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

Regulation 18 HRA Report

May 2021







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LC 654	Document Control Box
Client	South Norfolk Council
Report Title	Habitats Regulations Assessment Regulation 18 - HRA Report
Status	FINAL
Filename	LC-654_South Norfolk_Regulation 18_HRA Report_8_140521SC.docx
Date	May 2021
Author	SC
Reviewed	ND
Approved	ND

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Abbreviations

AA Appropriate Assessment

AADT Annual Average Daily Traffic

APIS Air Pollution Information System

CJEU Court of Justice of the European Union

DfT Department for Transport

DMRB Design Manual for Roads and Bridges

David Tyldesley and Associates

EMS European Marine Site

EU European Union

EUNIS European Nature Information System

GIRAMS Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy

Geographic Information System

GNLP Greater Norwich Local Plan

HDV Heavy Duty Vehicles

HRA Habitats Regulations Assessment

IRZ Impact Risk Zone

IUCN International Union for Conservation of Nature

JNCC Joint Nature Conservation Committee

LPA Local Planning Authority
LSE Likely Significant Effect

N Nitrogen

NE Natural EnglandNO₂ Nitrogen DioxideNOx Nitrogen Oxides

NPPF National Planning Policy Framework

NPPG National Planning Practice Guidance

PRoW Public Right of Way

RBMP River Basin Management Plan

RSPB Royal Society for the Protection of Birds

SAC Special Area of Conservation

SIP Site Improvement Plan
SPA Special Protection Area
SPZ Source Protection Zone

SSSI Site of Special Scientific Interest

SuDS Sustainable Urban Drainage

UK United Kingdom

VCHAP Village Cluster Housing Allocation Plan

WRC Wastewater Recycling Centres

WCS Water Cycle Study

WFD Water Framework Directive

WRC Water Recycling Centre

WRMP Water Resource Management Plan

WRZ Water Resource Zone

WWT Wildfowl and Wetlands Trust

1 Introduction

- 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 new homes in appropriate villages across South Norfolk up to 2038. This is known as the South Norfolk Village Cluster Housing Allocations Plan (VCHAP).
- 1.1.3 Lepus Consulting has been appointed by the Council to undertake a Habitats Regulations Assessment (HRA) to inform and support the preparation of the VCHAP.
- 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: European Sites;
 - Chapter 6: Impact Pathways;
 - Chapter 7: VCHAP Screening (HRA Stage 1);
 - Chapter 8: Next Steps: Appropriate Assessment (HRA Stage 2);
 - Chapter 9: Policy Considerations; and
 - Chapter 9: Conclusions.

1.2 Purpose of this report

1.2.1 The HRA has been prepared in accordance with the Conservation of Habitats and Species Conservation of Habitats and Species Regulations 2017 (as amended)^{2,3}, referred to hereafter as the Habitats Regulations. When preparing a land use plan, councils are required by law to carry out an HRA. The requirement for authorities to comply with the Habitats Regulations when preparing a land use plan is also noted in the Government's online planning practice guidance⁴.

¹ https://www.gnlp.org.uk/

² 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: 29/01/21]

³ The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: https://www.legislation.gov.uk/ukdsi/2019/9780111176573 [Date Accessed: 29/01/21]

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

- 1.2.2 The most effective way to deliver the outputs of HRA is to ensure that it is incorporated into the plan-making process as early as possible. This allows adverse impacts to be avoided in the first instance through strategic planning of options or, where this is not possible, effective mitigation. Mitigation measures can then be designed to avoid, cancel or reduce significant effects following the mitigation hierarchy. Such measures may take the form of guiding principles and policy requirements, drawing on existing best practice. Should mitigation not be possible there may be a need to consider alternatives which may require some more complex changes to a plan.
- 1.2.3 Regular contact with the plan-making team is essential to ensure that the planning and HRA processes run alongside each other effectively and iteratively. This ensures that the plan making team has plenty of time to respond to and incorporate the findings of the HRA process.
- 1.2.4 The purpose of this report is therefore to provide HRA guidance and advice to the Council at the early stages of Local Plan preparation. This Regulation 18 HRA report aims to identify European sites that will be considered in the HRA process through application of a 'source-pathway-receptor' model. In addition, key constraints and opportunities at European sites and likely pathways of impact from the VCHAP are set out. A formal HRA screening assessment of policies and allocations has also been undertaken. Finally, this report highlights methodologies and policy recommendations that will be taken forward in the next steps of the HRA process.

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 Regulation 19 Pre-Submission version of the Draft GNLP has recently been subject to consultation which took place between 1st February and 22nd March 2021.

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 is therefore in the early stages of producing a new local plan document that 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)⁶.
- 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 Regulation 18 consultation version of the VCHAP sets out the proposed Objectives for the VCHAP, as well as a set of Core Policies that will apply to all of the preferred allocation sites. The Core Polices cover standard requirements to deliver sustainable development, housing mix on preferred sites, and design standards.
- The Council has assessed almost 450 sites for possible inclusion in the VCHAP and, following this detailed assessment, the Regulation 18 consultation categorises sites as 'Preferred', 'Shortlisted (reasonable alternative)' or 'Rejected (unreasonable alternative)' and seeks comments upon these.

