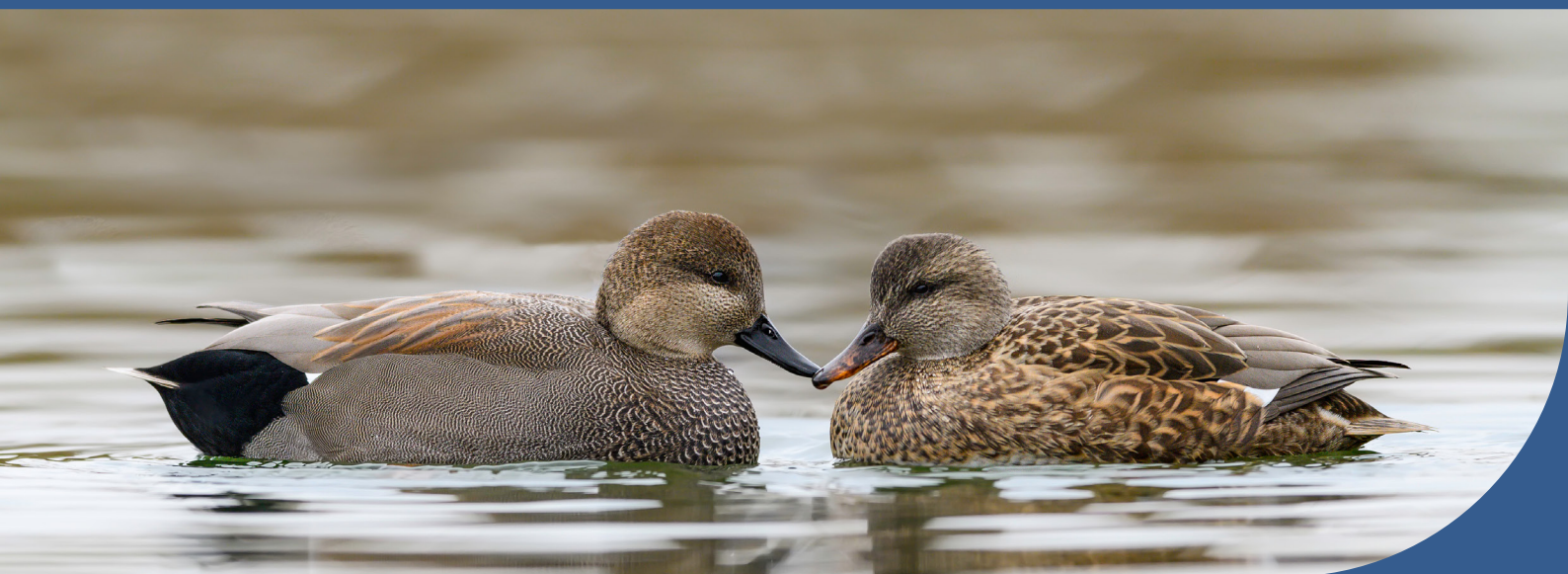


Habitats Regulations Assessment of the South Norfolk Village Clusters Housing Site Allocations Plan

Habitats Regulations Assessment Report
Publication (Regulation 19)

December 2022



LEPUS CONSULTING
LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

Habitats Regulations Assessment of the South Norfolk Village Cluster Housing Allocations Plan

Publication (Regulation 19) HRA Report

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Abbreviations

AA	Appropriate Assessment
AL	Abstraction Licencing
AWS	Anglian Water Services
CJEU	Court of Justice of the European Union
CIEEM	Chartered Institute of Ecology and Environmental Management
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
DTA	David Tyldesley and Associates
EA	Environment Agency
GI	Green Infrastructure
GIRAMS	Green Infrastructure Recreational Avoidance Mitigation Strategy
GIS	Geographic Information System
GNLP	Greater Norwich Local Plan
HRA	Habitats Regulations Assessment
IAQM	Institute of Air Quality Management
IRZ	Impact Risk Zone
IUCN	International Union for Conservation of Nature
JNCC	Joint Nature Conservation Committee
LPA	Local Planning Authority
LSE	Likely Significant Effect
NE	Natural England
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NWL	Norwich Western Link
PRoW	Public Right of Way
RAM	Resource Assessment and Management
RAMS	Recreational Avoidance Mitigation Strategy
RBMP	River Basin Management Plan
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SANG	Suitable Area of Natural Greenspace
SEA	Strategic Environmental Assessment
SIP	Site Improvement Plan
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest

SuDS	Sustainable Urban Drainage
WCS	Water Cycle Study
WeBS	Wetland Bird Survey
WFD	Water Framework Directive
WRMP	Water Resources Management Plan
VCHAP	Village Clusters Housing Allocations Plan

1 Introduction

1.1 Background

1.1.1 South Norfolk Council (hereafter referred to as the Council) is working with Broadland Council and Norwich City Council to produce the Greater Norwich Local Plan (GNLP)¹. Amongst other things, the GNLP identifies how many homes need to be built across the three authorities up to 2038.

1.1.2 As part of this process the Council is producing a local plan document which will identify land for a minimum of 1,200 new homes in appropriate villages across South Norfolk up to 2038. This is known as the South Norfolk Village Cluster Housing Allocations Plan (VCHAP) - see Figure 1.1 for location of plan area.

1.1.3 Lepus Consulting has been appointed by the Council to undertake a Habitats Regulations Assessment (HRA) alongside the preparation of the VCHAP. This report summarises the HRA which has been undertaken alongside the Regulation 19 Publication Version of the VCHAP².

1.1.4 This report is structured as follows:

- Chapter 1: Introduction;
- Chapter 2: The South Norfolk Village Cluster Housing Allocations Plan;
- Chapter 3: The HRA Process;
- Chapter 4: Methodology;
- Chapter 5: Habitats Sites;
- Chapter 6: Impact Pathways;
- Chapter 7: VCHAP Screening (HRA Stage 1);
- Chapter 8: Appropriate Assessment – water impacts;
- Chapter 9: Appropriate Assessment – recreational impacts; and
- Chapter 10: Conclusions.

¹ <https://www.gnlp.org.uk/>

² South Norfolk Local Plan. South Norfolk Village Clusters Housing Allocation Plan. Draft December 2022.

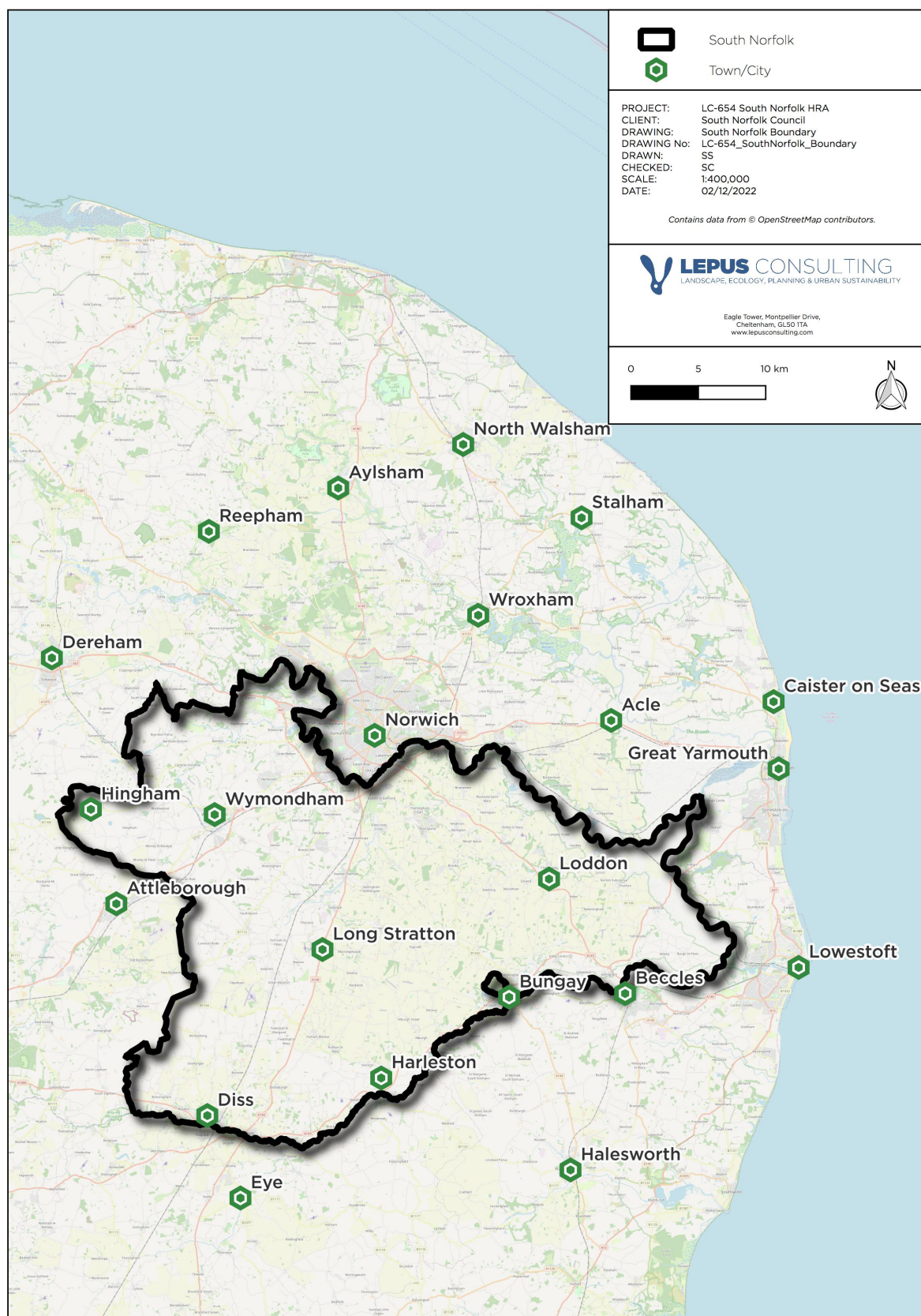


Figure 1.1: South Norfolk Village Clusters Housing Allocations Plan (VCHAP) area location map

1.2 Purpose of this report

- 1.2.1 This HRA has been prepared in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended)³, known as the Habitats Regulations. When preparing development plan documents, councils are required by law to carry out an HRA. The requirement for authorities to comply with the Habitats Regulations when preparing a local plan is also noted in the Government's online planning practice guidance⁴.
- 1.2.2 The purpose of this report is to inform the HRA of the VCHAP using best available information. South Norfolk Council, 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 Regulations 63(3) and 105(2) of the Habitats Regulations.

³ The Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London. Available at: <https://www.legislation.gov.uk/uksi/2017/1012/contents> [Date Accessed: 15/11/22] as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: <https://www.legislation.gov.uk/ukdsi/2019/9780111176573> [Date Accessed: 15/11/22]

⁴ Ministry of Housing, Communities and Local Government (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment

2 The South Norfolk Village Cluster Housing Allocations Plan

2.1 Greater Norwich Local Plan

- 2.1.1 The GNLP identifies how many homes need to be built across the three authorities of South Norfolk Council, Broadland Council and Norwich City Council between now and 2038, provides up to date policy to guide development and meet Government requirements set out in the National Planning Policy Framework (NPPF)⁵. The GNLP was submitted to the Secretary of State for independent examination on 30th July 2022.
- 2.1.2 Policies 7.1 to 7.4 of the GNLP provide details regarding the distribution of growth across Greater Norwich, along with location specific strategic policies for the different growth areas. Policy 7.4 sets out permitted and allocated housing growth in the village clusters. It notes that a separate South Norfolk Village Clusters Housing Allocations Local Plan will be produced to include sites for a minimum of 1,200 homes in addition to the 1,392 already committed in the village clusters. GNLP Policies 1 and 7.4 also support windfall development for affordable housing in the village clusters in both Broadland and South Norfolk, with some market housing permitted where it supports viability, including self/custom-build. The policies allow for infill and small extensions in those parts of village clusters which have a settlement boundary.

2.2 South Norfolk Village Cluster Housing Allocations Plan

- 2.2.1 The Council has prepared a new local plan document that identifies land for a minimum of 1,200 new homes in appropriate villages across South Norfolk up to 2038. This is known as the South Norfolk Village Cluster Housing Allocations Plan (VCHAP).
- 2.2.2 The main aim of the VCHAP is to allocate a series of smaller sites, of between 12 to 50 homes, across the 48 Village Clusters in South Norfolk, to accommodate at least 1,200 new homes in total. The Plan also defines the Settlement Limits for the villages within these clusters, making provision for further, smaller sites of up to 11 dwellings.
- 2.2.3 The VCHAP was published for public consultation between 7th June and 2nd August 2021, under Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012⁶. This provided members of the public and stakeholders with an opportunity to provide views on the sites that had been promoted, the assessments undertaken, the proposed changes to settlement limits and suggestions on policy wording.
- 2.2.4 The VCHAP was updated in light of the representations received and further evidence gathered. The current version of the VCHAP and assessed in this HRA is the publication (Regulation 19) version of the plan⁷.

⁵ <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

⁶ <https://www.legislation.gov.uk/uksi/2012/767/contents/made>

⁷ South Norfolk Local Plan. South Norfolk Village Clusters Housing Allocation Plan. Draft December 2022.

2.2.5 Once adopted, the GNLP and VCHAP will supersede the existing Joint Core Strategy for Broadland, Norwich and South Norfolk (2011 and subsequently readopted 2014)⁸ and the South Norfolk Local Plan Site Specific Allocations and Policies Document (2015)⁹. However, the 2015 Development Management Policies Document¹⁰ will remain in place.

2.2.6 Non-housing sites in the South Norfolk Village Clusters, such as employment allocations or stand-alone sites for specific uses, such as sports and recreation facilities, are dealt with through the GNLP.

2.3 Village clusters

2.3.1 There are 48 Village Clusters in South Norfolk (see Table 2.1 and Figure 2.1). Some contain a single parish, whilst others contain multiple parishes. In line with the approach set out in the GNLP, each one is centred around a local Primary School. The allocations within the Village Clusters are split into two categories

- **New Allocations:** These are sites proposed for between 12 to 50 dwellings, which will contribute towards the 1,200 dwelling requirement in the GNLP; and
- **Settlement Limit Extensions:** for sites smaller than 12 dwellings, these will not contribute towards the 1,200 dwelling requirement, but will help ensure that the 'windfall allowance' in the GNLP is achieved.

2.3.2 The threshold of 12 dwellings is consistent with the GNLP and reflects the fact that sites smaller than this are less likely to achieve the required element of affordable housing.

⁸ <https://www.gnlp.org.uk/node/30>

⁹ <https://www.south-norfolk.gov.uk/residents/planning/planning-policy/adopted-south-norfolk-local-plan/site-specific-allocations-and>

¹⁰ <https://www.south-norfolk.gov.uk/residents/planning/planning-policy/adopted-south-norfolk-local-plan/development-management-policies>

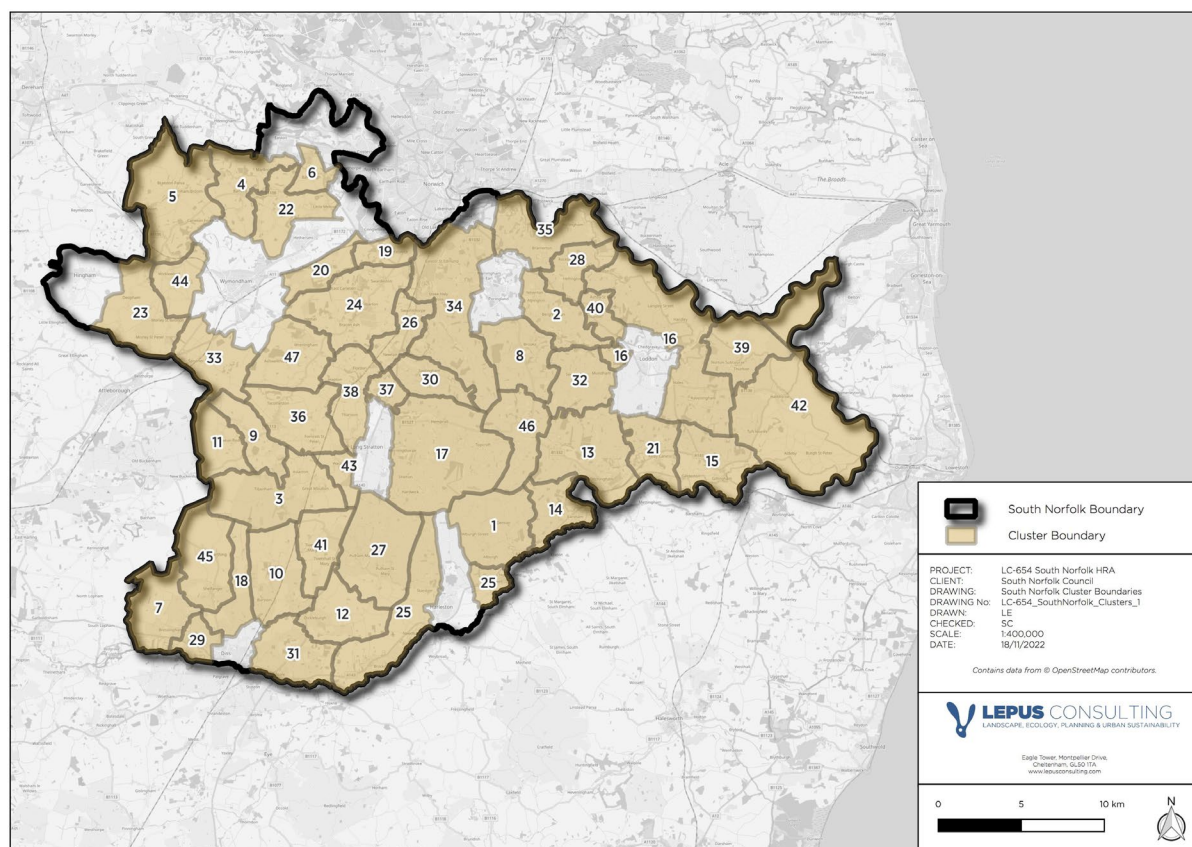


Figure 2.1: VCHAP Village Clusters (Cluster codes provided in Table 2.1)

Table 2.1: Village Clusters

Cluster Number	Village Cluster Name	Cluster Number	Village Cluster Name
1	Alburgh and Denton	25	Mulbarton, Bracon Ash, Swardeston and East Carleton
2	Alpington, Yelverton and Bergh Apton	26	Needham, Brockdish, Starston and Wortwell
3	Aslacton, Great Moulton and Tibenham	27	Newton Flotman and Swainsthorpe
4	Barford, Marlingford and Colton and Wrampingham	28	Pulham Market and Pulham St Mary
5	Barnham Broom, Kimberley, Carleton Forehare, Runhall and Brandon Parva	29	Rockland St Mary, Hellington and Holverston
6	Bawburgh	30	Roydon
7	Bressingham and Fersfield	31	Saxlingham Nethergate
8	Brooke, Kirstead and Howe	32	Scole
9	Bunwell	33	Seething and Mundham
10	Burston, Shimpling and Gissing	34	Spooner Row and Sutton
11	Carleton Rode	35	Stoke Holy Cross, Shotesham and Caistor St Edmund
12	Dickleburgh and Rushall	36	Surlingham, Bramerton and Kirby Bedon
13	Ditchingham, Broome, Hedenham and Thwaite	37	Tacolneston and Fornsett End
14	Earsham	38	Tasburgh

Cluster Number	Village Cluster Name	Cluster Number	Village Cluster Name
15	Fornsett St Mary and Fornsett St Peter	39	Tharston, Hapton and Flordon
16	Gillingham, Geldeston and Stockton	40	Thurlton and Norton Subcourse
17	Hales, Heckingham, Langley Street, Carleton St Peter, Claxton, Raveningham	41	Thurton and Ashby St Mary
18	Hempnall, Topcroft Street, Morningthorpe, Fritton, Shelton and Hardwick	42	Tivetshall St Mary and Tivetshall St Margaret
19	Heywood	43	Toft Monks, Aldeby, Haddiscoe, Wheatacre and Burgh St Peter
20	Keswick and Intwood	44	Wacton
21	Ketteringham	45	Wicklewood
22	Kirby Cane and Ellingham	46	Winfarthing and Shelfanger
23	Little Melton and Great Melton	47	Woodton and Bedingham
24	Morley and Deopham	48	Wreningham, Ashwellthorpe and Fundenhall

2.3.3 The Dickleburgh and Diss and District (which covers Diss, Burston, Roydon and Scole) Neighbourhood Plans are currently being prepared by the Dickleburgh and Diss and District Neighbourhood Plan Steering Groups. These are due to go to examination in January 2023 and both will make their own allocations for development based upon housing figures supplied by the Council and have been subject to their own HRA. The VCHAP sets the requirement for the other villages within the VCHAP plan area.

