative text

Appendix D: Baseline air quality information (Source: APIS)

APIS¹ provides current levels of nitrogen deposition and acidification at the Broads SAC and Broadland SPA alongside critical loads for each qualifying feature, these are summarised below.

Qualifying feature	Critical load class	Critical load (N) kg/ha/yr	Current levels of deposition Kg/ha/yr
Transition mires and quaking bogs	Valley mires, poor fens and transition mires	5-15	Maximum: 17.532 Minimum: 13.646 Average: 15.309
Fen orchid (<i>Liparis</i> <i>loeselii)</i>	Moist to wet dune slacks	5-15	Maximum: 17.532 Minimum: 13.646 Average: 15.309
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	Moist and wet oligotrophic grasslands: <i>Molinia caerulea</i> meadows	15-25	Maximum: 17.532 Minimum: 13.646 Average: 15.309
Calcareous fens with Cladium mariscus and species of the (<i>Caricion</i> <i>davallianae</i>)	Rich fens	15-25	Maximum: 17.532 Minimum: 13.646 Average: 15.309
Alkaline fens	Rich fens	15-25	Maximum: 17.532 Minimum: 13.646 Average: 15.309
Desmoulin's whorl snail <i>(Vertigo moulinsiana)</i>	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum: 13.237 Minimum: 8.364 Average: 9.786
Otter (Lutra lutra)	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum: 13.237 Minimum: 8.364 Average: 9.786
Ramshorn snail (Anisus vorticulus)	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum: 13.237 Minimum: 8.364 Average: 9.786

¹ Air Pollution Information System (APIS). Available at: <u>http://www.apis.ac.uk/srcl</u> [Date Accessed: 24/01/24].

Qualifying feature	Critical load class	Critical load (N) kg/ha/yr	Current levels of deposition Kg/ha/yr
Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara spp</i>	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum: 13.237 Minimum: 8.364 Average: 9.786
Northern crested newt (<i>Triturus Cristatus)</i>	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum: 13.237 Minimum: 8.364 Average: 9.786
Alluvial forests with <i>Alnus</i> glutinosa and <i>Fraxinus</i> excelsior (<i>Alno-Padion,</i> <i>Alnion incanae, Salicion</i> albae)	Designated feature / feature habitat not sensitive to eutrophication	No critical loads available for this feature	Maximum: 33.138 Minimum: 25.867 Average: 29.073
Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum: 13.237 Minimum: 8.364 Average: 9.786

Table C.2: Acidity critical load information for the Broads SAC (only qualifying features sensitive to acidity are included)

Qualifying feature	Critical load class	Critical load keq/ha/yr	Current levels of deposition Nitrogen / Sulphur (keq/ha/yr):
Transition mires and quaking bogs	Bogs	MaxCLminN:0.32 MaxCLmaxN:0.52 MaxCLmaxS:0.20 MinCLmaxN:0.32 MinCLmaxN:0.49 MinCLmaxS:0.17	Maximum: 1.289 Minimum: 0.981 Average: 1.121
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	Acid grassland	No critical loads available for this feature	Maximum: 1.289 Minimum: 0.981 Average: 1.121
Fen orchid <i>(Liparis loeselii)</i>	Calcareous grassland (using base cation)	MaxCLminN:1.07 MaxCLmaxN:5.07 MaxCLmaxS:4.00 MinCLmaxN:0.85 MinCLmaxN:4.85 MinCLmaxS:4.00	Maximum: 1.289 Minimum: 0.981 Average: 1.121
Desmoulin`s whorl snail <i>(Vertigo moulinsiana)</i>	Freshwater	No critical loads available for this feature	Maximum: 0.968 Minimum: 0.615 Average: 0.732
Otter <i>(Lutra lutra)</i>	Freshwater	No critical loads available for this feature	Maximum: 0.968 Minimum: 0.615 Average: 0.732
Ramshorn snail (<i>Anisus</i> <i>vorticulus)</i>	Freshwater	No critical loads available for this feature	Maximum: 0.968 Minimum: 0.615 Average: 0.732