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

⁶ South Norfolk Local Plan. April 2021. South Norfolk Village Clusters Housing Associations Plan. Draft Version.

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)⁷ and the South Norfolk Local Plan Site Specific Allocations and Policies Document (2015)⁸. However, the 2015 Development Management Policies Document⁹ 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. 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.
- 2.3.2 The sites 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.
- 2.3.3 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.
- 2.3.4 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 both currently working
 towards their Regulation 14 Consultations and both will make their own allocations for
 development based upon housing figures supplied by the Council. The VCHAP sets
 the requirement for the other villages within the VCHAP plan area.
- 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. Instead a maximum of 25 dwellings has been assumed across each village cluster. 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.

⁷ https://www.gnlp.org.uk/node/30

⁸ https://www.south-norfolk.gov.uk/residents/planning/planning-policy/adopted-south-norfolk-local-plan/site-specific-allocations-and

⁹ https://www.south-norfolk.gov.uk/residents/planning/planning-policy/adopted-south-norfolk-local-plan/development-management-policies

3.1.1

3 The HRA process

3.1 Overview

J.i Overview

The HRA process assesses the potential effects of a plan or project on the conservation objectives of European sites designated under the Habitats¹⁰ and Birds¹¹ 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. The Habitats Regulations^{12,13} provide a definition of a European site¹⁴ at Regulation 8 as follows:

- A Special Area of Conservation (SAC);
- A Site of Community importance which has been placed on the list referred to in the third sub-paragraph of Article 4(2) of the Habitats Directive (list of sites of Community importance) before exit day¹⁵;
- An area classified before exit day, pursuant to Article 4(1) or (2) of the old Wild Birds Directive or the new Wild Birds Directive (classification of Special Protection Areas (SPA) or classified after exit day under the retained transposing regulations; or
- A site which before exit day has been proposed to the European Commission in accordance with Article 4(1) of the Habitats Directive, until such time as—
 - the site is designated as a special area of conservation under regulation
 or under a corresponding provision in the other retained transposing regulations; or
 - ii. the appropriate authority gives the appropriate nature conservation body notice of its intention not to designate the site, setting out the reasons for its decision, in accordance with regulation 141A(3).

3.1.2 In addition, the NPPF in England and Wales notes that the following sites should also be given the same level of protection as a European site¹⁶:

¹⁰ 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.

¹¹ 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.

¹² 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: 29/01/21]

¹³ The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: https://www.legislation.gov.uk/ukdsi/2019/9780111176573 [Date Accessed: 29/01/21]

¹⁴ The term European site is taken here to include both European sites and European marine sites.

¹⁵ Exit day from the European Union.

¹⁶ Ministry of Housing, Communities & Local Government (2019). National Planning Policy Framework. Para 176. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_F_eb__2019_revised.pdf [Date Accessed: 05/01/21]

- 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 European sites, pSPA, pSAC and listed or proposed Ramsar sites.
- 3.1.3 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).
- 3.1.4 HRA applies to plans or projects which are likely to have a significant effect on a European 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.
- 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'¹⁷, which forms part F, has therefore been used to prepare this report. The DTA Handbook is used by Natural England, the Government's statutory nature conservation organisation, and is widely considered to be an appropriate basis for the HRA of plans.
- 3.1.6 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 Local Plan would be likely to have a significant effect on a European site. This stage comprises the identification of potential effects associated with the Local Plan on European 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 Local Plan would have a significant adverse effect on the integrity of any European site to be made by the Competent Authority (in this instance South Norfolk Council). This stage comprises an impact assessment and evaluation in view of a European 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 European site.

¹⁷ Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (September) (2013) edition UK: DTA Publications Limited. Available at: www.dtapublications.co.uk

Stage 4. Imperative reasons of overriding public interest and compensatory measures: Considering imperative reasons of overriding public interest and securing compensatory measures.

Article 6(3) Article 6(4) (Regulation 63 or 105) (Regulations 64 & 68 or 107 & 109) Stage 2: Stage 4: Appropriate Stage 3: Imperative reasons Stage 1: Screening for Assessment (AA) Alternative of overriding public likely significant and the Integrity Solutions interest (IROPI) and effects Test compensatory measures Agree the scope and Identify underlying Is the risk and harm to · Can plan be exempted, excluded or eliminated? methodology of AA need for the plan? the site overridden by · Gather information about Undertake AA · Identify whether imperative reasons of the European sites. · Apply the integrity alternative solutions public interest (taking · In a pre-screening process, exist that would account of 'priority' test, considering check whether plan may achieve the further mitigation features where affect European sites, either objectives of the plan where required. appropriate? alone or in combination, · Embed further and have no, or a · Identify and prepare and change the plan as far lesser effect on the as possible to avoid or mitigation into plan delivery of all necessary European site(s)? reduce harmful effects on Consult statutory compensatory the site(s). · Are they financially, measures to protect body and others · In a formal screening legally and technically overall coherence of • Is it possible to decision, decide whether feasible? Natura 2000 network ascertain no adverse plan may have significant effect on integrity? Notify Government