2.3.4 A slightly different approach has therefore been taken to HRA assessment at the village clusters covered by these Neighbourhood Plans. No preferred or shortlisted locations have been selected for these clusters. Scole has been identified for a 50 dwelling allocation, plus an uplift of 10 on the 2015 allocation. A total of 25 dwellings have been identified for Burston and Roydon in the Dickleburgh and Diss and District Neighbourhood Plan and 25 in Dickleburgh Neighbourhood Plan. The Neighbourhood Plan process will then be tasked with selecting and allocating preferred sites to deliver this growth requirement. This will be supported by a Strategic Environmental Assessment (SEA) and an HRA.

2.3.5 The VCHAP is comprised of a number of components as shown in Table 2.2.

Table 2.2: VCHAP Structure

Component	Content
Introduction and Background	This chapter sets the context of the plan.
The Plan Objectives	This chapter sets out the plan's objectives.: <ul style="list-style-type: none"> • SNVC Objective 1 - Meet housing needs • SNVC Objective 2 - Protecting village communities and support rural services and facilities • SNVC Objective 3 - Protect the character of villages and their settings
The Assessment of Sites	This section outlines the process the Council has taken towards the assessment of sites.

Component	Content
Evidence Base	This chapter sets out the evidence base which has been drawn upon for site selection.
Monitoring	This section sets out the arrangements for monitoring of Local Plan documents.
Village Cluster Chapters	<p>This chapter sets out relevant information for each village cluster including information on:</p> <ul style="list-style-type: none">• Form and character;• Settlement limit; and• Site allocations (where made).
Monitoring Framework	This chapter provides a framework for monitoring of the VCHAP.

3 The HRA process

3.1 Overview

- 3.1.1 The HRA process assesses the potential effects of a plan or project on the conservation objectives of Habitats sites designated under the Habitats¹¹ and Birds¹² Directives. These sites form a system of internationally important sites throughout Europe known collectively as the 'Natura 2000 Network'. In line with the Habitats Regulations, UK sites which were part of the Natura 2000 Network before leaving the EU, have become part of the National Site Network.
- 3.1.2 The Habitats Regulations¹³ 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.
- 3.1.3 In addition, policy in England and Wales notes that the following sites should also be given the same level of protection as a European site¹⁴. European sites together with sites set out in national policy (listed below) are referred to in England and Wales as a Habitats site¹⁵.
- A potential SPA (pSPA);
 - A possible / proposed SAC (pSAC);
 - Listed and proposed Ramsar Sites (Wetland of International Importance); and
 - In England, sites identified or required as compensation measures for adverse effects on statutory Habitats sites, pSPA, pSAC and listed or proposed Ramsar sites.

¹¹ Official Journal of the European Communities (1992). Council Directive 92 /43 /EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

¹² Official Journal of the European Communities (2009). Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.

¹³ Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London. Available at: <https://www.legislation.gov.uk/uksi/2017/1012/contents> [Date Accessed: 15/11/22] as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: <https://www.legislation.gov.uk/ukdsi/2019/9780111176573> [Date Accessed: 15/11/22]

¹⁴ Ministry of Housing, Communities & Local Government (2021). National Planning Policy Framework. Para 181. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf [Date Accessed: 15/11/22]

¹⁵ 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: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf [Date Accessed: 15/11/22]

- 3.1.4 Regulation 63 of the Habitats Regulations notes a competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project, must make an appropriate assessment of the implications of the plan or project for that site in view of its site conservation objectives. These tests are referred to collectively as a Habitats Regulations Assessment (HRA).
- 3.1.5 HRA applies to plans or projects which are likely to have a significant effect on a Habitats site (either alone or in combination with other plans or projects), and / or not directly connected with or necessary to the management of that site.
- 3.1.6 There is no set methodology or specification for carrying out and recording the outcomes of the assessment process. The Habitats Regulations Assessment Handbook, produced by David Tyldesley Associates (referred to hereafter as the 'DTA Handbook'), provides an industry recognised good practice approach to HRA. The DTA Handbook, and in particular 'Practical Guidance for the Assessment of Plans under the Regulations'¹⁶, which forms part F, has therefore been used to prepare this report, alongside reference to Government Guidance on Appropriate Assessment¹⁷.
- 3.1.7 A step-by-step guide to the methodology adopted in this assessment, as outlined in the DTA Handbook, is illustrated in Figure 3.1. In summary, the four key stages of the HRA process are as follows:
- Stage 1. Screening: Screening to determine if the VCHAP would be likely to have a significant effect on a Habitats site. This stage comprises the identification of potential effects associated with the VCHAP on Habitats sites and an assessment of the likely significance of these effects.
 - Stage 2. Appropriate Assessment and the 'Integrity Test': Assessment to ascertain whether or not the VCHAP would have a significant adverse effect on the integrity of any Habitats site to be made by the Competent Authority (in this instance the South Norfolk Council). This stage comprises an impact assessment and evaluation in view of a Habitats site's conservation objectives. Where adverse impacts on site integrity are identified, consideration is given to alternative options and mitigation measures which are tested.
 - Stage 3. Alternative solutions: Deciding whether there are alternative solutions which would avoid or have a lesser effect on a Habitats site.
 - Stage 4. Imperative reasons of overriding public interest and compensatory measures: Considering imperative reasons of overriding public interest and securing compensatory measures.

¹⁶ Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (September) (2013) edition UK: DTA Publications Limited. Available at: www.dtapublications.co.uk

¹⁷ Government Guidance on Appropriate Assessment. July 2019. Guidance on the use of Habitats Regulations Assessment. Available at: <https://www.gov.uk/guidance/appropriate-assessment>

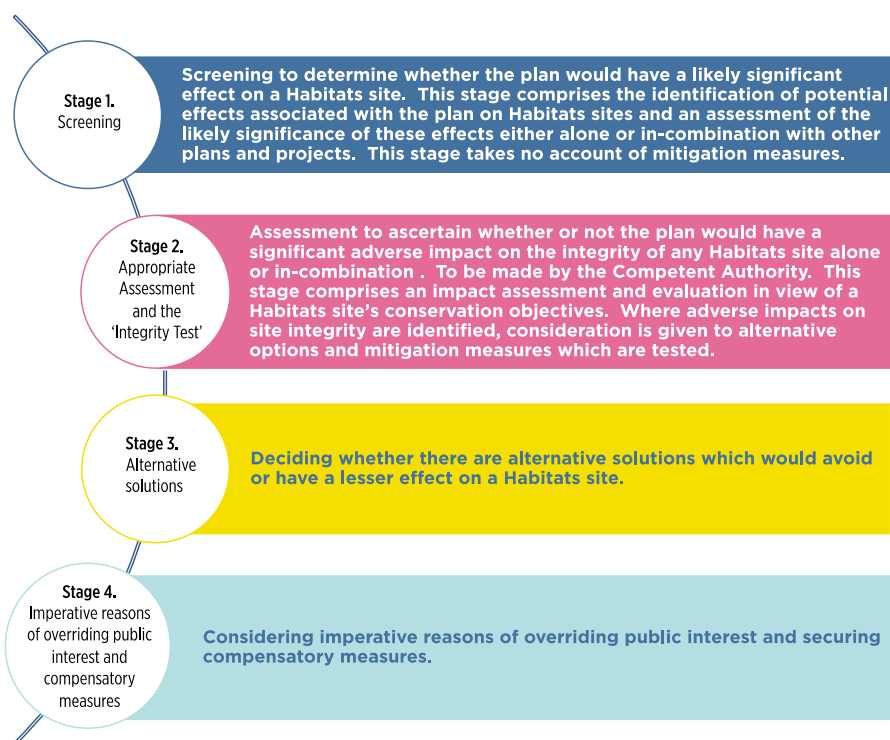


Figure 3.1: Stages in the Habitats Regulations Assessment process¹⁸

¹⁸ Adapted from Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (October) (2018) edition UK: DTA Publications Limited. Available at: www.dtapublications.co.uk

3.2 Previous HRA work

- 3.2.1 Detailed HRA work has been undertaken alongside the production of the GNLP. Whilst the GNLP, and its supporting HRA work, does not take into consideration the exact location of development set out in the VCHAP for South Norfolk, it does take into consideration the overall quantum of growth proposed in South Norfolk village clusters (including existing commitments, new allocations including uplift and a windfall allowance). The findings from the GNLP HRA are therefore relevant to the VCHAP HRA. Consideration has been given to comments made by Natural England upon the GNLP HRA work. In addition, a HRA was undertaken alongside preparation of the Regulation 18 version of the VCHAP. The outputs of this body of HRA work have informed the Regulation 19 stage of HRA. Table 3.1 provides a summary of the HRA work undertaken to date in support of both the GNLP and VCHAP.

Table 3.1: Summary of HRA work undertaken to date to support the GNLP and VCHAP

HRA Report	Summary of findings
<p>Habitats Regulations Assessment of Greater Norwich Local Plan Issues and Options stage for Greater Norwich Development Partnership</p> <p>Author: The Landscape Partnership</p> <p>December 2017</p>	<p>This HRA provided an interim assessment at the Regulation 18 Issues and Options stage. It considered alternative housing numbers and options for their distribution.</p> <p>The HRA provided an assessment of impacts upon the following Habitats sites:</p> <ul style="list-style-type: none"> - River Wensum SAC; - Norfolk Valley Fens SAC; - The Broads SAC/ Broadland SPA, Ramsar; - Breydon Water SPA/Ramsar/SPA (Marine); - Great Yarmouth North Denes SPA; - Winterton – Horsey Dunes SAC; - Paston Great Barn SAC; - Overstrand Cliffs SAC; - Waveney & Little Ouse Valley Fens SAC; - Redgrave and South Lopham Fens Ramsar; - Breckland SPA/SAC; - Benacre to Easton Bavents Lagoons SAC/Benacre to Easton Bavents SPA; - Dew's Ponds SAC; - The Wash and North Norfolk Coast SAC (inshore); - North Norfolk Coast SPA (marine)/SAC (inshore)/Ramsar; - Southern North Sea cSAC (offshore and inshore); - Outer Thames Estuary SPA (marine)/Outer Thames Estuary Extension pSAC (marine); and - Haisborough, Hammond and Winterton SCI. <p>The HRA applied a number of zones of influence for each potential impact as follows:</p> <ul style="list-style-type: none"> - Recreation – by foot 1km - 8km; - Recreation to special sites e.g. coastal reserves – 8km - 20km; - Water resources – 20km; - Pollution impacts to watercourses – 8km; - Air quality – not investigated but road corridors used as zone of influence; - Urbanisation effects – 1km; and - Direct impacts – 250m.

HRA Report	Summary of findings
	<p>The HRA found that the distributional alternatives for housing are likely to have a significant effect on Habitats sites and so further assessment is necessary as the plan develops.</p> <p>Potential significant effects of the GNLP in combination with other plans and projects were noted to include the following:</p> <ul style="list-style-type: none"> - Impacts resulting from in-combination effects associated with water abstraction on internationally designated wetland sites; - Water quality impacts resulting from in-combination effects associated with wastewater discharges on internationally designated wetland sites; - Air quality impacts associated with increased traffic generation resulting from development on internationally designated sites that support vegetation sensitive to NOx, SO2 or total Nitrogen; and - Increased disturbance and visitor pressure resulting from in-combination effects on the wetland, grassland/heathland and coastal sites. <p>Assessment of the distributional alternatives for housing identified that allocations to the north-west, west and south-west of Norwich were situated to reduce the likely impact of regular visitors to The Broads / Broadland Habitats sites. The options 'transport corridors' and 'Cambridge – Norwich tech corridor' were noted to be strong options in terms of avoiding impacts to Habitats sites. Allocations to the north-east of Norwich were marginally outside zones of influence of the popular coastal Habitats sites although as with all options some additional occasional visits to the popular coastal Habitats sites were predicted. Options for dispersal, or dispersal plus a new settlement were harder to assess as the HRA stated that the housing could be almost anywhere.</p> <p>The HRA set out a number of mitigation recommendations for incorporation into the GNLP as it develops. These included development of new recreational space and preparation of an updated Water Cycle Study (WCS).</p>
<p>Habitats Regulations Assessment of Greater Norwich Regulation 18 Draft Plan for Greater Norwich Development Partnership</p> <p>Author: The Landscape Partnership</p> <p>December 2019</p>	<p>An HRA was undertaken of the Consultation Draft stage v8.1 of the emerging Greater Norwich Local Plan.</p> <p>Impacts considered in the HRA included:</p> <ul style="list-style-type: none"> - Water cycles (use and disposal); - Traffic related air pollution; - Water pollution or enrichment; and - Increased visitors to Habitats sites. <p>The HRA focused on the same Habitats sites as identified in the Issues and Options HRA (above).</p> <p>The HRA concluded that the GNLP would have no adverse effect upon the integrity of any Habitats site acting alone, subject to the following outstanding matters:</p> <ul style="list-style-type: none"> • Mitigation of recreational impact upon Habitats sites comprising a) a tariff based payment taken from residential, and other relevant accommodation e.g. tourist accommodation, that will be used to fund a mixture of mitigation measures, most likely of soft and hard mitigation measures at the Habitats sites; b) the provision of suitable alternative natural green space (SANGs), which would be large enough to meet a range of recreational needs, c) implementation of a wider programme of Green Infrastructure Improvements in accordance with current and emerging project plans, so that residents have an alternative to Habitats sites for regular activities such as dog walking. Reference is made to

HRA Report	Summary of findings
	<p>the emerging Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy (GIRAMS) which, at the time of the HRA, was in preparation by the Norfolk Authorities.</p> <ul style="list-style-type: none"> • Satisfactory completion of a Water Cycle Study which demonstrates no adverse impact on Habitats sites. • Update to policy wording to read that 'Habitats Regulations Assessments will be required for small scale tourism accommodation within 1km, and for larger scale tourism accommodation within 10km, of a Habitats site. Habitats Regulations Assessment will also be required for tourism, leisure, cultural and environmental activities which would utilise Habitats sites'. <p>In terms of in-combination impacts, the HRA recommended that road schemes, not allocated or promoted by the GNLP but mentioned in the plan, receive stronger recognition from the plan with respect to protection of Habitats sites.</p> <p>The overall conclusion was that subject to satisfactory resolution of the outstanding matters there would be no adverse effect upon the integrity of any Habitats site.</p>
<p>Habitats Regulations Assessment of Greater Norwich Regulation 19 Draft Plan for Greater Norwich Development Partnership</p> <p>Author: The Landscape Partnership</p> <p>December 2020</p>	<p>An HRA was undertaken on the Draft Submission Reg 19 stage v1.6 of the emerging Greater Norwich Local Plan.</p> <p>The HRA provided an assessment of impacts upon the same Habitats sites as considered in 2017 and 2019 (above).</p> <p>The following likely significant effects were identified:</p> <ul style="list-style-type: none"> • Increased recreational pressure. • Increased pressure on water resources. • Water pollution impacts. • Air pollution impacts. • Increased urbanisation of the countryside. <p>The HRA concluded that there would be no adverse effect upon the integrity of any Habitats site acting alone, subject to the following outstanding matters:</p> <ul style="list-style-type: none"> • Adoption of the Green Infrastructure and Recreational Impact Avoidance Mitigation Strategy (GIRAMS) to achieve mitigation for in-combination recreational effects. • The provision of suitable green space for developments over 50 homes. • Resolution of issues with Water Recycling Centres. • Clarification of policy with regard to tourism accommodation and development which would utilise a Habitats site. <p>It notes that in-combination effects would be taken into consideration through the adoption of the GIRAMS scheme.</p> <p>In summary it concludes that, subject to satisfactory resolution of the outstanding matters listed above, there would be no adverse effect upon the integrity of any Habitats site alone or in-combination.</p>
<p>GNLP response to Regulation 19 Habitats Regulations Assessment</p> <p>Author: GNLP</p>	<p>A note was prepared by the GNLP to provide responses to recommendations made in the Regulation 19 HRA (2020, above).</p>

HRA Report	Summary of findings
(December 2020)	<p>This note confirmed the Water Cycle Study (WCS) was close to completion and shows sufficient water capacity for growth in the GNLP.</p> <p>Text has been included in policy wording around the Norwich Western Link and requirements in terms of ensuring no adverse impacts on Habitats sites.</p> <p>Text has been included in policy wording in relation to new tourism development and requirements in terms of ensuring no adverse impacts on Habitats sites.</p> <p>The note confirms that the contingency site has been included in the WCS.</p>
<p>Habitats Regulations Assessment of the South Norfolk Village Housing Clusters Allocations Plan Regulation 18 HRA Report</p> <p>Author: Lepus</p> <p>May 2021</p>	<p>The Regulation 18 HRA included a screening assessment which concluded the VCHAP would be screened in for Stage 2 Appropriate Assessment because, taking no account of mitigation measures that the plan may incorporate, there was potential for likely significant effects on Habitats sites. It identified the Habitats sites for inclusion in the next stage of the HRA, methods for AA and set out some preliminary policy recommendations.</p>

3.3 Natural England advice

- 3.3.1 Natural England has been consulted upon the HRA work undertaken in support of the GNLP. The output of this consultation has been taken into consideration in the preparation of the VCHAP HRA and is summarised in Table 3.2.