Qualifying feature	Nitrogen critical load class	Critical load (N) kg/ha/yr	Current levels of deposition Kg/ha/yr
Northern Shoveler <i>(Anas clypeata)</i>	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum: 13.237 Minimum: 8.376 Average: 9.871
Eurasian wigeon (<i>Anas</i> <i>Penelope)</i>	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum: 13.237 Minimum: 8.376 Average: 9.871
Gadwell <i>(Anas strepera)</i>	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum: 13.237 Minimum: 8.376 Average: 9.871
Eurasian bittern <i>(Botaurus stellaris)</i>	Rich Fens	15-25	Maximum: 13.237 Minimum: 8.376 Average: 9.871
Western marsh harrier (<i>Circus aeruginosus)</i>	Rich Fens	15-25	Maximum: 13.237 Minimum: 8.376 Average: 9.871
Hen harrier (<i>Circus cyaneus)</i>	Northern wet heath: Callunadominated wet heath (upland) Atlantic upper-mid & mid-low salt marshes Rich Fens	5-15 10-20 15-25	Maximum: 13.237 Minimum: 8.376 Average: 9.871
Tundra swan (<i>Cygnus columbianus)</i>	Species broad habitat not sensitive to eutrophication	No critical loads available for this feature	Maximum: 13.237 Minimum: 8.376 Average: 9.871
Whooper swan (<i>Cygnus cygnus)</i>	Species broad habitat not sensitive to eutrophication	No critical loads available for this feature	Maximum: 13.237 Minimum: 8.376 Average: 9.871

Table C.3: Nitrogen critical load information for Broadlands SPA qualifying features broad habitat types²

² Table only includes broad habitats which are sensitive to nitrogen.

Qualifying feature	Nitrogen critical load class	Critical load (N) kg/ha/yr	Current levels of deposition Kg/ha/yr
Ruff <i>(Philomachus pugnax)</i>	Atlantic upper – mid & mid – low salt marshes, Low and medium altitude hay meadows	10-20	Maximum: 13.237 Minimum: 8.376 Average: 9.871

Table C.4: Acid deposition information for Broadlands SPA qualifying features broad habitat types³

Broad habitat types for SPA qualifying features	Qualifying features	Acidity critical load keq/ha/yr	Current levels of deposition Nitrogen / Sulphur (keq/ha/yr):
Northern Shoveler <i>(Anas clypeata)</i>	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum: 0.93 Minimum: 0.61 Average: 0.72
Eurasian wigeon <i>(Anas Penelope)</i>	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum: 0.93 Minimum: 0.61 Average: 0.72
Gadwell <i>(Anas</i> <i>strepera)</i>	No comparable habitat with established critical load estimate available	No critical loads available for this feature	Maximum:0.93 Minimum: 0.61 Average: 0.72
Whooper swan (<i>Cygnus</i> <i>cygnus)</i>	Species Broad habitat not sensitive to eutrophication	MaxCLminN:1.03 MaxCLmaxN:5.16 MaxCLmaxS:4.13	Maximum: 0.93 Minimum: 0.61 Average: 0.72

³ Table only includes broad habitats which are sensitive to acidity.

Broad habitat types for SPA qualifying features	Qualifying features	Acidity critical load keq/ha/yr	Current levels of deposition Nitrogen / Sulphur (keq/ha/yr):
Tundra swan (<i>Cygnus columbianus)</i>	Species Broad habitat not sensitive to eutrophication	No critical loads available for this feature	Maximum: 0.968 Minimum: 0.615 Average: 0.738
Ruff <i>(Philomachus pugnax)</i>	Atlantic upper – mid & mid – low salt marshes. Low and medium altitude hay meadows	MaxCLminN:1.07 MaxCLmaxN:5.07 MaxCLmaxS:4.00 MinCLmaxN:0.85 MinCLmaxN:4.85 MinCLmaxS:4.00	Maximum: 0.968 Minimum: 0.615 Average: 0.738



Lepus Consulting Eagle Tower Montpellier Drive Cheltenham Gloucestershire GL50 1TA

t:	01242 525222
W:	www.lepusconsulting.com
e:	enquiries@lepusconsulting.com

Habitats Regulations Assessments

Sustainability Appraisals

Strategic Environmental Assessments

Landscape Character Assessments

Landscape and Visual Impact Assessments

Green Belt Reviews

Expert Witness

Habitat and Ecology Surveys

Biodiversity Net Gain



© Lepus Consulting Ltd

Eagle Tower

Montpellier Drive

Cheltenham

GL50 1TA

T: 01242 525222

E: enquiries@lepusconsulting.com

www.lepusconsulting.com

CHELTENHAM