Outline of the four-stage approach to the assessment of plans under the Habitats Regulations

effects on a European site. Assessment is complete Assessment is Assessment is Assessment ends IF IF complete IF There are alternative complete: Either Taking no account of Taking account of A] there are IROPI and solutions to the mitigation measures, mitigation measures, plan: compensatory the plan has no likely plan has no adverse Plan cannot be measures: Plan can be significant effect either effect on integrity of adopted without adopted alone or in combination any European site, modification B] if not, Plan cannot with plans or projects: either alone or in be adopted Plan can be adopted combination:

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Figure 3.1: Stages in the Habitats Regulations Assessment process¹⁸

Plan can be adopted

¹⁸ 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 and have been used as a guide to inform this assessment process. In addition, consideration has been given to comments made by Natural England upon the GNLP HRA work. Table 3.1 provides a summary of the HRA work undertaken to date in support of the GNLP.

Table 3.1: Summary of HRA work undertaken to date to support the GNLP		
HRA Report	Summary of findings	
Habitats Regulations Assessment of Greater Norwich Local Plan Issues and Options stage for Greater Norwich Development Partnership Author: The Landscape Partnership December 2017	This HRA provided an interim assessment at the Regulation 18 Issues and Options stage. It considered alternative housing numbers and options for their distribution. The HRA provided an assessment of impacts upon the following European sites: 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.	
	The HRA applied a number of zones of influence for each potential impact as follows: - 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. The HRA found that the distributional alternatives for housing are likely to have a significant effect on European sites and so further assessment is necessary as the plan develops. Potential significant effects of the GNLP in combination with other plans and projects were noted to include the following:	

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HRA Report	Summary of findings
	 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. 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 European sites. The options 'transport corridors' and 'Cambridge - Norwich tech corridor' were noted to be strong options in terms of avoiding impacts to European sites. Allocations to the north-east of Norwich were marginally outside zones of influence of the popular coastal European sites although as with all options some additional occasional visits to the popular coastal European 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. 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).
Habitats Regulations Assessment of Greater Norwich Regulation 18 Draft Plan for Greater Norwich Development Partnership Author: The Landscape Partnership December 2019	An HRA was undertaken of the Consultation Draft stage v8.1 of the emerging Greater Norwich Local Plan. Impacts considered in the HRA included: - Water cycles (use and disposal); - Traffic related air pollution; - Water pollution or enrichment; and - Increased visitors to European sites. The HRA focused on the same European sites as identified in the Issues and Options HRA (above). The HRA concluded that the GNLP would have no adverse effect upon the integrity of any European site acting alone, subject to the following outstanding matters: • Mitigation of recreational impact upon European 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 European 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 European sites for regular activities such as dog walking. Reference is made to the emerging Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy (GIRAMS) currently in preparation by the Norfolk Authorities. • Satisfactory completion of a Water Cycle Study which demonstrates no adverse impact on European sites. • Update to policy wording to read that 'Habitats Regulations Assessments will be required for small scale tourism accommodation within 1km, and

HRA Report	Summary of findings
	for larger scale tourism accommodation within 10km, of a European site. Habitats Regulations Assessment will also be required for tourism, leisure, cultural and environmental activities which would utilise European sites'. 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 European sites. The overall conclusion was that subject to satisfactory resolution of the outstanding matters there would be no adverse effect upon the integrity of any European site.
Habitats Regulations Assessment of Greater Norwich Regulation 19 Draft Plan for Greater Norwich Development Partnership Author: The Landscape Partnership December 2020	An HRA was undertaken on the Draft Submission Reg 19 stage v1.6 of the emerging Greater Norwich Local Plan. The HRA provided an assessment of impacts upon the same European sites as considered in 2017 and 2019 (above). The following likely significant effects were identified: Increased recreational pressure. Increased pressure on water resources. Water pollution impacts. Air pollution impacts. Increased urbanisation of the countryside. The HRA concluded that there would be no adverse effect upon the integrity of any European site acting alone, subject to the following outstanding matters: 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 European site. It notes that in-combination effects would be taken into consideration through the adoption of the GIRAMS scheme. 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 European site alone or in-combination.

3.2.2 Natural England has been consulted upon the HRA work undertaken in support of the GNLP. The output of this consultation is summarised in **Table 3.2**.

Table 3.2: Review of Natural England HRA related representations

Organisation	Summary of representation
Natural England 21 March 2018	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.

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Organisation	Summary of representation
	Natrual 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)."
Natural England 16 March 2020	Natural England provided comments on the 2019 Regulation 18 version of the HRA. These comments are summarised below.
	- NE note that the European 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.
	- 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 200 m 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 European 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 European 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 European site.

Organisation	Summary of representation
	- 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 European site arising from the GNLP alone.