Table 3.2: Review of Natural England HRA Report related representations

Organisation	Summary of representation
Natural England 21 March 2018	<p>Natural England note the requirement of the GNLP to provide a range of avoidance and mitigation measures to address recreation impacts. These include the provision of new well-designed GI either on-site and/or off-site, with suitable and accessible green space for recreational activities, including dog walking, together with good connectivity to the surrounding PROW network, and costs towards the mitigation of impacts on designated sites.</p> <p>Natural England state that “residential and commercial development, and waste water discharges affecting water quality. Water-dependent designated sites, including the River Wensum, those in The Broads, the Norfolk Valley Fens and the Waveney Valley Fens, are affected by these issues which can arise from a single development or in combination with other developments. A detailed water cycle study will need to be undertaken to determine where allocations should be located and what measures will be required to address water quantity and quality issues identified, which should then need to be addressed through policies and allocations in the Greater Norwich Local Plan (GNLP).”</p>
Natural England 16 March 2020	<p>Natural England provided comments on the 2019 Regulation 18 version of the HRA. These comments are summarised below.</p> <ul style="list-style-type: none"> - NE note that the Habitats designated sites have been identified correctly and that they agree with the likely significant effects identified. - NE note that water resources are required for both residential and employment allocations. - NE highlighted some concern regarding securing mitigation set out within the HRA.

Organisation	Summary of representation
	<ul style="list-style-type: none"> - NE advised that the HRA be re-examined to take into consideration the findings of the GIRAMS. NE recognise that the findings of GIRAMS will need to be reflected in the Local Plan regarding tariffs, Natural England does not consider the two other strands of suitable alternative natural green space (SANGs) and the implementation of a cohesive programme of GI improvements, have been covered adequately in the Plan to conclude that these will be delivered in a coherently and timely approach at the appropriate locations. - NE note that the proposed Norwich Western Link (NWL) road will pass within 200m of the River Wensum Special Area of Conservation (SAC), and although the road is proposed by Norfolk County Council, it has been identified as necessary in order to support the future housing and employment growth in the Greater Norwich area. The Plan references the NWL, including under Policy 4 - Strategic Infrastructure, and the road should be considered in combination with the other proposals under Policy 4 that have the potential to affect designated sites through increases in air pollution. - In addition, to examining the distance of proposed allocations from Habitats sites, further assessment of air quality is required where changes to the road network or traffic volumes might increase daily traffic flows by 1,000 Average Annual Daily Traffic (AADT) or more where the road stretch has sensitive habitats within 200 m of the road. Air quality considerations need to have appropriate regard for any impacts that may act in combination. NE note that it is unclear whether this work has been done. - NE note that the WCS outputs need to feed into the Plan policies and inform the HRA. NE note that they would expect future iterations of the HRA to recognise the need for water efficiency planning policies to support water efficiency requirements in new builds. Solutions to any water quality issues or water supply issues identified in the WCS need to form part of the detailed master plan stage so there is certainty in what is required and timely delivery, prior to any planning application being made. - With regard to any water treatment issues identified, the HRA will need to examine if the Local Plan contains clear wording in relation to assuring timely delivery of required infrastructure and treatment capabilities for phosphate, ammonia and nitrogen. - Whilst NE agrees that the Policy will not have an adverse effect on any Habitats site, they do not consider the current wording and supporting text to be sufficient to secure the delivery of the mitigation measures identified in the HRA. NE does not consider it possible at this stage to conclude no adverse effect upon the integrity of any Habitats site. - NE has concerns whether the current wording and supporting text of various Plan policies are sufficient to secure the delivery of the mitigation measures identified in the HRA including GI, whether on-site or off-site, and SANGS. - Where GI is required, reference should be incorporated into the policy and supporting text of each individual site allocation policy, making it clear that the allocation will only be deliverable if a project level HRA can demonstrate no adverse effects. Similarly, the policy and supporting text of each individual site allocation policy will need to include details of any other non-recreational related mitigation measures where these are identified at a subsequent stage of the Plan (together with a requirement for a project level HRA). The requirement for individual project level HRAs needs to be covered in the revised HRA, (and reflected in the relevant policy wording within the Local Plan) in light of the ZoI in the GIRAMS. - In conclusion NE does not consider that it is possible at this stage to conclude no adverse effect upon the integrity of any Habitats site arising from the GNLP alone.

- 3.3.2 On 16 March 2022, advice was received from the Chief Planning Officer from the Department for Levelling Up, Housing and Communities (DLUHC)¹⁹ and from Natural England²⁰. This highlighted the importance of nutrient impacts on The River Wensum SAC, The Broads SAC and Broadlands Ramsar. This is relevant to components of these SACs and Ramsar which are in an unfavourable condition due to elevated and exceeded nutrient thresholds. These components include those underpinned by the following SSSIs:
- River Wensum SSSI;
 - 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.
- 3.3.3 Water quality data indicates that the SSSI designation underpinning the River Wensum are overall exceeding the targets for Total Phosphorus. Data for the SSSI designations underpinning the Broads SAC and Broadlands Ramsar are overall exceeding the targets for Total Phosphorus and Total Nitrogen.
- 3.3.4 Natural England's advice requires South Norfolk Council (as the Competent Authority) to fully consider nutrients implications on these sites when determining relevant plans or projects and to secure appropriate mitigation measures. Natural England suggests nutrient neutrality may be a potential solution to enable developments to proceed in the catchment(s) (see Appendix A for relevant nutrient neutrality catchment maps) where an adverse effect on site integrity cannot be ruled out²¹.
- 3.3.5 Developments with the potential to increase nutrients includes the following²²:
- New homes;
 - Student accommodation;
 - Care homes;
 - Tourism attractions;
 - Tourist accommodation;
 - Permitted development (which gives rise to new overnight accommodation) under the Town and Country Planning (General Permitted Development) (England) Order 2015; and

¹⁹ 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_Planner_Letter_about_nutrient_pollution_March_2022.pdf [Date Accessed: 16/11/22]

²⁰ Letter from Natural England. Advice for development proposals with the potential to affect water quality resulting in adverse nutrient impacts on habitats sites. Available at: <https://www.southnorfolkandbroadland.gov.uk/downloads/file/4481/ne-water-quality-and-nutrient-neutrality-advice-16-03-2022-issue-1-final> [Date Accessed: 16/11/22]

²¹ 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.

²² <https://www.southnorfolkandbroadland.gov.uk/planning-applications/apply/2> [Date Accessed: 16/11/22]

- Any development not involving overnight accommodation, but which may have non-sewerage water quality implications.

- 3.3.6 The Norfolk Authorities are working together to ensure consistency of approach on Nutrient Neutrality. The contents of the Written Ministerial Statement and Chief Planner letter have been considered carefully to establish the basis on which permissions may be issued or conditions discharged.
- 3.3.7 In addition, Royal Haskoning are continuing with their work on behalf of the Norfolk Authorities. To date a bespoke nutrient calculator for the Norfolk catchments has been prepared along with updated catchment mapping²³. Royal Haskoning are also exploring the identification of mitigation solutions for the short, medium, and long term which will be published in due course²⁴.
- 3.3.8 The Inspector undertaking the Examination in Public of the GNLP highlighted the implications of this advice in a note prepared in response to the July 2022 hearings²⁵. It was noted that nutrient issues have the potential to affect lead-in times and phasing assumptions in the GNLP and therefore the Inspector's considered it would be beneficial to discuss housing land supply matters once the GNLP Partnership's approach to nutrient neutrality has been developed.
- 3.3.9 In response to this the GNLP Partnership indicated that the advice from DLUHC and NE on nutrients would be taken into consideration in a modification to the GNLP policy wording²⁶. The Partnership note that it "*expects the policy amendments to tie the delivery of housing growth more tightly to nutrient levels impacting on internationally protected habitats, including as appropriate, a county-wide mitigation strategy. The availability of a mitigation strategy will affect the timing of the delivery of sites as opposed to the principle of their development*". This response sets out a timetable for preparation of both long, medium and short term mitigation strategies and action plans with adoption expected by March 2023. The Partnership note that the housing trajectory will take into account the implementation of nutrient neutrality mitigation measures. It goes on to note that the HRA prepared in support of the GNLP will be updated to take into consideration this advice and associated outputs.
- 3.3.10 The Norfolk Authorities most affected by nutrient neutrality are currently progressing a joint venture arrangement to deliver nutrient neutrality mitigation. The current expectation is that this will be established by the end of March 2023, with the approach to mitigation informed by the Royal Haskoning mitigation strategies as opposed to these strategies being separately adopted. The Norfolk mitigation scheme would work alongside any Natural England mitigation scheme, developer led-mitigation schemes and any market led mitigation schemes. Potential effects on water quality due to increased nutrient loading must be considered in the context of the DLUHC and NE advice and output of the work undertaken by the GNLP Partnership in terms of mitigation.

²³ <https://www.southnorfolkandbroadland.gov.uk/downloads/download/816/nutrient-neutrality>

²⁴ <https://www.southnorfolkandbroadland.gov.uk/planning-applications/apply/2> [Date Accessed: 16/11/22]

²⁵ https://www.gnlp.org.uk/sites/gnlp/files/2022-06/Examination%20Note%20re%20HLS_0.pdf

²⁶ https://www.gnlp.org.uk/sites/gnlp/files/2022-05/Written%20Ministerial%20Statement%20Response%20Letter_0.pdf

4 Methodology

4.1 HRA guidance

4.1.1 As noted in Section 1.2, the application of HRA to land-use plans is a requirement of the Habitats Regulations. HRA applies to plans and projects, including all Local Development Documents in England and Wales.

4.1.2 This report has been informed by the following guidance:

- Planning Practice Guidance: Appropriate Assessment²⁷; 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*').

4.2 HRA methodology

4.2.1 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, as required by the Habitats Regulations. A step-by-step guide to this methodology is outlined in Figure 3.1.

4.3 Stage 1: Screening for likely significant effects

4.3.1 The first stage in the HRA process comprises the screening stage. 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 likely significant effects at a Habitats site, either alone or in combination with other plans or projects.

4.3.2 Screening considers the potential 'significance' of adverse effects. Where elements of the VCHAP will not result in an LSE on a Habitats site these are screened out and not considered in further detail in the process. The screening stage follows a number of steps which are outlined in Figure 4.1.

²⁷ Ministry of Housing, Communities and Local Government (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment. <https://www.gov.uk/guidance/appropriate-assessment> [Date Accessed: 15/11/22].

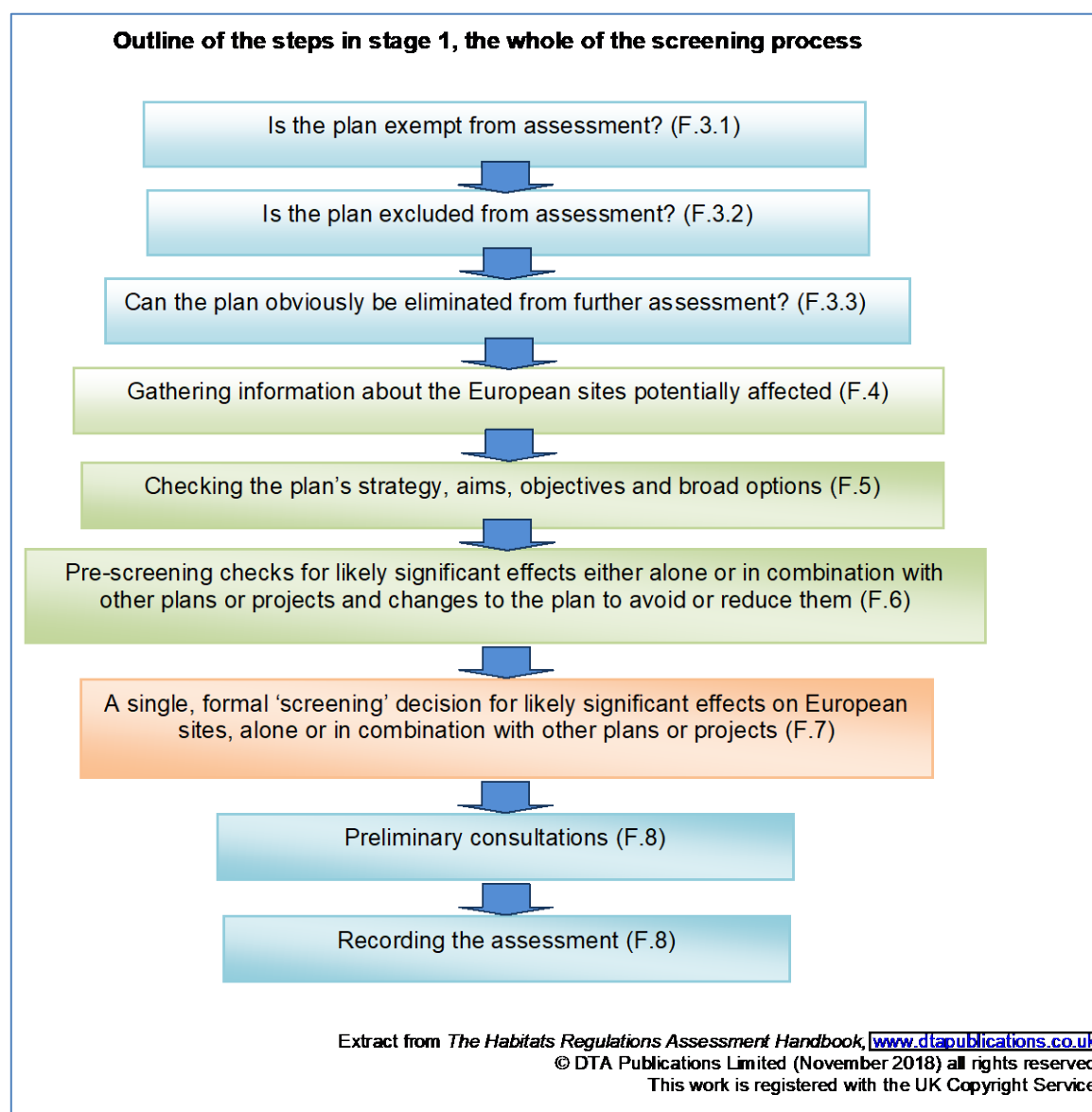


Figure 4.1: Outline of steps in stage 1; the whole screening process

- 4.3.3 Pre-screening the components of a plan at the early stage of the plan-making process helps to minimise or avoid LSEs upon any Habitats site and can improve the plan. Pre-screening was firstly undertaken at Regulation 18 and has been repeated at Regulation 19 to pick up any changes since Regulation 18. The pre-screening process uses a number of evaluation codes to summarise whether or not a plan component is likely to have LSEs alone or in combination, see Table 4.1, and inform the formal screening decision.

Table 4.1: Assessment and reasoning categories from Part F of the DTA Handbook

Assessment and reasoning categories from Chapter F of The Habitats Regulations Assessment Handbook (DTA Publications, 2013) ²⁸:

- A. General statements of policy / general aspirations.
- B. Policies listing general criteria for testing the acceptability / sustainability of proposals.
- C. Proposal referred to but not proposed by the plan.
- D. General plan-wide environmental protection / site safeguarding / threshold policies
- E. Policies or proposals that steer change in such a way as to protect Habitats sites from adverse effects.
- F. Policies or proposals that cannot lead to development or other change.
- G. Policies or proposals that could not have any conceivable or adverse effect on a site.
- H. Policies or proposals the (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in combination with other aspects of this or other plans or projects).
- I. Policies or proposals with a likely significant effect on a site alone.
- J. Policies or proposals unlikely to have a significant effect alone.
- K. Policies or proposals unlikely to have a significant effect either alone or in combination.
- L. Policies or proposals which might be likely to have a significant effect in combination.
- M. Bespoke area, site or case-specific policies or proposals intended to avoid or reduce harmful effects on a Habitats site.