4 Methodology

4.1 HRA guidance

- 4.1.1 As noted above, the application of HRA to land-use plans is a requirement of the Habitats Regulations (as amended). 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 Assessment¹⁹; 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 European site's qualifying interests. It is intended to ensure that designated European sites are protected from impacts that could adversely affect their integrity, as required by the Birds and Habitats Directives. A step-by-step guide to this methodology is outlined in the DTA Handbook and has been reproduced 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. This process identifies likely significant effects (LSEs) of a plan or project upon a European site, either alone or in combination with other plans or projects. This stage considers the potential 'significance' of adverse effects. Where elements of the plan will not result in an LSE on a European site these may be screened out and not considered in further detail in the process.
- 4.3.2 The screening stage follows a number of steps which are outlined in **Figure 4.1**.

¹⁹ Ministry of Housing, Communities and Local Government (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment

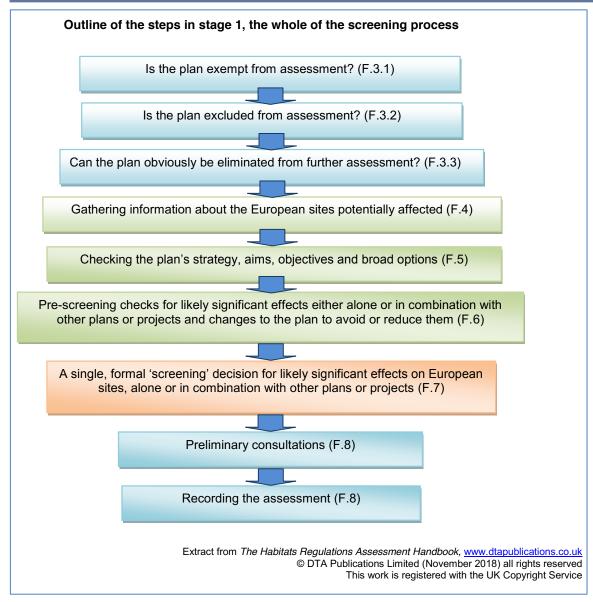


Figure 4.1: Outline of steps in stage 1; the whole screening process

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 European site and as such improve the plan. 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**,

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

and inform the formal screening decision.

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

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

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'"²⁰.
- 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
 - Any event which contributes to the reduction of the size of the habitat of the species within the site.

²⁰Tyldesley, D. (2013) The Habitats Regulations Assessment Handbook - Chapter F. DTA Publications

- 4.4.5 Rulings from the 2012 'Sweetman'²¹ 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 Councils to show that the VCHAP will result in no effects whatsoever on any European 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 European site in question, as per the 2004 'Waddenzee'²² 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 As well as considering the LSEs of the VCHAP general planning policies and allocated sites alone on European sites at the screening stage, it is also 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 European 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 European site.
- 4.5.2 The DTA Handbook²³ 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 has been 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 will be undertaken 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.

²¹ Source: EC Case C-258-11 Reference for a Preliminary Ruling, Opinion of Advocate General Sharpston 'Sweetman' delivered on 22nd November 2012 (para 48)

²² Source: EC Case C-127/02 Reference for a Preliminary Ruling 'Waddenzee' 7th Sept 2004 (para 48)

²³ Ibid.

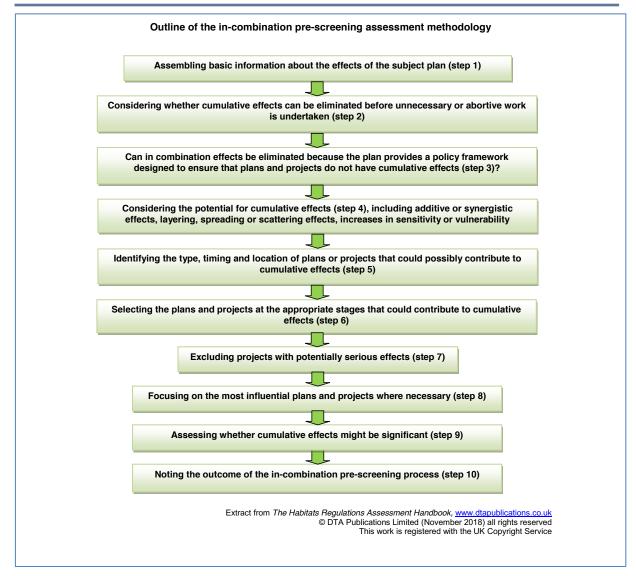


Figure 4.2: Outline of the in-combination pre-screening assessment methodology

4.5.5 Plans and projects which are considered to be of mos

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 European sites have also been considered.

- 4.5.6 The following points describe how in-combination effects have been taken into account in the Regulation 18 HRA process to date, and how they will be taken into consideration in future stages of the HRA process.
 - Air quality LSEs on all European sites within the HRA study area in-combination
 with the VCHAP will be taken into consideration within traffic modelling. This
 includes current and future growth within the VCHAP plan area and within the
 wider area.