4.4 What is a Likely Significant Effect?

- 4.4.1 HRA screening provides an analysis of LSEs identified during the HRA screening process. It considers the nature, magnitude and permanence of potential effects in order to inform the plan making process.
- 4.4.2 The DTA Handbook guidance provides the following interpretation of LSEs:
- 4.4.3 *"In this context, 'likely' means risk or possibility of effects occurring that cannot be ruled out on the basis of objective information. 'Significant' effects are those that would undermine the conservation objectives for the qualifying features potentially affected, either alone or in combination with other plans or projects ... even a possibility of a significant effect occurring is sufficient to trigger an 'appropriate assessment'."*²⁹.
- 4.4.4 With reference to the conservation status of a given species in the Habitats or Birds Directives, the following examples would be considered to constitute a significant effect:
- Any event which contributes to the long-term decline of the population of the species on the site;
 - Any event contributing to the reduction, or to the risk of reduction, of the range of the species within the site; and

²⁸ Tyldesley, D., and Chapman, C., (2013) The Habitats Regulations Assessment Handbook. December 2019 edition UK: DTA Publications Ltd, www.dtapublications.co.uk

²⁹ Tyldesley, D., and Chapman, C., (2013) The Habitats Regulations Assessment Handbook. December 2019 edition UK: DTA Publications Ltd, www.dtapublications.co.uk

- Any event which contributes to the reduction of the size of the habitat of the species within the site.

4.4.5 Rulings from the 2012 'Sweetman'³⁰ case provide further clarification:

4.4.6 *"The requirement that the effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill".*

4.4.7 Therefore, it is not necessary for the Council to show that the VCHAP will result in no effects whatsoever on any Habitats site. Instead, the Council is required to show that the VCHAP, either alone or in-combination with other plans and projects, will not result in an effect which undermines the conservation objectives of one or more qualifying features.

4.4.8 Determining whether an effect is significant requires careful consideration of the environmental conditions and characteristics of the Habitats site in question, as per the 2004 'Waddenzee'³¹ case:

4.4.9 *"In assessing the potential effects of a plan or project, their significance must be established in the light, inter alia, of the characteristics and specific environmental conditions of the site concerned by that plan or project".*

4.5 In-combination effects

4.5.1 Where screening has concluded that there are no LSEs from the VCHAP alone, it is next necessary to consider whether the effects of the policies in-combination with other plans and projects would combine to result in an LSE on any Habitats site. It may be that the VCHAP alone may not have a significant effect but could have a residual effect that may contribute to in-combination effects on a Habitats site.

4.5.2 The DTA Handbook³² notes that *"where an aspect of a plan could have some effect on the qualifying feature(s) of a European site, but that aspect of the plan alone are unlikely to be significant, the effects of that aspect of the plan will need to be checked in combination firstly, with other effects of the same plan, and then with the effects of other plans and projects".*

4.5.3 As such an in-combination assessment was undertaken as part of the HRA process at both the screening stage (where no LSE are considered possible alone, but in-combination effects are likely) and at the Appropriate Assessment stage (where, following Appropriate Assessment and mitigation, an insignificant adverse effect is still likely which has the potential to act in-combination with other plans and projects).

4.5.4 The in-combination assessment presented in Chapter F of the DTA Handbook comprises a ten-step approach as illustrated in Figure 4.2 below.

³⁰ Source: EC Case C-258-11 Reference for a Preliminary Ruling, Opinion of Advocate General Sharpston 'Sweetman' delivered on 22nd November 2012 (para 48)

³¹ Source: EC Case C-127/02 Reference for a Preliminary Ruling 'Waddenzee' 7th Sept 2004 (para 48)

³² Tyldesley, D., and Chapman, C., (2013) The Habitats Regulations Assessment Handbook. December 2019 edition UK: DTA Publications Ltd, www.dtapublications.co.uk

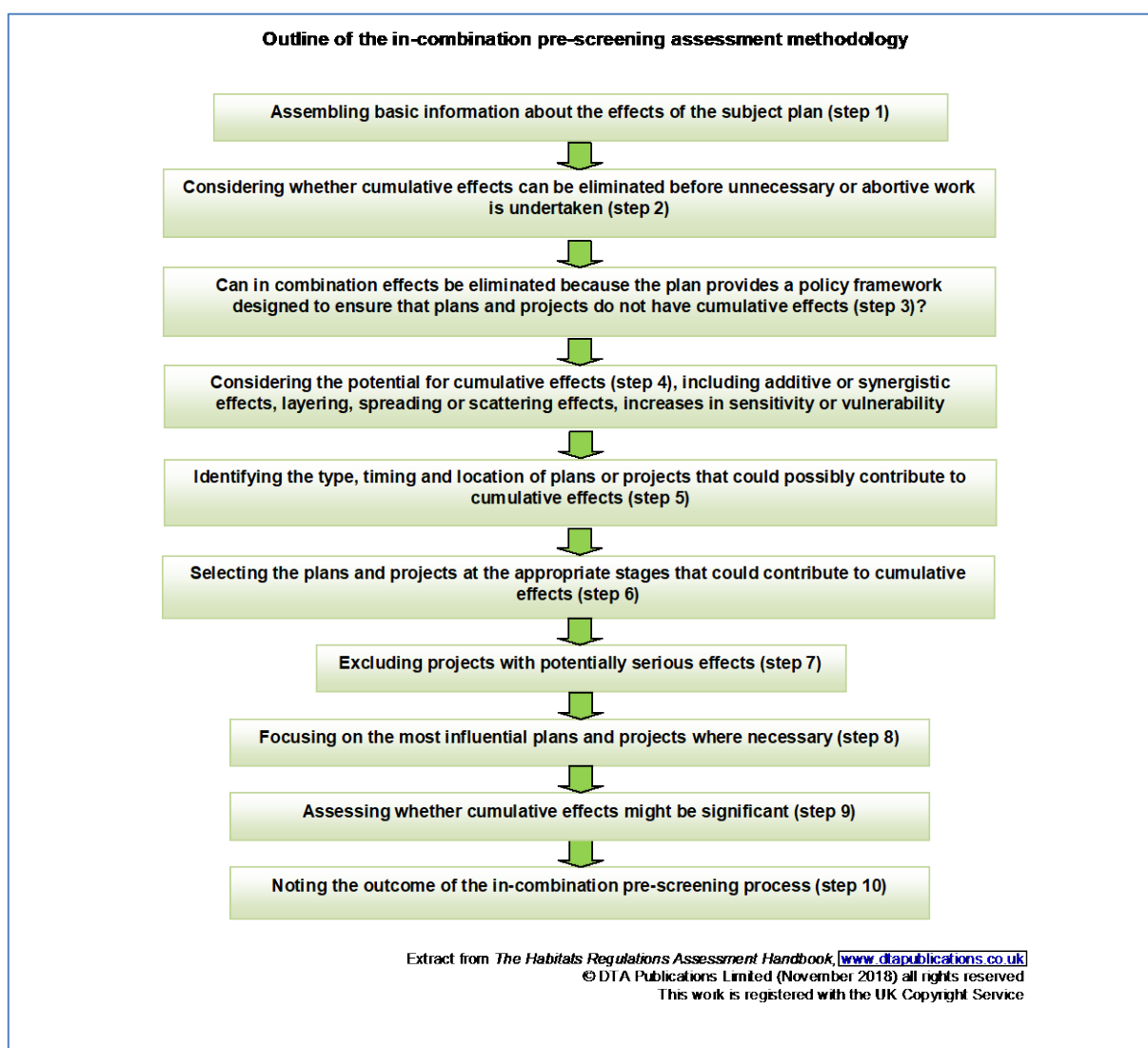


Figure 4.2: Outline of the in-combination pre-screening assessment methodology

4.5.5 Plans and projects which are considered to be of most relevance to the in-combination assessment of the VCHAP include those that have similar impact pathways. These include those plans and projects that have the potential to increase development in the HRA study area. In addition, other plans and projects with the potential to increase traffic across the study area which may act in-combination with the VCHAP, such as transport, waste and mineral plans and projects, have been taken into consideration. Plans which allocate water resources or are likely to influence water quality in the study area have been considered. Finally, neighbouring authority local plans which may increase development related public access and disturbance pressures at Habitats sites have also been considered.

4.5.6 The following points describe how in-combination effects have been taken into account in the Regulation 19 HRA.

- Consideration of in-combination impacts upon water quality have been taken into consideration in terms of increased nutrient loading within sensitive catchments of the River Wensum SAC, The Broads SAC and Broadlands Ramsar.
- Consideration of recreational in-combination effects from development across Norfolk has been taken into consideration.

- 4.5.7 The assessment of potential in-combination effects (Appendix B) has not resulted in additional impact pathways being screened in, however, several links between other plans and projects and the VCHAP have been identified.

4.6 Consideration of mitigation measures

- 4.6.1 The European Court Judgement on the interpretation of the Habitats Directive in the case of People Over Wind and Sweetman vs Coillte Teoranta (Case C-323/17³³) determined that mitigation measures are only permitted to be considered as part of an appropriate assessment.

- 4.6.2 It is useful to define mitigation measures. The DTA Handbook notes that there are two types of measures as follows³⁴:

- *“Measures intended to avoid or reduce harmful effects on a European site; or*
- *Features or characteristics of a plan which are essential in defining the nature, scale, location, timing, frequency or duration of the plan’s proposals, or they may be inseparable aspects of the plan, without which an assessment of the plan could not properly be made, in the screening decision, even though these features or characteristics may incidentally have the effect of avoiding or reducing some or all of the potentially adverse effects of a plan”.*

- 4.6.3 The HRA screening process undertaken for the VCHAP (at Regulation 18 and repeated at Regulation 19) has not taken account of incorporated mitigation or avoidance measures that are intended to avoid or reduce harmful effects on a Habitats site when assessing the LSE of the VCHAP 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.

4.7 Stage 2: Appropriate Assessment and Integrity Test

- 4.7.1 Where LSEs are identified from the VCHAP either alone or in-combination it is necessary to move to Stage 2 of the HRA process – the Appropriate Assessment and Integrity Test.

- 4.7.2 The purpose of the Appropriate Assessment (as defined by the DTA Handbook) is to *“undertake an objective, scientific assessment of the implications for the European site qualifying features potentially affected by the plan in light of their consideration objectives and other information for assessment”*³⁵.

³³ InfoCuria (2018) Case C-323/17. Available at:

<http://curia.europa.eu/juris/document/document.jsf?docid=200970&doclang=EN> [Date Accessed: 15/11/22]

³⁴ Tyldesley, D., and Chapman, C., (2013) The Habitats Regulations Assessment Handbook. November 2018 edition UK: DTA Publications Ltd, www.dtapublications.co.uk

³⁵ Tyldesley, D., and Chapman, C., (2013) The Habitats Regulations Assessment Handbook. November 2018 edition UK: DTA Publications Ltd, www.dtapublications.co.uk

- 4.7.3 As part of this process decision makers should take account of the potential consequences of no action, the uncertainties inherent in scientific evaluation and 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 VCHAP or GNLP or mitigation proposed through other plans or regulatory mechanisms. All mitigation measures must be deliverable and able to mitigate adverse effects for which they are targeted.
- 4.7.4 The Appropriate Assessment aims to present information in respect of all aspects of the VCHAP and ways in which it could, either alone or in-combination with other plans and projects, affect a Habitats site.
- 4.7.5 The Council (as the Competent Authority) must then ascertain, based on the findings of the Appropriate Assessment, whether the VCHAP 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 and will draw on the conclusions of this report and take into consideration representations made by Natural England.

4.8 Dealing with uncertainty

- 4.8.1 Uncertainty is an inherent characteristic of HRA, and decisions can be made only on currently available and relevant information. This concept is reinforced in the 7th September 2004 'Waddenzee' ruling³⁶:
- 4.8.2 *"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".*

4.9 The Precautionary Principle

- 4.9.1 The HRA process is characterised by the precautionary principle. This is described by the European Commission as being:
- 4.9.2 *"If a preliminary scientific evaluation shows that there are reasonable grounds for concern that a particular activity might lead to damaging effects on the environment, or on human, animal or plant health, which would be inconsistent with protection normally afforded to these within the European Community, the Precautionary Principle is triggered".*

³⁶EC Case C-127/02 Reference for a Preliminary Ruling 'Waddenzee' 7th September 2004 Advocate General's Opinion (para 107)

5 Habitats sites

5.1 Identification of Habitats sites

- 5.1.1 There is no guidance that defines the study area for inclusion in HRA. Planning Practice Guidance for Appropriate Assessment (listed above) indicates that:
- 5.1.2 *“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”.*
- 5.1.3 Therefore, in order to determine a study area for the HRA, consideration has been given to the nature and extent of potential impact pathways from the VCHAP and their relationship to Habitats sites.
- 5.1.4 The HRA work undertaken for the GNLP and Regulation 18 VCHAP (see Table 3.1) considered the scope of the HRA to include Habitats sites within a number of different threat specific zones of influence. It is noted that Natural England indicated their agreement with the scope of Habitats sites considered within the GNLP HRA (Table 3.2).
- 5.1.5 The Habitats sites to be assessed in the Regulation 19 VCHAP HRA, taking into consideration individual impact pathways and drawing on HRA work undertaken alongside the GNLP and the Regulation 18 VCHAP, are set out in Table 5.1 (and illustrated in Figures 5.1 to 5.3):

Table 5.1: Habitats sites for consideration in the VCHAP HRA

Habitats site	Location in relation to the VCHAP plan area (listed by distance from Plan area)
River Wensum SAC	Located within the Plan area
Norfolk Valley Fens SAC	Located within the Plan area
The Broads SAC	Located within the Plan area
Broadland SPA	Located within the Plan area
Broadland Ramsar	Located within the Plan area
Breydon Water SPA	Located immediately adjacent to the Plan area
Breydon Water Ramsar	Located immediately adjacent to the Plan area
Waveney & Little Ouse Valley Fens SAC	Located approximately 252m to the west of the Plan area
Redgrave and South Lopham Fens Ramsar	Located approximately 252m to the west of the Plan area
Outer Thames Estuary SPA	Located approximately 5,384m to the east of the Plan area

Habitats site	Location in relation to the VCHAP plan area (listed by distance from Plan area)
Breckland SPA	Located approximately 6,603m to the west of the Plan area
Southern North Sea SAC	Located approximately 6,278m to the east of the Plan area
Great Yarmouth North Denes SPA	Located approximately 7,119m to the north east of the Plan area
Benacre to Easton Barents Lagoons SAC	Located approximately 8,309m to the south of the Plan area
Benacre to Easton Barents SPA	Located approximately 8,309m to the south of the Plan area
The Greater Wash SPA	Located approximately 9,290m to the north east of the Plan area
Breckland SAC	Located approximately 11,933m to the west of the Plan area
Winterton-Horsey Dunes SAC	Located approximately 13,000m to the north east of the Plan area
Hainsborough, Hammond and Winterton SAC	Located approximately 15,250m to the east of the Plan area
Dew's Ponds SAC	Located approximately 18,897m to the south east of the Plan area
Paston Great Barn SAC	Located approximately 25,600m to the north east of the Plan area
Overstand Cliffs SAC	Located approximately 28,666m to the north east of the Plan area
North Norfolk Coast SPA	Located approximately 30,550m to the north of the Plan area
North Norfolk Coast SAC	Located approximately 30,550m to the north of the Plan area
North Norfolk Coast Ramsar	Located approximately 30,550m to the north of the Plan area
The Wash and North Norfolk Coast SAC	Located approximately 30,750m to the north of the Plan area
Roydon Common and Dersingham Bog SAC	Located approximately 38,350m to the north of the Plan area
Dersingham Bog Ramsar	Located approximately 38,350m to the north of the Plan area
The Wash SPA	Located approximately 45,400m to the north of the Plan area
The Wash Ramsar	Located approximately 45,400m to the north of the Plan area