- Consideration of in-combination impacts upon water quality and water quantity
 has been taken into consideration in the GNLP overarching Water Cycle Study
 and will be taken into consideration in any related work undertaken to support
 the VCHAP specifically.
- Consideration of recreational in-combination effects has been taken into consideration in preparation of the emerging GIRAMS, the recommendations of which will feed into development of the VCHAP.
- 4.5.7 The assessment of potential in-combination effects at this stage of the assessment has not resulted in additional impact pathways being screened in, however, a number of links between other plans and projects and the VCHAP have been identified.
- 4.5.8 The following neighbouring local authorities' local plans, and other relevant plans and projects, and their HRA work have been reviewed as part of this assessment (see **Appendix A**).
 - Greater Norwich Authorities;
 - Broads Authority;
 - Breckland Council;
 - Great Yarmouth Borough Council;
 - Waveney District Council;
 - Mid Suffolk District Council;
 - Norfolk County Council;
 - Greater Norwich Water Cycle Study²⁴;
 - Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy²⁵;
 - Greater Norwich Growth Board Green Infrastructure Delivery Plan²⁶;
 - River Basin Management Plan for the Anglian Water Basin District²⁷;
 - Anglian Water Water Resource Management Plan²⁸;
 - Environment Agency Broadland Catchment Abstraction Licencing Strategy²⁹;
 - Norwich Northern Distributor Link Road³⁰.

²⁴ AECOM. January 2021. Greater Norwich Water Cycle Study. Final Draft.

²⁵ Place Services. March 2021. Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy. Habitats Regulations Strategy Document.

²⁶ Greater Norwich Growth Board. May 2020. Green Infrastructure Delivery Plan.

²⁷ Environment Agency. Updated December 2015. Part 1: Anglian River Basin District. River Basin Management Plan.

²⁸ Anglian Water. December 2019. Water Resource Management Plan.

²⁹ Environment Agency. May 2017. Broadland Abstraction Licensing Strategy.

³⁰ https://www.norfolk.gov.uk/roads-and-transport/major-projects-and-improvement-plans/norwich/norwich-western-link

4.5.9

Traffic and roads represent a cross boundary issue. On 20th March 2017 a high court ruling³¹ found that traffic increases and subsequent air pollution on roads within 200m of a European site also requires an in-combination approach that considers the development of neighbouring and nearby authorities (**Box 1**).

Box 1: The Wealden Case (March 2017)

On 20th March 2017 a high court ruling found that traffic increases and subsequent air pollution on roads within 200m of an EU site also requires an in-combination approach that considers the development of neighbouring and nearby authorities. This is because projects and plans that increase road traffic flow have a high likelihood of acting together, or 'in-combination', with other plans or projects that would also increase traffic on the same roads. If the combined effects of borough's development will lead to increases of traffic of more than 1,000 cars a day, further consideration of the issue is required. This would be through traffic and air quality modelling. It is therefore necessary to consider the potential impact of the Local Plan on roads within 200m of each EU site both alone and in-combination with relevant plans and projects.

4.5.10 The approach outlined above for an in-combination effects assessment is compliant with the Wealden Judgement.

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-323/17³²) determined that mitigation measures are only permitted to be considered as part of an appropriate assessment (Box 2).

Box 2: The Sweetman Case (April 2018)

A recent decision by the Court of Justice of the European Union (CJEU) People Over Wind and Sweetman v Coillte Teoranta (C-323/17) (from here on known as the 'Sweetman Case') has important consequences for the HRA process in the UK.

In summary, the ruling reinforces the position that if an LSE is identified during the HRA screening process it is not appropriate to incorporate mitigation measures to prevent the LSE at this stage. An appropriate assessment (AA) of the potential effects and the possible avoidance or mitigation measures must be undertaken. The 're-screening the Plan after mitigation has been applied' is no longer an option which would be legally compliant:

"Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site."

- In light of the above, it is necessary to further define mitigation measures. The DTA Handbook notes that there are two types of measures as follows:
 - "Measures intended to avoid or reduce harmful effects on a European site; or

4.6.2

³¹ Wealden District Council & Lewes District Council before Mr Justice Jay. Available at: http://www.bailii.org/ew/cases/EWHC/Admin/2017/351.html [Date Accessed: 27/01/20]

³² InfoCuria (2018) Case C-323/17. Available at: http://curia.europa.eu/juris/document/document.jsf?docid=200970&doclang=EN [Date Accessed: 27/01/20]

- 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 has not taken account of incorporated mitigation or avoidance measures that are intended to avoid or reduce harmful effects on a European site when assessing the LSE of the VCHAP on European sites. These are measures, which if removed (i.e. should they no longer be required for the benefit of a European site), would still allow the lawful and practical implementation of a plan.

4.7 Stage 2: Appropriate Assessment and Integrity Test

- 4.7.1 Stage 2 of the HRA process comprises the appropriate assessment and integrity test. 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".
- 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 European sites. Mitigation measures may take the form of policies within the VCHAP 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.
- 4.7.3 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 European site.
- 4.7.4 The plan-making body (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 European site either alone or in-combination with other plans and projects. This is referred to as the Integrity Test.