5.1.6 The locations of these Habitats sites are shown in Figures 5.1.

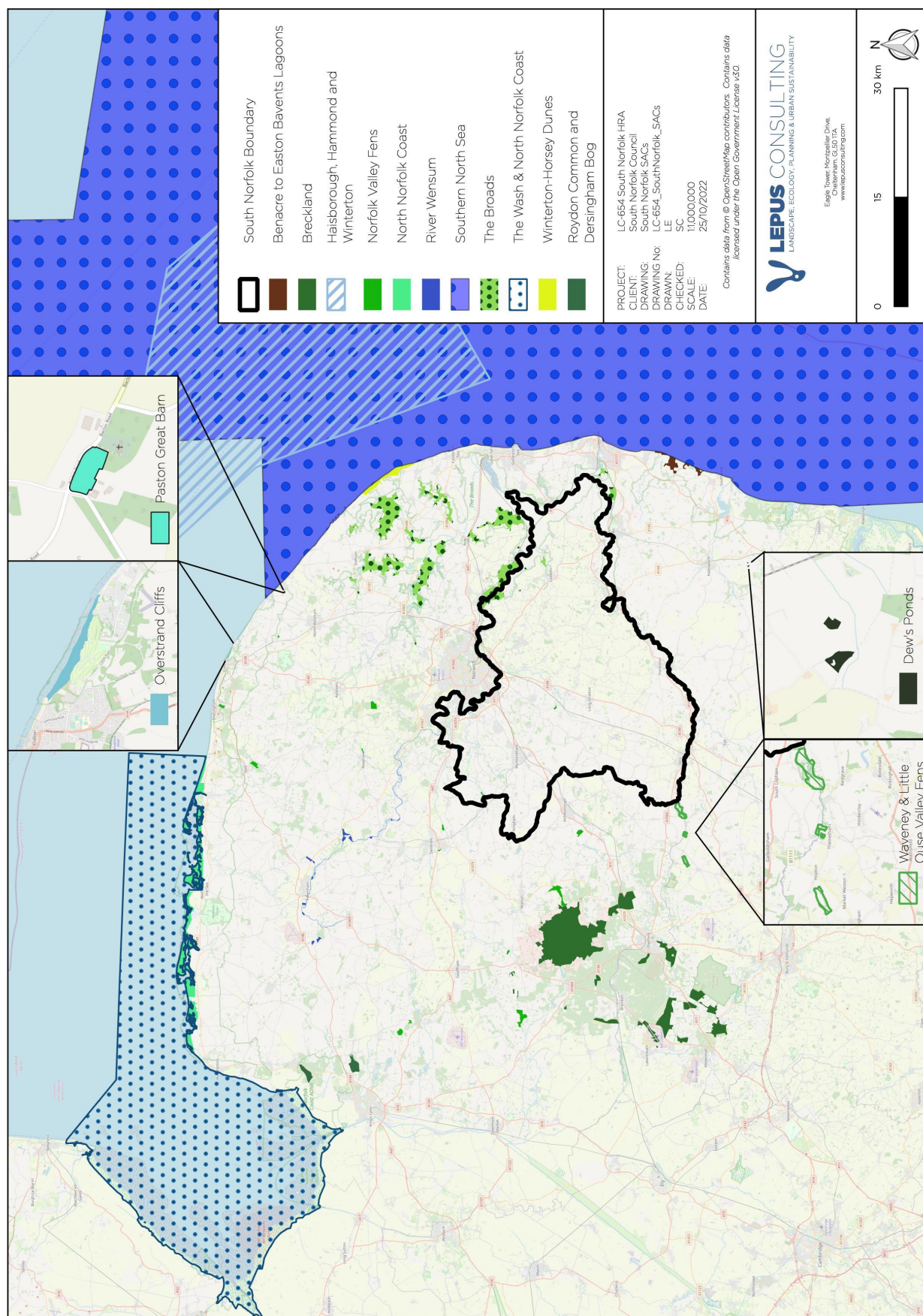


Figure 5.1: SAC location plan

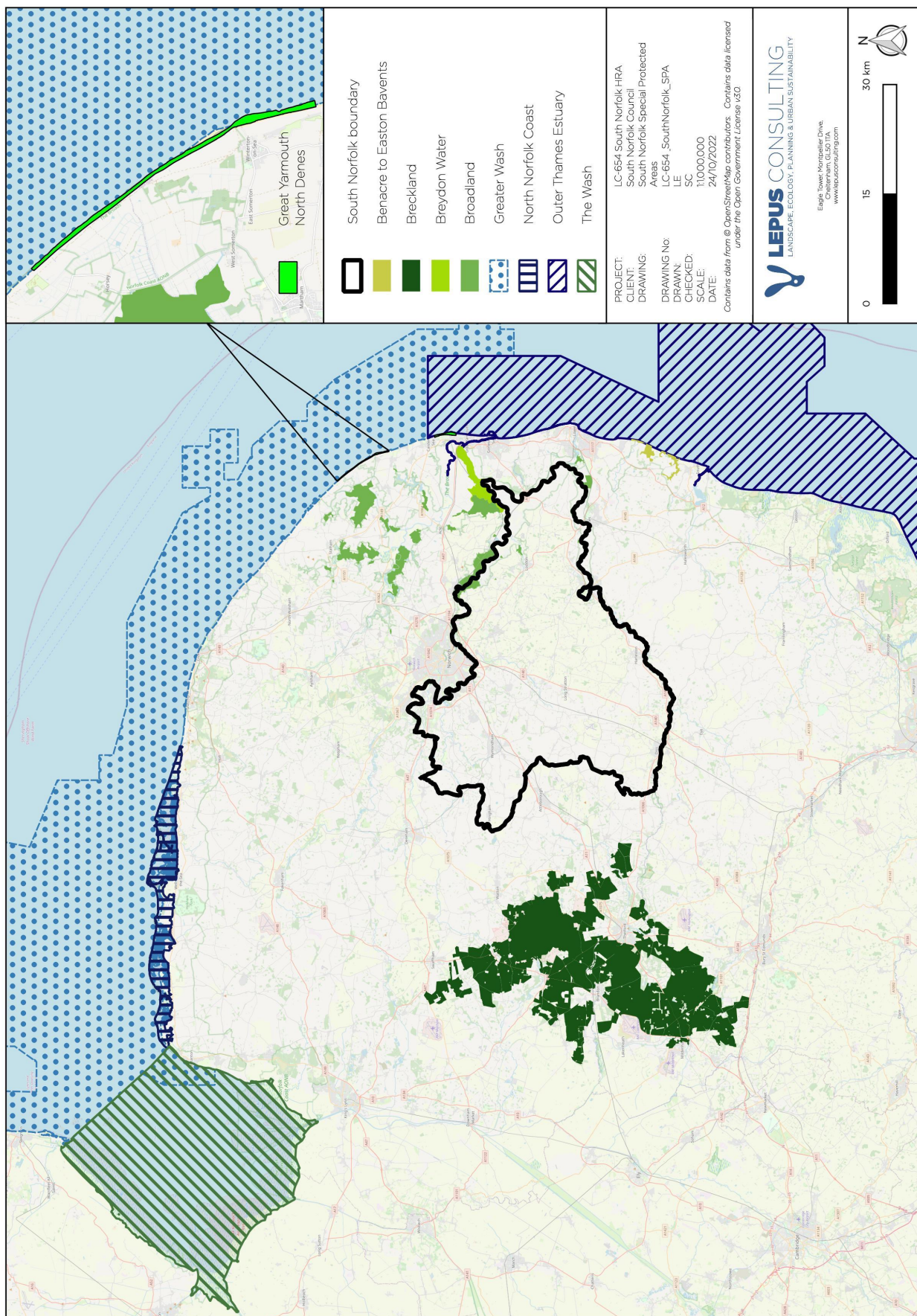


Figure 5.2: SPA location plan

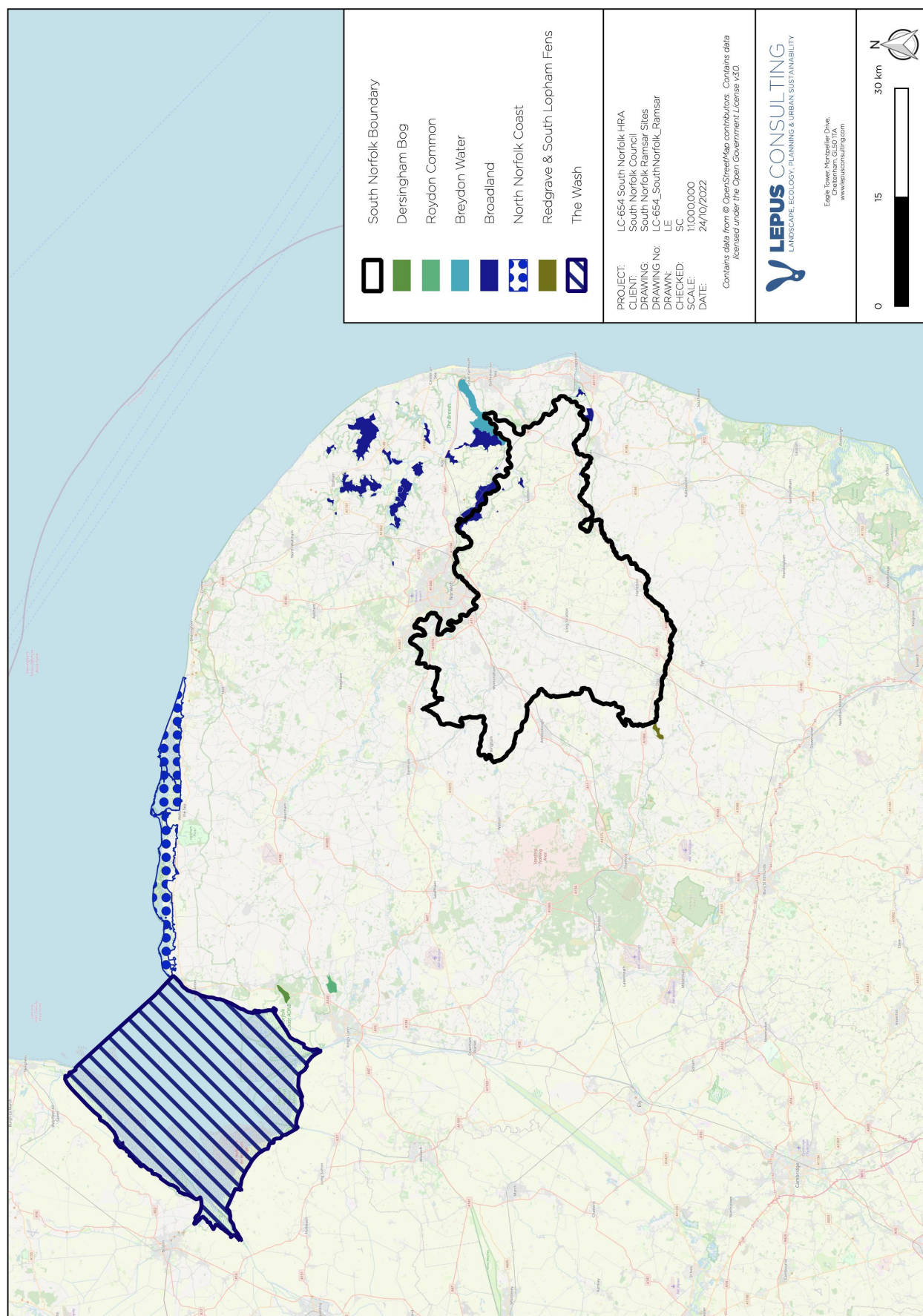


Figure 5.3: Ramsar location plan

- 5.1.7 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 the ecosystems that it does. 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), the pollution a development generates, and the resources used (during construction and operation for instance).
- 5.1.8 An intrinsic quality of any Habitats site is its functionality at the landscape ecology scale. This refers to how the site interacts with the zone of influence of its immediate surroundings, as well as the wider area. This is particularly the case where there is potential for developments resulting from the 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, but which are qualifying features of the site. For example, there may be effects on protected birds that use land outside the designated site for foraging, feeding, roosting or other activities.

5.2 Ecological information

- 5.2.1 The CJEU ruling in the Holohan case (C-461/17³⁷) confirmed that Appropriate Assessment should: (i) catalogue (i.e. list) all habitats and species for which the site is protected and (ii) include in its assessment other (i.e. non-protected) habitat types or species which are on the site and habitats and species located outside of the site if they are necessary to the conservation of the habitat types and species listed for the protected area.
- 5.2.2 This report fully considers the potential for effects on species and habitats. This includes those not listed as a qualifying feature for the Habitats site, but which may be important to achieving its conservation objectives. This ensures that the functional relationships underlying Habitats sites and the achievement of their conservation objectives are adequately understood.
- 5.2.3 Appendix C identifies the qualifying features of each of these sites and presents details of their conservation objectives. This information is drawn from the Joint Nature Conservancy Council (JNCC)³⁸ and Natural England³⁹.
- 5.2.4 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.

³⁷ EUR-Lex (2018) Case C-461/17. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62017CJ0461&from=EN> [Date Accessed 02/02/22]

³⁸ JNCC (2019) Available at: <http://jncc.defra.gov.uk/page-1458> [Date Accessed: 02/02/22]

³⁹ Natural England (2019) Available at: <http://publications.naturalengland.org.uk/> [Date Accessed: 02/02/22]

- 5.2.5 Natural England periodically assesses the conservation conditions of each SSSI unit, assigning it a status. SSSIs located either entirely or partially within the Habitats sites considered in this report are listed in Appendix D along with their current conservation status. The conservation status of each SSSI highlights any SAC/SPA that is currently particularly vulnerable to threats/pressures. Conservation status is defined as follows:
- Favourable;
 - Unfavourable – recovering;
 - Unfavourable – no change; or
 - Unfavourable – declining.
- 5.2.6 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 Habitats designation. However, it is considered that the conservation status of SSSI units that overlap with Habitats designated sites offer a useful indicator of habitat health at that location.
- 5.2.7 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 European sites, which are underpinned by the SSSI designation and "Compensation Sites", which have been secured as compensation for impacts on Natura 2000/Ramsar sites"*⁴⁰. The location of IRZs has been taken into consideration in this assessment as they provide a useful guide as to the location of functionally linked land and likely vulnerabilities to development proposed within the VCHAP.

⁴⁰ 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 [Date Accessed: 02/02/22]

6 Impact Pathways

6.1 Gathering information about Habitats sites and impact pathways

- 6.1.1 It is important to understand how the VCHAP may affect a Habitats site in order to determine LSEs. Consideration must first be given to potential links or causal connections between the effects of the VCHAP and Habitats sites. This section therefore scopes potential impact pathways at the Habitats sites in Table 5.1.

6.2 Threats and pressures

- 6.2.1 Threats and pressures to which each Habitats site is vulnerable have been identified through reference to data held by the JNCC on Natura 2000 Data Forms, Ramsar Information Sheets and Site Improvement Plans (SIPs). This information provides current and predicted issues at each Habitats site and is summarised in Appendix C.
- 6.2.2 Supplementary advice notices prepared by Natural England provide more recent information on threats and pressures upon Habitats sites than SIPs. Additional threats flagged up by supplementary advice notices which may be impacted by the VCHAP have also been identified (Appendix C).
- 6.2.3 A number of similar threats and pressures have been considered together, for instance ‘recreation’ is considered under ‘public access and disturbance’. A number of threats and pressures are considered to be beyond the scope of the potential impacts of VCHAP. These threats and pressures have not been included in this assessment having been scoped out.
- 6.2.4 Following a review of HRA assessment work undertaken to date for the Regulation 18 HRA and to support the GNLP, and an identification of causal connections and links, the remaining threats and pressures that are considered to be within the scope of influence of the VCHAP include:
- Atmospheric pollution – consideration of commuting data for the plan area and consultation with the County Highways Team on key commuting routes⁴¹;
 - Hydrological changes – consideration of water quality (changes in nutrient levels) and water quantity; and
 - Public access and disturbance – consideration of recreational disturbance and urbanisation threats, drawing on recreational survey data and established zones of influence where available.
 - Habitat loss and fragmentation – of potentially functionally linked land.
- 6.2.5 The tests set out under Article 6(3) and 6(4) of the Habitats Regulations need to be applied in respect of plans or projects which may significantly affect functionally linked habitat that plays an important role in contributing to the favourable conservation status of the relevant species for which a Habitats site is designated.

⁴¹ Office for National Statistics (2011) Location of usual residence and place of work by method of travel to work (2011 census data). Available at: <https://www.nomisweb.co.uk/census/2011/wu03uk/chart> [Date accessed: 06/02/20]

- 6.2.6 The term 'functional linkage' is defined by Natural England as *"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"*⁴².
- 6.2.7 The CJEU ruling in the Holohan case confirmed that habitat and / or species which are located outside of a designated site, if they are necessary to the conservation of the habitat types and species listed for the protected area, must be considered in an Appropriate Assessment.
- 6.2.8 Supporting habitat, also referred to as functionally linked habitat, may be located some distance from a Habitats site. The fragmentation of habitats through the loss of connecting corridors, indirect and direct impacts also have the potential to hinder the movement of qualifying species.
- 6.2.9 The pathways of impact listed above will be considered at designated sites themselves and also at areas of potentially functionally linked habitat.

6.3 Air Pollution Scoping

- 6.3.1 Air pollution can affect Habitats sites if it has an adverse effect on its features of qualifying interest. The main mechanisms through which air pollution can have an adverse effect is through eutrophication (nitrogen), acidification (nitrogen and sulphur) and direct toxicity (ozone, ammonia and nitrogen oxides)⁴³. Deposition of air pollutants can alter the soil and plant composition and species which depend upon these.
- 6.3.2 As highlighted through the review of threats and pressures at Habitats sites, (Appendix C) air pollution, and in particular atmospheric nitrogen deposition, has been identified as a threat or pressure for qualifying features of several Habitats sites within the relevant Natural England SIPs and Supplementary Advice Notes.

⁴² 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.

⁴³ APIS (2016) Ecosystem Services and air pollution impacts. Available at: <http://www.apis.ac.uk/ecosystem-services-and-air-pollution-impacts>. [Date Accessed: 06/02/20]

- 6.3.3 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 plans⁴⁴. In addition, the Institute of Air Quality Management (IAQM)⁴⁵ and the Chartered Institute of Ecology and Environmental Management (CIEEM)⁴⁶ have also prepared advice on the assessment of air quality impacts at designated sites. This guidance sets a number of thresholds for screening of Likely Significant (air quality) Effects (LSEs) at the HRA screening stage (Stage 1 of the HRA process) and methodologies for further Appropriate Assessment and ecological interpretation of air quality impacts.
- 6.3.4 The Natural England staged approach to screening of likely significant air quality effects has been applied here⁴⁷. The first step is to determine if the plan will give rise to emissions which are likely to reach a Habitats site.
- 6.3.5 The VCHAP will trigger housing development and as such increase traffic related emissions. Consultation with the Norfolk County Council Transport Team indicates that the key commuting area for development within the South Norfolk village clusters is likely to occur within South Norfolk itself and the immediate adjacent neighbouring authority areas, including Norwich, Broadland, Breckland, Waveney (now part of East Suffolk), Mid Suffolk and Great Yarmouth. These authority areas have therefore been taken as the HRA air quality study area for the purposes of this assessment. It is however noted that there is likely to be considerable variance between these destinations, as travel patterns will invariably focus on routes/journeys to significant attractors, such as towns centres and other major employment, retail and leisure areas. It is therefore likely that more remote sites in districts, with lower journey numbers to/from South Norfolk, are less likely to be affected. The Habitats sites listed in Table 6.1 are within this study area.
- 6.3.6 It is widely accepted that air quality impacts are greatest within 200m of a road source, decreasing with distance^{48,49,50}. Table 6.1 identifies roads within 200m of any Habitats site that has been identified as being sensitive to changes in air quality (in either Natural England's SIP, Supplementary Advice data or on the Air Pollution Information System (APIS) – see Appendix C) and which is located within the air quality study area. Table 6.1 indicates which Habitats sites will be considered further in the HRA screening assessment.

⁴⁴ 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: 18/05/22]

⁴⁵ 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.

⁴⁶ CIEEM (2021) Advice on Ecological Assessment of Air Quality Impacts. Chartered Institute of Ecology and Environmental Management. Winchester, UK.

⁴⁷ 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: 15/11/22]

⁴⁸ 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.

⁴⁹ Natural England (2016) The ecological effects of air pollution from road transport: an updated review. Natural England Commissioned Report NECR 199.

⁵⁰ Signal, K., Ashmore, M. & Power, S. (2004) The ecological effects of diffuse air pollution from road transport. English Nature Research Report No. 580, Peterborough.