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' ruling³³:

³³EC Case C-127/02 Reference for a Preliminary Ruling 'Waddenzee' 7th September 2004 Advocate General's Opinion (para 107)

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".

5 European sites

5.1 Identification of European 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 European sites.
- 5.1.4 The HRA work undertaken for the GNLP (see **Table 3.1**) considered the scope of the HRA to include European sites within a number of different threat specific zones of influence. It is noted that Natural England indicated their agreement with the scope of European sites considered within the GNLP HRA (**Table 3.2**).
- 5.1.5 The European sites to be assessed in this HRA scoping report, taking into consideration individual impact pathways and drawing on current HRA work undertaken alongside the GNLP, include the following (as illustrated in **Figures 5.1** to **5.3**):
 - River Wensum SAC;
 - Norfolk Valley Fens SAC;
 - The Broads SAC;
 - Broadland SPA;
 - Broadland Ramsar;
 - Breydon Water SPA;
 - Breydon Water Ramsar;
 - 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;
 - Breckland SAC;
 - Benacre to Easton Bavents Lagoons SAC;
 - Benacre to Easton Bavents SPA;
 - Dew's Ponds SAC;
 - The Wash and North Norfolk Coast SAC;
 - The Wash SPA:
 - The Wash Ramsar;
 - The Greater Wash SPA;
 - North Norfolk Coast SPA;
 - North Norfolk Coast SAC;

- North Norfolk Coast Ramsar;
- Southern North Sea SAC (offshore and inshore);
- Outer Thames Estuary SPA; and
- Hainsborough, Hammond and Winterton SAC.

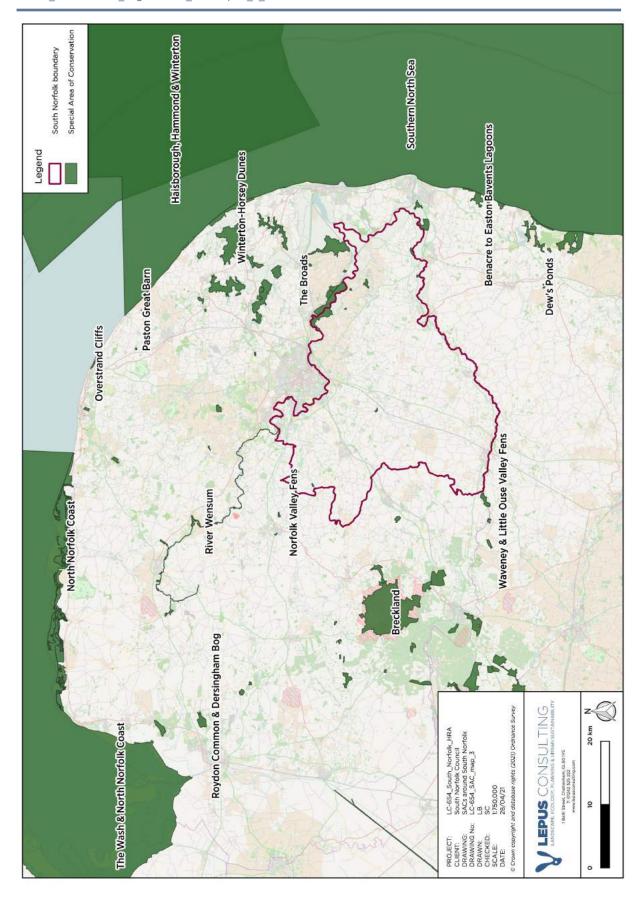


Figure 5.1: SACs within HRA study area

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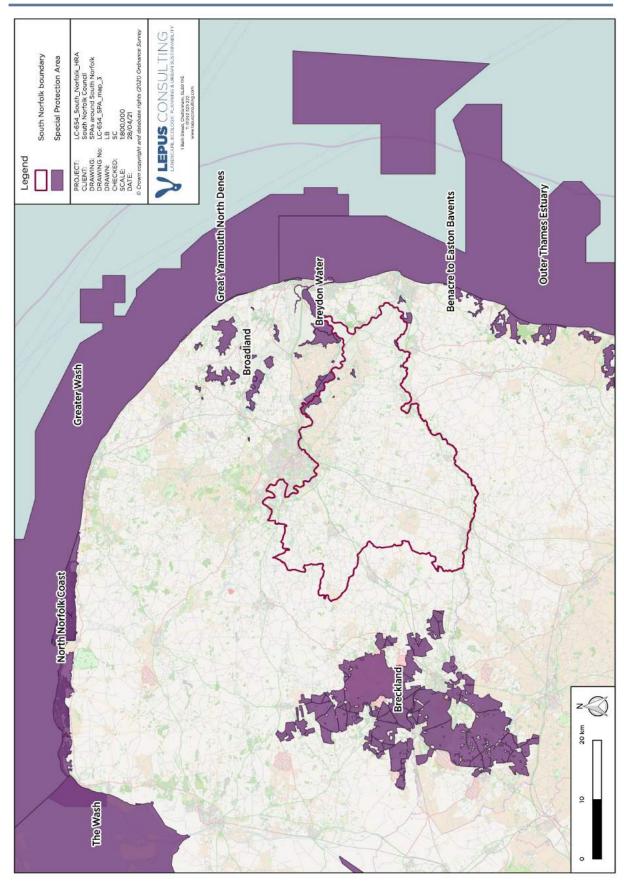


Figure 5.2: SPAs within HRA study area

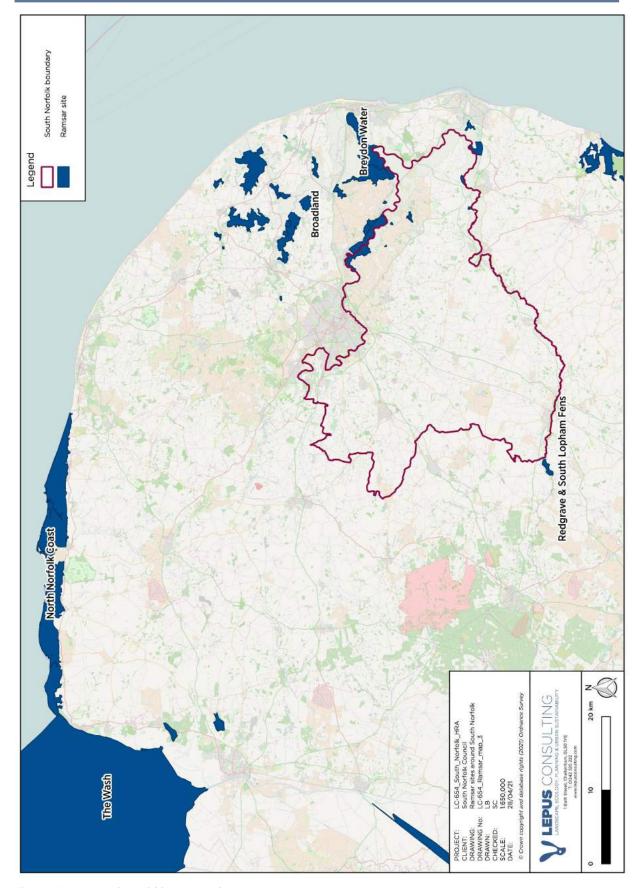


Figure 5.3: Ramsar sites within HRA study area

5.1.6

Each site of European importance 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).

5.1.7

An intrinsic quality of any European 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-461/17³⁴) 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 (**Box 3**).

Box 3: Holohan v An Bord Pleanala (November 2018)

"Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that an 'appropriate assessment' must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site.

Article 6(3) of Directive 92/43 must be interpreted as meaning that the competent authority is permitted to grant to a plan or project consent which leaves the developer free to determine subsequently certain parameters relating to the construction phase, such as the location of the construction compound and haul routes, only if that authority is certain that the development consent granted establishes conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.

Article 6(3) of Directive 92/43 must be interpreted as meaning that, where the competent authority rejects the findings in a scientific expert opinion recommending that additional information be obtained, the 'appropriate assessment' must include an explicit and detailed statement of reasons capable of dispelling all reasonable scientific doubt concerning the effects of the work envisaged on the site concerned".

³⁴ 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: 29/07/20]

- 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 European site, but which may be important to achieving its conservation objectives. This ensures that the functional relationships underlying European sites and the achievement of their conservation objectives are adequately understood.
- 5.2.3 **Appendix B** identifies the qualifying features of each of these sites and presents details of their conservation objectives. The conservation objectives relate to each of the habitats and species for which the site was designated. This information is drawn from the Joint Nature Conservancy Council (JNCC)³⁵ and Natural England³⁶.
- 5.2.4 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.
- 5.2.5 Natural England periodically assesses the conservation conditions of each SSSI unit, assigning it a 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 European 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 reason for designation as a European site. However, it is considered that the conservation status of SSSI units that overlap with European sites offer a useful indicator of habitat health at that location. A review of SSSI data for each European site is presented in **Appendix C**.

³⁵ JNCC (2019) Available at: http://jncc.defra.gov.uk/page-1458 [Date Accessed: 29/07/20]

³⁶ Natural England (2019) Available at: http://publications.naturalengland.org.uk/ [Date Accessed: 29/07/20]

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"³⁷. 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.

³⁷ 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: 29/07/20]

6 Impact Pathways

6.1 Gathering information about European sites and impact pathways

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

6.2 Threats and pressures

- Threats and pressures to which each European 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 European site. Threats and pressures which are likely to be impacted by the VCHAP at each European site are provided at **Appendix B**.
- 6.2.2 Supplementary advice notices prepared by Natural England provide more recent information on threats and pressures upon European sites than SIPs. Additional threats flagged up by supplementary advice notices which may be impacted by the VCHAP have also been identified (**Appendix B**).
- 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 GNLP HRA and an identification of causal connections and links, the remaining impact pathways that were considered to be within the scope of influence of the VCHAP include:
 - Air pollution;
 - Hydrological changes (to include water abstraction, water resources and water pollution):
 - Public access and disturbance (to include impacts of development, urbanisation effects and recreational impacts); and
 - Habitat loss and fragmentation (to include habitat connectivity and impacts on functionally linked land).
- 6.2.5 **Appendix D** provides a summary of threats and pressures which will be considered further in the HRA process at each European site.