Table 6.1: Air quality scoping

Habitats site vulnerable to changes in air quality (as identified in Natural England's SIP or Supplementary Advice - Appendix C)	Review of APIS data ⁵¹	Strategic road links (A and B roads) located within 200m of Habitats site	Considered further in HRA screening process.
Norfolk Valley Fens SAC	Current levels exceed or are within critical loads. Not all qualifying features are sensitive to acidification.	A47, B1149 and B1075	Yes
The Broads SAC	Current levels exceed or are within critical loads. Not all qualifying features are sensitive to acidification.	B1150, A149, A47, A1064 and A146	Yes
Broadland SPA	Current levels exceed or are within critical loads for habitat types. Not all qualifying features are sensitive to nitrogen deposition or acidification.	B1150, A1064 and A146	Yes
Broadland Ramsar	Current levels exceed or are within critical loads. Not all qualifying features are sensitive to nitrogen deposition or acidification.	B1150, A1064 and A146	Yes
Breckland SAC	Current levels exceed or are within critical loads. Not all qualifying features are sensitive to nitrogen deposition or acidification.	A11, A134 and A1075	Yes
Breckland SPA	Current levels exceed or are within critical loads for habitat types. Not all qualifying features are sensitive to nitrogen deposition or acidification.	A11, A1066, B1111, A1088, A134, A1075, A1134, A1065, A1122,	Yes
Great Yarmouth North Deans SPA	Current levels exceed or are within critical loads for habitat types.	None	No
Winterton-Horsey Dunes SAC	Current levels exceed or are within critical loads. Not all qualifying features are sensitive to nitrogen deposition or acidification.	None	No
Paston Great Barn SAC	Current levels exceed or are within critical loads.	The B1159 terminates at the Gas Works before Paston Barn, is located approx. 25km to the north east of the Plan area, is unlikely to link to key housing / areas of employment associated with the Plan area and therefore is unlikely to result in an alone / in-combination breach of air quality thresholds.	No
Waveney & Little Ouse Valley Fens SAC	Current levels exceed or are within critical loads. Not all qualifying features are sensitive to nitrogen deposition or acidification.	B1113	Yes

⁵¹ <https://www.apis.ac.uk/>

Habitats site vulnerable to changes in air quality (as identified in Natural England's SIP or Supplementary Advice - Appendix C)	Review of APIS data ⁵¹	Strategic road links (A and B roads) located within 200m of Habitats site	Considered further in HRA screening process.
Redgrave & South Lopham Fens Ramsar	SSSI air quality data indicates exceed or are within critical loads. Not all qualifying features are sensitive to nitrogen deposition or acidification.	B1113 Sensitivity to air quality is not identified in Ramsar information sheet but identified in SAC SIP for Waveney & Little Ouse Valley Fens SAC which is coincident with Ramsar designation.	Yes
Benacre to Easton Bavents SPA	Current levels exceed or are within critical loads. Not all qualifying features are sensitive to nitrogen deposition or acidification.	B1127	Yes

6.4 Water Scoping

- 6.4.1 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. Water mains leakage and sewer infiltration may also affect the water balance.
- 6.4.2 Urbanisation also has the potential to reduce the quality of water entering a catchment during the construction of a development through processes such as sedimentation, accidental spillage of chemicals and materials. Water quality may also be reduced through effluent discharges and pollution as well as an increased water temperature.
- 6.4.3 Features for which a Habitats site is designated are often sensitive to changes in water quality and water quantity. Therefore, urbanisation affecting drainage streams which is connected to a Habitats site has the potential to adversely affect the features for which it is designated.
- 6.4.4 The Plan area lies predominantly within the Anglian river management basin and within the Broadland Rivers surface water management catchment area. A small area to the west of the Plan area is also in the Cam and Ely Ouse management catchment and the Anglian TraC management catchment follows the River Chet into the Plan area. The upper reaches of the Broadland Rivers' management catchment include the River Wensum and the River Waveney. The River Wensum is a calcareous groundwater dominated river which originates in northwest Norfolk, flowing in a south easterly direction before joining the River Yare to the south east of Norwich. Further down the catchment the land is mostly at or below sea level and forms an area of slow-flowing rivers and interconnected lakes and wetlands. These lower reaches are affected by tidal surges from the North Sea as well as upstream inputs. The Broadland Rivers management catchment is further divided into four operational management catchments associated with the following rivers⁵²:
- The River Bure, is located to the north of the Plan area. It rises at Melton Constable and flows south west through the Broads towards the sea at Great

⁵² Environment Agency. Catchment Data Explorer. Available at: <https://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/5> [Date Accessed: 16/11/22]

Yarmouth. Downstream of Wroxham, it is joined by the Ant and then the Thurne. This low-lying area incorporates many of the broads.

- The River Waveney runs along the southern Plan boundary. It begins in the Regrave and Lopham Fen National Nature Reserve flowing east through the towns of Diss, Harleston, Bungay and Beccles. Finally joining the River Yare to reach the sea at Great Yarmouth. The Waveney branches off to Oulton Broad towards Lowestoft where a sea lock divides sea water, linking Oulton Broad with Lake Lothing and the sea.
- The River Wensum which flows along the northern boundary of the Plan area, through Fakenham and the Pensthorpe nature reserve, and on through Swanton Morley, Taverham and Norwich, joining the river Yare at Whitlingham.
- The River Yare rises south of Dereham close to the village of Shipdham, and then flows east towards Norwich across the north of the Plan area. It has two major tributaries, the river Tiffey which flows north through Wymondham and joins the Yare at Barford, and the River Tas, which flows north through Long Stratton before joining the Yare at Trowse⁵³.

6.4.5 AECOM prepared a Water Cycle Study (WCS)⁵⁴ in support of the GNLP. This aimed to help the Greater Norwich Authorities determine the most appropriate options for development within the study area with respect to water infrastructure and the water environment. This provides an assessment of GNLP combined planned growth in terms of water supply, environmental capacity and wastewater capacity and includes growth in the VCHAP. The WCS looked at hydrology impacts upon ecologically designated sites and applied water quality thresholds set through implementation of the WFD, and site-specific standards, to ensure the protection of environmental receptors.

6.4.6 In order to scope Habitats sites that will be considered further in the HRA process in terms of water impacts (alone and in-combination), an assessment has been made of their hydrological connectivity with the Plan area. The WCS identifies that the following Habitats sites will be sensitive to hydrological impacts from development set out in the GNLP (and therefore the VCHAP):

- River Wensum SAC;
- Broadlands SPA; and
- The Broads SAC.

6.4.7 As noted in Section 3.3, advice received from DLUHC and Natural England highlighted the importance of nutrient impacts on the River Wensum SAC, the Broads SAC and Broadlands Ramsar. Given the VCHAP will lead to an increase of development within the catchments of these Habitats sites, there is the potential for likely significant water quality effects from the Plan alone.

6.4.8 In addition, the following Habitats sites, which are known to be sensitive to hydrological impacts and within the Broadland Rivers surface water management catchment, are also hydrologically linked to the Plan area and will therefore also be considered further in the screening process.

⁵³ Data taken from Environment Agency Catchment Data Explorer. Reference above.

⁵⁴ AECOM. January 2021. Greater Norwich Water Cycle Study. Final Draft.

- Norfolk Valley Fens SAC (at Flordon Common SSSI within the Plan area);
- Breydon Water SPA (adjacent to the River Yare and downstream of the Plan area); and
- Breydon Water Ramsar (as above).

6.4.9 All other Habitats sites within the HRA study area are not considered to be hydrologically linked to the Plan area either due to their location or because they are not considered to be sensitive to hydrological impacts. As such these sites have been scoped out of the HRA in terms of hydrological impacts (including water quality and water quantity issues).

6.5 Public access and disturbance

6.5.1 Public access and disturbance can take a number of forms. It can include both physical and non-physical disturbance, which can be caused by urbanisation pressures and increased recreational activity.

6.5.2 These activities can result in damage to habitats through erosion and compaction, troubling of grazing stock, spreading invasive species, cat predation, dog fouling, litter and fly-tipping, tree climbing, wildfire and arson, noise, vibration, light pollution and vandalism.

Recreational Pressure

6.5.3 Across the UK, public access and disturbance threats at Habitats sites are often considered in terms of buffer distances. For recreational impacts, these are often determined through analysis of visitor and recreational survey data, baseline site information and take into consideration the proximity of new development.

6.5.4 In 2015 and 2016 Footprint Ecology was commissioned by Norfolk County Council/the Norfolk Biodiversity Partnership (NBP) on behalf of all local planning authorities, to undertake a number of visitor surveys to determine current and projected visitor patterns to Habitats sites across Norfolk⁵⁵. The Habitats sites which formed the focus of this commission included the following:

- Breydon Water Ramsar;
- Breydon Water SPA;
- Breckland SAC;
- Breckland SPA;
- Broadland SPA;
- Broadland Ramsar;
- Norfolk Valley Fens SAC;
- North Norfolk Coast SAC;
- North Norfolk Coast SPA;
- North Norfolk Coast Ramsar;
- Roydon Common & Dersingham Bog SAC;
- Roydon Common & Dersingham Bog Ramsar;
- The Broads SAC;
- The Wash SPA;
- The Wash Ramsar;

⁵⁵ 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.

- Winterton Horsey Dunes / Great Yarmouth North Denes SAC; and
- Winterton Horsey Dunes / Great Yarmouth North Denes SPA.

6.5.5 Visitor surveys were undertaken in 2015 and 2016 at 35 agreed sites across the above Habitats sites following input from a range of stakeholders. Following analysis of the findings Footprint Ecology concluded that over half of interviewees were visiting from home and resident within Norfolk, with 16% of interviewees travelling from home on a short visit/day trip from outside Norfolk. The most popular activities undertaken on site were shown to be dog walking and walking. A high number of trips were made from holiday makers to the North Coast and Broads (66%), with the majority staying locally or on boats in the Broads. Over three quarters (77%) of all interviewees were shown to have arrived at the interview location by car.

6.5.6 The Footprint Ecology research identified a number of strategic mitigation options on a site-by-site basis, such as access management, wardening, raising public awareness, site management and delivery of high-quality green space. The report indicated where people travel from and provided an assessment of the links between the cumulative impact of new housing development across all planning authorities in Norfolk and increased recreation use at Habitats sites. The report noted that increased recreation pressure has the potential to impact a Habitats site's qualifying features for instance through disturbance to Annex I birds. The results showed a range of different use and recreational draw for the different sites and as such the mitigation suggestions were tailored to suit individual sites.

6.5.7 Drawing on the visitor survey data collated by Footprint Ecology, the Councils of 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 and the Broads Authority (working together to address cross-boundary issues and offer a strategic solution through a Norfolk Strategic Planning Framework (NSPF)), have prepared a Norfolk Green Infrastructure (GI) and Recreational Impact Avoidance and Mitigation Strategy (RAMS)⁵⁶. This strategy forms part of the evidence base for each local planning authority (LPA) Local Plan and provides the basis for future agreements through the NSPF.

6.5.8 The Norfolk GIRAMS identifies particular Zones of Influence (ZOIs) which represent the extent of land around Habitats sites within which residents travel to the relevant site for recreational activities, as evidenced by extensive survey work⁵⁷. These ZOI cover the administrative area of the Council, and contain the following designated Habitats sites:

- Broads ZOI: Broadland SPA, Broadland Ramsar, Breydon Water SPA, The Broads SAC;
- East Coast ZOI: Winterton – Horsey Dunes SAC, Great Yarmouth North Denes SPA;
- Norfolk Brecks ZOI: Breckland SPA, Breckland SAC;

⁵⁶ 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. Available at: <https://www.southnorfolkandbroadland.gov.uk/downloads/file/4390/norfolk-gi-rams-strategy-march-2021> [Date Accessed: 21/10/22]

⁵⁷ See Table 6 (ZOI Calculations for Norfolk Habitats Sites with regard to recreational impacts) of the GIRAMS. Source as per footnote 54.

- Norfolk Coast ZOI: North Norfolk Coast SAC, North Norfolk Coast SPA, North Norfolk Coast Ramsar;
- Valley Fens ZOI: Norfolk Valley Fens SAC; and
- Wash ZOI: The Wash SPA, The Wash and North Norfolk Coast SAC, The Wash Ramsar.

6.5.9 These ZOIs have been applied to the scoping of Habitats sites for consideration in the HRA screening process.

6.5.10 In response to HRA work undertaken in support of the Great Yarmouth Borough Council Core Strategy, Great Yarmouth Borough Council established a monitoring and mitigation advisory group to deliver required mitigation measures to protect the main local Habitats sites to this Council area including: Winterton-Horsey Dunes SAC, Breydon Water SPA/Ramsar site and North Denes SPA, from any significant effects resulting from increased recreational pressures which may arise from new housing and tourism development. As a result, a Habitats Monitoring and Mitigation Strategy⁵⁸ was approved by Great Yarmouth Borough Council. This has been taken into consideration in development of GIRAMS and incorporated into the strategic approach to mitigation for these east coast sites to ensure a continued strategic approach.

6.5.11 North of the River Blyth, Footprint Ecology recognised that the key concern from recreation pressure was disturbance to populations of Little Tern (*Sternula albifrons*). As such they extended the zone of influence along the coastline to include the northern part of Waveney District. This links into the area where the Norfolk strategic mitigation commences for Great Yarmouth Borough, as discussed above, therefore ensuring a continued strategic approach for Little Terns across the relevant Habitats sites for this species in Norfolk and Suffolk.

6.5.12 In summary, Table 6.2 presents the Habitats sites which will be considered further in terms of recreational pathways of impact in the screening assessment.

Table 6.2: Habitats sites potentially affected by increased recreational pressures

SAC	SPA	Ramsar
<ul style="list-style-type: none"> - Norfolk Valley Fens - The Broads - Winterton-Horsey Dunes - Breckland - The Wash and North Norfolk Coast - North Norfolk Coast 	<ul style="list-style-type: none"> - Broadland - Breydon Water - Great Yarmouth and North Denes - Breckland - The Wash - North Norfolk Coast 	<ul style="list-style-type: none"> - Broadland - Breydon Water - The Wash - North Norfolk Coast

⁵⁸ Great Yarmouth Borough Council. 2019. Habitats Monitoring and Mitigation Strategy.

Urbanisation Pressure

- 6.5.13 Urbanisation effects are caused where development is located close to a Habitats site designated boundary. These effects often include cat predation of ground nesting birds, lighting (illumination), visual disturbance, fly tipping, noise and vandalism. As with recreational impacts, urbanisation mitigation strategies have been implemented across the UK through the establishment of buffer zones. Commonly applied urbanisation zones of influence extend around 400m 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 Framework⁵⁹ 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.
- 6.5.14 Given the distance over which urbanisation pressures are felt, it is considered that this pathway of impact will only effect Habitats sites within or immediately adjacent to the Plan area which are sensitive to public access and disturbance impacts. These sites include the following:
- Breydon Water SPA;
 - Breydon Water Ramsar;
 - Broadland SPA;
 - Broadland Ramsar;
 - Norfolk Valley Fens SAC;
 - River Wensum SAC; and
 - The Broads SAC.

6.6 Habitat loss and fragmentation

- 6.6.1 As set out in Section 6.2, functionally linked habitat may be located some distance from a Habitats site designated boundary. This habitat may however be necessary to the conservation of qualifying habitat types and / or species. In particular the loss or fragmentation of functionally linked habitat has the potential to affect qualifying species which may be mobile, for example birds which may use habitat outside designated sites as migratory routes, foraging areas or roosting sites.
- 6.6.2 There are a number of Habitats sites located within the VCHAP area as listed below.
- Broadland SPA;
 - Broadland Ramsar;
 - Norfolk Valley Fens SAC;
 - River Wensum SAC; and
 - The Broads SAC.

⁵⁹ Thames Basin Heaths Joint Strategic Partnership Board (2009). Thames Basin Heaths SPA Delivery Framework. <https://www.bracknell-forest.gov.uk/sites/default/files/2021-08/thames-basin-heaths-spa-delivery-framework.pdf> [Date Accessed: 30/05/22].

- 6.6.3 At the HRA screening stage (Section 7) each VCHAP allocation was analysed in the context of their potential to provide suitable habitat to support the qualifying features of each Habitats site listed above. Where suitable habitat was identified, its likelihood to provide an important role in maintaining or restoring the qualifying features at a favourable conservation status (i.e. to be functionally linked) was taken into consideration.
- 6.6.4 The majority of qualifying features associated with the Habitats sites listed above (as detailed in Appendix C) are specifically associated with rivers, streams and wetland / fen habitat types. However, a number of bird species associated with the Broadland SPA and Broadland Ramsar may potentially use the surrounding landscape for foraging and/or nesting. For example, the Bewick's swan (*Cygnus columbianus bewickii*), Whooper swan (*Cygnus cygnus*), Eurasian wigeon (*Anas penelope*), Pink footed goose (*Anser brachyrhynchus*) and Greylag goose (*Anser anser*) forage on farmland for leftover potatoes and grains; the hen harrier (*Circus cyaneus*) and Eurasian marsh harrier (*Circus aeruginosus*) predate on small birds and mammals. Unlike the hen harrier, the marsh harrier may also use the wider landscape for breeding⁶⁰.
- 6.6.5 The Broadland SPA and Broadland Ramsar sites have therefore been scoped into the HRA for further consideration in terms of screening of habitat fragmentation and/or loss.

6.7 Habitats sites

- 6.7.1 Table 6.3 provides a summary of the scoping outputs in terms of Habitats sites which will form the basis of the HRA screening assessment.

⁶⁰ <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/>

Table 6.3: Scoping summary of potential pathways of impact to Habitats sites within VCHAP HRA study area

Habitats sites	Air Pollution	Water quality and water quantity	Public Access and Disturbance (recreational pressure and urbanisation effects)	Habitat Loss and Fragmentation
River Wensum SAC	No threat or pressure	Vulnerable	No threat or pressure	No threat or pressure
Norfolk Valley Fens SAC	Vulnerable	Vulnerable	Vulnerable	No threat or pressure
The Broads SAC	Vulnerable	Vulnerable	Vulnerable	No threat or pressure
Broadland SPA	Vulnerable	Vulnerable	Vulnerable	Vulnerable
Broadland Ramsar	Vulnerable	Vulnerable	Vulnerable	Vulnerable
Breydon Water SPA	No threat or pressure	Vulnerable	Vulnerable	No threat or pressure
Breydon Water Ramsar	No threat or pressure	Vulnerable	Vulnerable	No threat or pressure
Great Yarmouth North Deans SPA	No threat or pressure	No threat or pressure	Vulnerable	No threat or pressure
Winterton-Horsey Dunes SAC	No threat or pressure	No threat or pressure	Vulnerable	No threat or pressure
Paston Great Barn SAC	No threat or pressure	No threat or pressure	No threat or pressure	No threat or pressure
Overstrand Cliffs SAC	No threat or pressure	No threat or pressure	No threat or pressure	No threat or pressure
Waveney & Little Ouse Valley Fens SAC	Vulnerable	No threat or pressure	No threat or pressure	No threat or pressure
Redgrave and South Lopham Fens Ramsar	Vulnerable	No threat or pressure	No threat or pressure	No threat or pressure

Breckland SAC	Vulnerable	No threat or pressure	Vulnerable	No threat or pressure
Breckland SPA	Vulnerable	No threat or pressure	Vulnerable	No threat or pressure
Benacre to Easton Bavents Lagoons SAC	No threat or pressure	No threat or pressure	No threat or pressure	No threat or pressure
Benacre to Easton Bavents Lagoons SPA	Vulnerable	No threat or pressure	No threat or pressure	No threat or pressure
Dew's Ponds SAC	No threat or pressure	No threat or pressure	No threat or pressure	No threat or pressure
The Wash and North Norfolk Coast SAC	No threat or pressure	No threat or pressure	Vulnerable	No threat or pressure
Roydon Common and Dersingham Bog SAC	No threat or pressure	No threat or pressure	No threat or pressure	No threat or pressure
Roydon Common Ramsar	No threat or pressure	No threat or pressure	No threat or pressure	No threat or pressure
Dersingham Bog Ramsar	No threat or pressure	No threat or pressure	No threat or pressure	No threat or pressure
The Wash SPA	No threat or pressure	No threat or pressure	Vulnerable	No threat or pressure
The Wash Ramsar	No threat or pressure	No threat or pressure	Vulnerable	No threat or pressure
The Greater Wash SPA	No threat or pressure	No threat or pressure	No threat or pressure	No threat or pressure
North Norfolk Coast SPA	No threat or pressure	No threat or pressure	Vulnerable	No threat or pressure
North Norfolk Coast SAC	No threat or pressure	No threat or pressure	Vulnerable	No threat or pressure
North Norfolk Coast Ramsar	No threat or pressure	No threat or pressure	Vulnerable	No threat or pressure

Southern North Sea SAC	No threat or pressure	No threat or pressure	No threat or pressure	No threat or pressure
Outer Thames Estuary SPA	No threat or pressure	No threat or pressure	No threat or pressure	No threat or pressure
Hainsborough, Hammond and Winterton SAC	No threat or pressure	No threat or pressure	No threat or pressure	No threat or pressure

7 Screening (HRA Stage 1)

7.1 Policy and allocations pre-screening

7.1.1 Each policy and allocation of the Regulation 19 Publication version of the VCHAP has been appraised against the HRA pre-screening criteria (see Table 4.1), taking into consideration case law and best practice. Appendix E provides the output of this screening exercise. It is noted that this screening exercise was undertaken at Regulation 18 and has been updated at Regulation 19 to capture changes to the VCHAP which have occurred over the plan making period.

7.1.2 It is concluded that LSEs, either from the VCHAP alone or in- combination with other plans or projects, could be screened out for some elements of the VCHAP. This is because they fell into the following categories (see Table 4.1 for a description of each category):

- Category B: Policies listing general criteria for testing the acceptability / sustainability of proposals;
- Category D: Environmental protection / site safeguarding; and
- Category F: Policies or proposals that cannot lead to development or other change.

7.1.3 A number of policies were however considered likely to have an LSE on the basis of this assessment as they fell into the following categories:

- Category I: Policies or proposals with a likely significant effect on a site alone; and
- Category L: Policies or proposals which might be likely to have a significant effect in combination.

7.2 Air quality screening

7.2.1 HRA work undertaken in support of the GNLP concluded that no new roads are proposed within 200m of any Habitats site, and notes that the siting of proposed allocations further than 1km from any Habitats site indicates that road traffic associated with the developments would be sufficiently far that there would be no air pollution impacts. To ensure a consistent approach is taken in the VCHAP HRA, a similar method has been adopted in applying Natural England's screening methodology when asking 'determine if the plan will give rise to emissions which are likely to reach a Habitats site'. There are three allocations within 1km of a Habitats site (as listed below).

- Rockland St Mary – VCROC1 – Approximately 450m to the west of the Broads SAC, Broadland SPA and Broadlands Ramsar.
- Gillingham – VCGIL1 – Approximately 665m to the east of the Broads SAC, Broadland SPA and Broadlands Ramsar.
- Geldeston – VCGEL1 - Approximately 716m to the west of the Broads SAC, Broadland SPA and Broadlands Ramsar.

- 7.2.2 A review of aerial mapping data indicates that, with the exception of the Brecklands SAC and SPA, there are only short sections of road within 200m of each Habitats site when compared against the overall coverage of each designation. Given the scale of development proposed at the VCHAP allocations, the rural nature of roads across Norfolk as a whole, the dispersed nature of all allocations and, importantly, taking a consistent approach to the overarching GNLP HRA, air quality impacts have been screened out of the assessment alone and in-combination. It is noted that this approach is a departure from Natural England's screening guidance to LPAs⁶¹. Given the small-scale nature of housing proposed across the village cluster allocations, traffic modelling has not been undertaken as the costs for doing this would be disproportionate. Traffic data was therefore not available to compare against air quality impact screening thresholds.

7.3 Water screening

- 7.3.1 A number of allocations proposed within the VCHAP are located within the hydrological catchment of the Broads SAC and Broadland Ramsar which are sensitive to nutrient enrichment (see Section 3.3). No allocation is within the River Wensum SAC nutrient neutrality hydrological catchment and therefore this Habitats site can be screened out.
- 7.3.2 Breydon Water Ramsar and Breydon Water SPA are located adjacent to the River Yare, downstream of the Plan area and within close proximity to a number of allocations in the west of the Plan area. In addition, one component of the Norfolk Valley Fens SAC (underpinned by Flordon Common SSSI) is within the Plan area and downstream of VCHAP allocations.
- 7.3.3 Hydrological impacts at these sites are therefore screened in for further consideration in the HRA process through Appropriate Assessment.

7.4 Public access and disturbance screening

- 7.4.1 The screening exercise indicates that all allocations are located in one or more recreational ZOI for the Habitats sites listed in Table 6.2 and therefore potential in-combination recreational impacts have been screened into the HRA process for further consideration in the Appropriate Assessment. Two allocations are linked via the existing Public Rights of Way (PRoW) network to components of the Broadlands SPA and Broadlands Ramsar site and therefore alone impacts are considered possible. Recreational impacts are unlikely at any other Habitats site.
- 7.4.2 No allocation is located within 400m of any Habitats site and therefore urbanisation LSEs can be screened out.

⁶¹ 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: 18/05/22]

7.5 Habitat loss and fragmentation screening

7.5.1 A screening review has been undertaken of habitat types at each allocation and possible opportunities for them to provide functionally linked / supporting habitat for the qualifying features of the Broadland SPA and Broadland Ramsar designations. This included land for foraging, roosting, nesting and migrating. In particular, the review took into consideration the potential of each allocation to provide an important role in maintaining or restoring the qualifying features at a favourable conservation status.

7.5.2 The output of this review is presented in Appendix E. The following factors were explored at each allocation site:

- Distance from the designated site (sites closer to components of the SPA and/or Ramsar site are more likely to provide roosting and /or foraging opportunities for birds).
- Site characteristics including details on:
 - Habitat type
 - Use as agricultural field
 - Visibility (for example are there unrestricted sight-lines to designated sites)
 - Details of any field boundaries (trees/hedgerows/field drains)
 - Details of any permanent waterbodies, areas of seasonal flooding
- The size of the site
- Details of any existing factors (where available) that may affect the habitat suitability, including:
 - Existing PRoW and their usage, especially by users with dogs
 - Proximity to existing built up areas
 - Existing farming practices
 - Noise and visual disturbance such as busy road and rail infrastructure
 - Presence of large and/or multiple overhead power lines

7.5.3 All allocations are situated on the edge of existing settlements, within village clusters, and are therefore in close proximity to existing development and road infrastructure associated with these villages. These features may provide a source of disturbance to birds. In addition, due to their distance from the designations (all greater than 400m), the overall small size of each allocation, absence of water bodies and presence of features such as hedgerows, power lines and trees which restrict bird sight lines, it can be concluded that habitat loss and fragmentation effects can be screened out of the HRA.

7.6 Screening conclusion

- 7.6.1 As required under Regulation 105 of the Habitats Regulations, an assessment has been undertaken of LSEs of the VCHAP upon Habitats sites. The VCHAP is not directly connected with or necessary to the management of any Habitats site. The screening checks (contained at Appendix E) indicate the VCHAP has the potential to have water and recreational LSEs on a number of Habitats sites, both alone, and for a number of policies / allocations, in-combination. The screening assessment takes no account of mitigation measures that the VCHAP may incorporate to mitigate adverse impacts upon Habitats sites. It is therefore concluded that the VCHAP will be screened into the HRA process. The next stage of the HRA process is Stage 2 - Appropriate Assessment. This assessment will focus on water and recreational LSEs.

8 Appropriate Assessment – Water Impacts

8.1 Introduction

8.1.1 SNVC Objective 1 – Meet housing needs – was screened in as it will trigger development with potential for LSEs in-combination with other plans and projects upon water quality and quantity. All village cluster allocation policies set out in the VCHAP when taken cumulatively, were considered to have the potential to cause LSEs in terms of a change in water quality and water quantity at the Habitats sites listed below due to hydrological connectivity. This is based on their location upstream from Habitats sites and their situation within the Anglian River Basin and the Broadland Rivers surface water management catchment area.

- Breydon Water Ramsar;
- Breydon Water;
- Broadland SPA;
- Broadland Ramsar;
- Norfolk Valley Fens SAC. and
- The Broads SAC;

8.1.2 The following village cluster policy allocations are located within the nutrient neutrality catchment associated with the Broads SAC and the Broadland Ramsar designations. These allocations were therefore considered likely to have significant water quality impacts alone at these Habitats sites.

- Policy VC ASL1 - Land off Church Road, Aslacton
- Policy VC GRE1 - North of High Green, west of Heather Way, Great Moulton
- Policy VC GRE2 – Land north of High Green opposite White House Farm Bungalow
- Policy VC BAR1 – Land at Cock Street and Watton Road Barford
- Policy VC BB1 – Corner of Norwich Road and Bell Road, Barnham Broom
- Policy VC BAW1 - Land to the east of Stocks Hill
- Policy VC BUN1 -Land to the north of Bunwell Street, Bunwell
- Policy VC BUN2 – Land opposite Lilac Farm, Bunwell Street
- Policy VC CAR1 – Land west of Rode Lane
- Policy VC HEM1 - Land at Millfields, Hempsall
- Policy VC LM1 - South of School Lane and East of Burnthouse Lane, Little Melton
- Policy – VC MUL1 – Land east of Bluebell Road and north of The Rosery Mulbarton
- Policy VC SWA1 - Land off Bobbins Way, Swardeston
- Policy BRA1 - Land at Norwich Road, Bracon Ash
- Policy VC NEW1 - Land off Alan Avenue, Newton Flotman
- Policy NEW2 – Land adjacent to Alan Avenue
- Policy VC SPO1 - Land west of Bunwell Road, Spooner Row

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- Policy VC SPO2 Land South of Station Road, Spooner Row
 - Policy VC SPO3 – Land at School Lane
 - Policy VC SPO4 – Land at Chapel Road
 - Policy VC – Land on Main Road;
 - Policy VC STO1 - Land north of Long Lane
 - Policy VC TAC1 - Land to the west of Norwich Road
 - Policy VC TAC2 – Land adjacent The Fields
 - Policy VS TAS1 – North of Church Road, Tasburgh
 - Policy VC WIC1 - Land to the south of Wicklewood Primary School
 - Policy VC WIC2 - Land off Hackford Road
 - Policy VC WIC3 – Land at Hackford Road
 - Policy VC ASH1 - Land west of New Road, Ashwellthorpe

8.1.3 The following Appropriate Assessment focuses on assessing more precisely the ecological impacts associated with a deterioration in water quality and quantity due to VCHAP growth at each Habitats site in view of its qualifying features and conservation objectives.

8.2 Mitigation

8.2.1 Water efficiency is now required by the Norfolk Strategic Planning Framework for local plans across the county⁶². Under this framework the Norfolk Authorities have agreed that when preparing Local Plans, they will seek to include the optional higher water efficiency standard (110 litres/per person/per day) for residential development. They have also agreed through this framework to provide regular and timely updates to each other on the delivery of development sites and proposed utility projects to ensure that development is aligned with water and wastewater infrastructure.

8.2.2 GNLP Policy 2 – Sustainable Communities – supports efficient water management. It requires development to protect water quality, both surface and groundwater, and be water efficient. To achieve the latter it states that:

- Housing development will meet the Building Regulations part G (amended 2016) water efficiency higher optional standard; and
- Non-housing development will meet the BREEAM “Very Good” water efficiency standard, or any equivalent successor.

8.2.3 It also notes that if the potential to set more demanding standards locally is established by the Government, the highest potential standard will be applied in Greater Norwich.

8.2.4 Policy 4 of the GNLP – Strategic Infrastructure – requires water supply and sewerage network improvements for new development, including the waste-water network at Whitlingham water recycling centre, the Yare Valley sewer and elsewhere to protect water quality and designated habitats.

⁶² Norfolk strategic Planning Framework. Shared Spatial Objectives for a Growing County and Emerging Statement of Common Ground. Available at: <https://www.norfolk.gov.uk/-/media/norfolk/downloads/what-we-do-and-how-we-work/policy-performance-and-partnerships/partnerships/strategic-member-forum/draft-norfolk-strategic-framework.pdf> [Date Accessed: 21/11/22]

- 8.2.5 A number of the village allocation policies require early engagement between developers and Anglian Water regarding the capacity of receiving water recycling centres and the need to phase sites until capacity is available. They also require consultation with the Environment Agency to ensure water quality is not adversely affected.
- 8.2.6 Following the advice received from DLUHC and Natural England in relation to nutrient neutrality, to ensure compliance with the Habitats Regulations, the Council (as the Competent Authority) cannot lawfully grant planning permission unless it can conclude that development within the catchment of the Broads SAC and Broadlands Ramsar site will not have an adverse effect. All development within this catchment area is therefore required to demonstrate nutrient neutrality and be accompanied by an application with a shadow HRA.
- 8.2.7 The Norfolk Authorities are currently working together to ensure consistency of approach on Nutrient Neutrality. Royal Haskoning are working on behalf of the Authorities to explore the identification of mitigation solutions for the short, medium, and long term. Developers are also free to identify their own solutions for achieving nutrient neutrality.
- 8.2.8 As set out in Section 2.1, the GNLP is currently at examination. GNLP policy will be updated and considered by the Inspector during 2023 as part of the ongoing Examination. Policy updates will address the issue of nutrient neutrality and will secure an overarching mitigation policy framework to allow development to come forward. This will be supported by evidence which will give certainty that development outlined in the GNLP (and VCHAP) within the catchment of the Broads SAC and Broadlands Ramsar site can be delivered with no adverse impacts on site integrity (either alone or in combination).

8.3 Water Quantity Appropriate Assessment

- 8.3.1 Anglian Water is the potable water provider for the Greater Norwich Authorities. 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 stress⁶³.
- 8.3.2 The Anglian River Basin Management Plan (RBMP)⁶⁴ 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. It provides strategic level policy guidance in relation to baseline classification of water bodies, statutory objectives for protected areas and water bodies and a summary of measures to achieve statutory protection.

⁶³ Environment Agency. Areas of water stress: final classification. Available at:
<https://www.gov.uk/government/publications/water-stressed-areas-2021-classification> [Date Accessed: 18/11/22].

⁶⁴ Environment Agency (2015) Anglian River Basin Management Plan. Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718327/Anglian_RB_D_Part_1_river_basin_management_plan.pdf [Date Accessed: 28/10/22]

- 8.3.3 The Anglian RBMP outlines a number of measures to tackle water management issues and achieve a series of environmental objectives set out within the plan. Local measures are set out on a catchment basis. As noted, the Plan area sits predominantly within the Broadland Rivers management catchment area. Within this catchment the priority river basin management issues include tackling diffuse pollution from rural areas, physical modification of rivers and lakes, and pollution from wastewater. An HRA was undertaken alongside the preparation of the RBMP⁶⁵. This HRA concluded that, at the strategic plan level, and given the range of potential mitigation options available, the RBMP is not likely to have any significant effects on any Habitats site, alone or in combination with other plans or projects. It notes the requirement for project level HRA where necessary for lower tier plans.
- 8.3.4 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. Anglian Water is currently working on their next WRMP – WRMP24 – with a draft submitted to Defra in October 2022⁶⁶. Their current WRMP⁶⁷, which covers the period to 2045, sets out a series of measures to ensure the water supply - demand balance is achieved. This includes measures such as smart metering, leakage reduction, water efficiency, strategic water planning / transfers. The WRMP indicates that the total impact to the supply-demand balance is 294 MI/d by 2045 which results in a reduction in the baseline supply-demand balance from a total regional surplus of 150 MI/d in 2020, to a total regional deficit of -30 MI/d by 2025 and -144 MI/d by 2045. Following application of the measures the WRMP concludes that adequate water supplies will be available up to 2045 and will cater for proposed levels of growth in the region.
- 8.3.5 An HRA was undertaken alongside the preparation of the current WRMP⁶⁸. This concluded there would be no adverse effects on the integrity of any Habitats site but highlighted the importance of lower tier project-level HRA of future plans, projects, or permissions which may act in-combination with WRMP options to refine mitigation strategies and assessment conclusions once appropriate detailed design is available.

⁶⁵ Environment Agency (2015). River basin management plan for the Anglian River Basin District Habitats Regulations Assessment Updated December 2015. Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/496430/RBMP_HRA_Anglian_FINAL_Jan_2016.pdf [Date Accessed: 28/10/22]

⁶⁶ Anglian Water. WRMP24 and a Best Value Plan. Available at:
<https://www.anglianwater.co.uk/siteassets/household/about-us/wrmp24-preconsultation.pdf> [Date Accessed: 18/11/22].

⁶⁷ Anglian Water. 2019. Water Resources Management Plan 2019. Available at:
<https://www.anglianwater.co.uk/siteassets/household/about-us/wrmp-report-2019.pdf>. [Date Accessed: 28/10/22]

⁶⁸ Mott McDonald. 2019. Anglian Water - Water Resources Management Plan Habitats Regulations Assessment Task II: Appropriate Assessment Final for Publication.

- 8.3.6 Water companies divide their supply into Water Resource Zones (WRZs). South Norfolk lies within the Norwich and the Broads WRZ and Norfolk Rural WRZs. The AECOM WCS⁶⁹ looked at the impact of growth in the whole GNLP area upon water supply (and as such water supply in the VCHAP area)⁷⁰. It also looked at the implication of growth upon ecologically designated sites including Habitats sites. The WCS sets out options to ensure the minimisation of water use over the GNLP period and explored a number of water neutrality scenarios which were taken into considered in the development of GNLP policies.
- 8.3.7 CAMS are six-year water abstraction licensing strategies developed by the EA for managing water resources at the local level, produced for every river catchment area in England and Wales. The CAMS process comprises three stages, including resource assessment and management (RAM), interpreting the results of RAM to achieve sustainable abstraction and an abstraction licencing (AL) strategy. It aims to assess the amount of water available for further abstraction licensing, taking into account what the environment needs and implement the RBMPs and Water abstraction plan⁷¹ into licencing policy. Habitats sites within the Plan area lie within the Broadland Catchment Abstraction Management Area CAMS area⁷². Abstraction licences, issued through the CAMS process, outline the site-specific flow standards developed for Habitats sites and measures to prevent unsustainable abstraction. Changes to abstraction and discharge regimes as a result of new development would not be permitted unless the applicant can demonstrate compliance with the Habitats Regulations.
- 8.3.8 Water supply issues will be addressed through the higher-level water planning framework (RBMP, WRMP and CAMS) and GNLP policies to improve water efficiency and ensure adequate water supply for growth and to meet the requirements of designated sites. Therefore it can 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 VCHAP.

8.4 Water Quality Appropriate Assessment

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

⁶⁹ AECOM. January 2021. Greater Norwich Water Cycle Study. Final Draft.

⁷⁰ AECOM. January 2021. Greater Norwich Water Cycle Study. Final Draft.

⁷¹ 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: 09/11/22]

⁷² Environment Agency. May 2017. Broadland Abstraction Licensing Strategy.

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- 8.4.2 The WFD sets out areas which require special protection. These include areas designated for “the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection including relevant Natura 2000 sites designated under Directive 92/43/EEC (*the Habitats Directive*) and Directive 79/409/EEC (*the Birds Directive*)”⁷³.
- 8.4.3 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 water bodies. Each of the WRCs 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 to WRC through the issue of permits.
- 8.4.4 GNLP Policy 2 requires new development to protect water quality and advocates the use of sustainable urban drainage systems (SuDS) to protect water quality and provide environmental benefits. Funding for water infrastructure improvements will be captured through developer charges for connections to water supply network and foul sewerage networks. To ensure that development does not have a detrimental impact on the water environment, particularly in relation to water quality and the potential for impacts on the water-based sites protected under the Habitats Regulations, GNLP Policy 4 requires adequate water infrastructure to be in place capable of accommodating major development up front.
- 8.4.5 These policy provisions will address urbanisation run off at Habitats sites which are hydrologically connected to the Plan area and not sensitive to nutrient enrichment; Breydon Water Ramsar, Breydon Water SPA and Norfolk Valley Fens SAC.
- 8.4.6 As noted in Section 8.2, following examination, the GNLP will be updated to address the issue of nutrient neutrality and provide an overarching mitigation policy framework to allow development to come forward in the GNLP and VCHAP. This will be supported by a robust evidence base to demonstrate that the mitigation can be delivered with certainty and beyond reasonable scientific doubt.
- 8.4.7 It is not possible at this stage to rule out adverse impacts on the integrity of the Broads SAC and Broadland Ramsar site due to nutrient enrichment from development set out in the VCHAP without this policy. Once the GNLP policy has been updated to address this issue the VCHAP HRA will be updated to reflect this.

⁷³ Official Journal of the European Communities (2000) Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:5c835afb-2ec6-4577-bdf8-756d3d694eeb.0004.02/DOC_1&format=PDF [Date Accessed: 19/04/21]

9 Appropriate Assessment – Recreation Impacts

9.1 Introduction

- 9.1.1 SNVC Objective 1 – Meet housing needs – was screened in as it will trigger development with potential for likely significant recreational impacts in-combination with other plans and projects. Based on a review of established recreational ZOIs (as presented in 6.5 Section), all village cluster allocation policies set out in the VCHAP were considered to have the potential to increase recreational pressures in-combination upon one or more of the Habitats sites listed in Table 6.2. A review of mapping data indicates that Allocation Policies VC ROC1 (Land south of New Inn Hill) and VC GEL1 (North of Kell's Way, Geldeston) are directly linked to components of the Broadland SPA and Broadland Ramsar site through the local Public Right of Way (PRoW) network and as such may result in alone recreational impacts upon these sites.
- 9.1.2 The following Appropriate Assessment focuses on assessing more precisely the ecological impacts associated with increased recreational pressure due to VCHAP growth at each Habitats site in view of its qualifying features and conservation objectives.

9.2 Mitigation

- 9.2.1 The Norfolk Strategic Planning Framework includes county-wide policy objectives on environmental protection, landscape protection and biodiversity⁷⁴. It recognises the ecological importance of the area and the need to protect these features from development in Norfolk through a strategic Green Infrastructure (GI) strategy.
- 9.2.2 As noted in Section 6.5, a Norfolk-wide study, known as GIRAMS, provides two overarching recommendations in relation to GI and RAMS to mitigate adverse impacts that might arise from visitor pressure related to new housing developments at sensitive Habitats sites (listed in Table 6.2).
- 9.2.3 GI and RAMS provide a two-stage approach to recreational mitigation at Habitats sites. Firstly, GI seeks to avoid impacts on the protected sites through the provision of sufficient and suitable informal recreational greenspace elsewhere. The aim of this is to reduce the number of visits to the protected sites. Secondly, a financial contribution from each new home is to be made towards direct mitigation measures on the protected sites (RAMS).
- 9.2.4 As such, Policy 3 of the GNLP – Environmental Protection – requires all residential development to address the potential visitor pressure, caused by residents of new development, that would detrimentally impact on sites protected under the Habitats Regulations through the following:

⁷⁴ Norfolk Strategic Planning Framework. Shared Spatial Objectives for a Growing County and Emerging Statement of Common Ground. Available at: <https://www.norfolk.gov.uk/-/media/norfolk/downloads/what-we-do-and-how-we-work/policy-performance-and-partnerships/partnerships/strategic-member-forum/draft-norfolk-strategic-framework.pdf> [Date Accessed: 21/11/22]

- The payment of a contribution towards the cost of mitigation measures at the protected sites (as determined under the Norfolk GIRAMS⁷⁵ plus an allowance for inflation); and
- The provision or enhancement of adequate GI, either on the development site or nearby, to provide for the informal recreational needs of the residents as an alternative to visiting the protected sites. This will equate to a minimum of 2 hectares per 1,000 population and will reflect Natural England's Accessible Natural Greenspace Standard.

9.2.5 The Greater Norwich Infrastructure Plan⁷⁶ was prepared in support of the GNLP and includes the South Norfolk Council area. It looks at key infrastructure requirements that support the major growth locations including GI. It sets out a number of projects for delivery of GI. Whilst this not intended to replace detailed site survey and design work, it is intended to assist the Development Management process.

9.2.6 South Norfolk Council provide planning advice for new development with the potential for recreational impacts upon Habitats sites. This includes a shadow HRA template and accompanying guidance notes⁷⁷. These reflect the requirements of GIRAMS and require a financial contribution towards RAMS and provision of GI. Where GI provision cannot be met on-site, a relevant commuted sum is sought based upon the total number of dwellings and respective housing mix.

9.2.7 As set out in Section 2.1, the GNLP is currently at examination. Once adopted, policy set out in the GNLP, which embeds the requirements of the GIRAMS, will apply to development proposed in the VCHAP.

9.3 Recreational impacts Appropriate Assessment

9.3.1 As noted in Section 6.5, visitor surveys were undertaken in 2015 and 2016 at various locations at the Habitats sites set out in Table 6.2⁷⁸. These surveys highlighted the varying level of access across these sites, including access from the public rights of way network, access at nature reserves with marked trails and hides, open access land with right of access on foot under the CRoW Act (2000) and access via water-based activities.

9.3.2 The survey work provided a summary of potential effects from increased recreational pressure to the qualifying features of the Habitats sites across Norfolk. These effects include disturbance to breeding birds, wintering / passage birds and non-avian interest, trampling and erosion of habitats, increased fire risk, eutrophication (from dog fouling) and contamination.

⁷⁵ Place Services. March 2021. Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy. Available at: <https://www.southnorfolkandbroadland.gov.uk/downloads/file/4390/norfolk-gi-rams-strategy-march-2021> [Date Accessed: 22/11/22]

⁷⁶ Greater Norwich Growth Board. May 2020. Greater Norwich Infrastructure Plan. <https://www.greaternorwichgrowth.org.uk/delivery/greater-norwich-infrastructure-plan/>

⁷⁷ <https://www.southnorfolkandbroadland.gov.uk/downloads/download/807/green-infrastructure-recreation-avoidance-mitigation-strategy>

⁷⁸ Panter, C., Liley, D., Lowen, S., 2017. Visitor surveys at European Protected Sites across Norfolk in 2015 and 2016. Unpublished report by Footprint Ecology for Norfolk County Council.

- 9.3.3 A review of Natural England SIP information and Supplementary Advice highlighted the key sensitivities at each site to recreational disturbance. At the Broads Sites⁷⁹ the SIP indicates that habitats associated with the SAC and wintering waterfowl are particularly sensitive to disturbance. Water based recreational disturbance is noted to be a particular issue. At the Norfolk Brecks sites⁸⁰ recreational impacts upon nightjar and woodlark populations are a particular issue, with SAC features noted to be vulnerable to eutrophication, unauthorised fires and disturbance of soils. At the Wash and North Norfolk coast sites⁸¹ a range of recreational threats are identified for the bird qualifying species including boating, motorised vehicles, bird/wildlife watching and dog walking. Natural England's Supplementary Advice for the Norfolk Valley Fens SAC indicates that the *Molinia* meadows and purple moor-grass (*Molinia caerulea*) meadows are sensitive to recreational pressures. At the East Coast sites,⁸² SIP data indicates these sites are at carrying capacity in terms of recreational disturbance, with the breeding Little terns, as well as the lichen dune grassland and dune heath being particularly sensitive to disturbance.
- 9.3.4 The research undertaken by Footprint Ecology provides an assessment of the cumulative, in-combination effects of development⁸³ across all local planning authorities in Norfolk. It identifies the following implications of this growth at sensitive Habitats site:
- A 14% increase in access by Norfolk residents to the sites surveyed (in the absence of any mitigation), as a result of new housing during the plan period (at the time of the survey).
 - The increase will be most marked in the Brecks sites, where the study predicts an increase of around 30%. For the Broads sites the figure is 14%; 11% for the East Coast sites; 9% for North Norfolk sites; 15% for Roydon & Dersingham; 28% for the Valley Fens SAC and 6% for the Wash sites⁸⁴.
 - For parts of the North Coast, the Broads, and parts of the East Coast, the links between an increase in local housing and recreation impacts were shown to be less clear as these sites attract a high number of visitors coming from a wide geographical area, both inside and outside Norfolk. There are therefore likely to be pressures from overall population growth both from within the county and further afield⁸⁵.
- 9.3.5 An increase in housing set out in the VCHAP, in-combination with other growth in Norfolk, has the potential to further increase recreational pressures at these sensitive Habitats sites and result in adverse impacts upon their qualifying features.

⁷⁹ Broadland SPA, Broadland Ramsar, Breydon Water SPA, The Broads SAC.

⁸⁰ Breckland SPA and Breckland SAC.

⁸¹ The Wash SPA, The Wash and North Norfolk Coast SAC, The Wash Ramsar, North Norfolk Coast SAC, North Norfolk Coast SPA and North Norfolk Coast Ramsar.

⁸² Winterton – Horsey Dunes SAC and Great Yarmouth North Denes SPA.

⁸³ At the time the assessment was undertaken (2015/2016).

⁸⁴ Note these figures relate to the surveyed access points only and to visits by Norfolk residents

⁸⁵ Panter, C., Liley, D., Lowen, S., 2017. Visitor surveys at European Protected Sites across Norfolk in 2015 and 2016. Unpublished report by Footprint Ecology for Norfolk County Council.

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- 9.3.6 GNLP policy will ensure that mitigation set out in the GIRMAS is secured for all development in the Greater Norwich area, including development set out in the VCHAP. This will address the in-combination impact of increased recreational pressure from growth upon Habitats sites. As set out in the South Norfolk Shadow HRA template guidance notes⁸⁶, depending on the size of the development, mitigation outlined in GIRMAS will be secured through either Section 106 agreements or via a Unilateral Undertaking under Section 106 of the Town and Country Planning Act 1990 at the planning permission stage. All applications within the specified ZOI will also need to be supported by a shadow HRA.
- 9.3.7 As noted in Section 9.1, two policy allocations (VC GEL1 and VC ROC1) were identified in the screening process to be linked via the current PRoW network to the closest component of the Broadlands SPA and Broadlands Ramsar site. Given their proximity and potential connection, there is a risk that recreational pressures from dog walking in particular may increase at these sites and birds may be disturbed.
- 9.3.8 At allocation VC GEL1 (Land off Kells Way), the PRoW network runs from the settlement of Geldeston in a southerly direction to the River Waveney and then follows this along the southern boundary of the closest component of the Broadlands SPA and Ramsar (approximately 735m to the south of the allocation). A review of aerial photography indicates that the footpath which follows the course of the River Waveney is separated from these designations by a mature hedge / tree buffer. No PRoWs extend into the designated sites themselves. Given the total allocation is for 20 dwellings, and taking into consideration the screening effect provided by the vegetation along the river, adverse alone impacts from this allocation upon the site integrity of the Broadlands SPA and Broadlands Ramsar site can be ruled out. In-combination impacts will be addressed through GIRMAS mitigation as outlined above.
- 9.3.9 At allocation VC ROC1 (South New Inn Hill / West Lower Road), the PRoW network runs in a northerly direction from the allocation (and settlement of Rockland St Mary) to the closest component of the Broadlands SPA and Broadlands Ramsar site (approximately 451m to the north of the allocation). At its closest point, the PRoW network passes adjacent to these designated sites, but is separated by a block of woodland within the designation. The PRoW network also runs to the south of these designated sites in an easterly direction, but is on the opposite bank of the River Yare at this point. Given the total allocation is for 25 dwellings, and taking into consideration the screening effect provided by woodland and river, adverse alone impacts from this allocation upon the site integrity of the Broadlands SPA and Broadlands Ramsar site can be ruled out. In-combination impacts will be addressed through GIRMAS mitigation as outlined above.
- 9.3.10 In conclusion there will be no adverse impacts upon the integrity of any Habitats site, either alone or in-combination, as a result of growth set out in the VCHAP.

⁸⁶ <https://www.southnorfolkandbroadland.gov.uk/downloads/download/807/green-infrastructure-recreation-avoidance-mitigation-strategy>

10 Conclusions

10.1 Summary

- 10.1.1 The VCHAP is not directly connected with or necessary to the management of any Habitats site. A screening assessment was therefore undertaken, taking no account of mitigation. This identified a number of likely significant effects associated with the VCHAP at Habitats sites. The HRA therefore progressed to an Appropriate Assessment. This detailed assessment looked at the impacts of a change in water quality and quantity and recreational impacts upon the qualifying features and conservation objectives of each Habitats site.
- 10.1.2 Water impacts were identified for a number of hydrologically connected Habitats sites. Water quantity issues will be addressed through the higher-level water planning framework (RBMP, WRMP and CAMS) alongside GNLP policy and therefore no adverse impacts on Habitats sites, alone or in-combination, in respect of water quantity was concluded. Whilst policy wording set out in the GNLP and VCHAP provides measures to protect the water environment from contaminated run-off, policy wording in respect of nutrient neutrality issues at the Broads SAC and Broadlands Ramsar site has not yet been agreed and incorporated in the GNLP. It is therefore not possible to rule out adverse impacts on the integrity of the Broads SAC and Broadland Ramsar site due to nutrient enrichment impacts without this policy in place. Once the GNLP policy has been updated to address this issue, the VCHAP HRA will be updated to reflect this.
- 10.1.3 Recreational impacts were identified for two allocations alone and for all allocations cumulatively and in-combination with other plans and projects. The Appropriate Assessment included a detail review of accessibility from the two allocations to the closest components of the Broadlands SPA and Broadland Ramsar site. This concluded that risks are unlikely due to the scale of development and route of the PRoW network. Alone impacts on site integrity from these allocations was therefore ruled out. Strategic mitigation set out in the GIRMAS will be secured through GNLP policy which applies to all development set out in the VCHAP. Adverse effects on the integrity of any Habitats site, alone or in-combination, from growth set out in the VCHAP was therefore also ruled out and no further assessment is required.

10.2 Next Steps

- 10.2.1 The purpose of this report is to inform the HRA of the Publication Version of the VCHAP using best available information.
- 10.2.2 The Council, as the Competent Authority, have responsibility to make the Integrity Test, which can be undertaken in light of the conclusions set out in this report.
- 10.2.3 This report will be submitted to Natural England, the statutory nature conservation body, for formal consultation. The Councils must 'have regard' to their representations under the provisions of Regulations 63(3) and 105(2) prior to making a final decision as to whether they will 'adopt' the conclusions set out within this report as their own.

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Ecological Services
Green Infrastructure
Landscape and Visual Impact Assessment
Landscape Character Assessment
Habitats Regulations Assessment
Strategic Environmental Assessment
Sustainability Appraisal



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