6.3 Air quality

- Air pollution can affect a European site 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)³⁸. Deposition of air pollutants can alter the soil and plant composition and species which depend upon these.
- As highlighted through the review of threats and pressures at European sites, and as reported upon in **Appendix B**, air pollution, and in particular atmospheric nitrogen deposition, has been identified as a threat or pressure for qualifying features of a number of European sites within the relevant Natural England SIPs and Supplementary Advice Notes:
- 6.3.3 Excess atmospheric nitrogen deposition within an ecosystem or habitat can disrupt the delicate balance of ecological processes interacting with one another. As the availability of nitrogen increases in the local environment, some plants that are characteristic of that ecosystem may become competitively excluded in favour of more nitrophilic plants. It also upsets the ammonium and nitrate balance of the ecosystem, which disrupts the growth, structure and resilience of some plant species.
- Excess nitrogen deposition often leads to the acidification of soils and a reduction in the soils' buffering capacity (the ability of soil to resist pH changes). It can also render the ecosystem more susceptible to adverse effects of secondary stresses, such as frost or drought, and disturbance events, such as foraging by herbivores.
- As an attempt to manage the negative consequences of atmospheric nitrogen deposition, 'critical loads' have been established for ecosystems in Europe. Each European site is host to a variety of habitats and species, the features of which are often designated a critical load for nitrogen deposition. The critical loads of pollutants are defined as a:
- 6.3.6 "...quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge"³⁹.

³⁸ APIS (2016) Ecosystem Services and air pollution impacts. Available at: http://www.apis.ac.uk/ecosystem-services-and-air-pollution-impacts [Date Accessed: 29/07/20]

³⁹ UNECE (2004) ICP Modeling and Mapping Critical loads and levels approach. Available at: http://www.unece.org/fileadmin//DAM/env/lrtap/WorkingGroups/wge/definitions.htm [Date Accessed: 29/07/20]

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6.3.7

Natural England has 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 plans⁴⁰. In addition, the Institute of Air Quality Management (IAQM)⁴¹ and the Chartered Institute of Ecology and Environmental Management (CIEEM)⁴² 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 of air quality impacts where relevant.

6.3.8

Given the scale of development proposed in the VCHAP it is likely that air quality effects upon European sites would be associated with the VCHAP in-combination with other plans and projects, and in particular in-combination with development set out in the GNLP.

6.3.9

As part of the Regulation 18 HRA air quality assessment, a preliminary screening assessment has been undertaken to determine LSE from air quality. The first step involved the identification of a study area over which the VCHAP may potentially increase traffic related air pollution due to growth. Data obtained from the Office for National Statistics highlights the most common destinations for journeys to work undertaken by car or van arising from South Norfolk and those finishing in South Norfolk⁴³ (**Figure 6.2**). It is noted that these figures do not include journeys to work that both start and end in South Norfolk.

⁴⁰ 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: 29/07/20]

⁴¹ 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.

⁴² CIEEM (2021) Advice on Ecological Assessment of Air Quality Impacts. Chartered Institute of Ecology and Environmental Management. Winchester, UK.

⁴³ 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 and https://www.nomisweb.co.uk/census/2011/wu03uk [Date Accessed: 14/09/20]

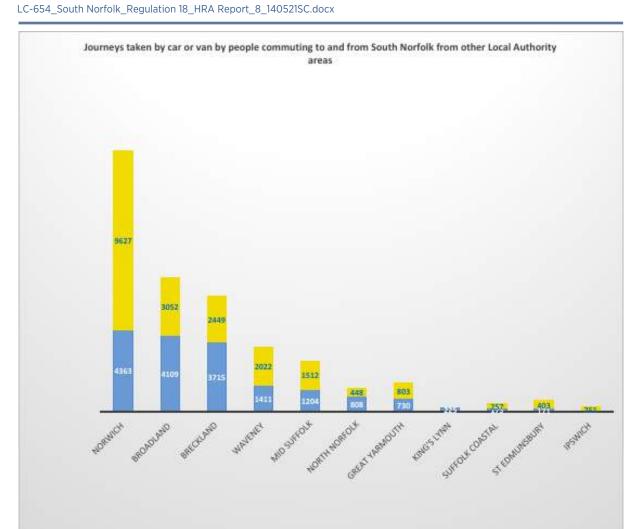


Figure 6.1: Inflow and outflow traffic data for South Norfolk – popular destinations for journeys to work by car and van only (note: King's Lynn is now part of King's Lynn and West Norfolk Council area)

Inflow Outflow

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6.3.10

This data indicates that the key commuting areas to / from South Norfolk include Norwich, Broadland, Breckland, Waveney, Mid Suffolk, North Norfolk and Great Yarmouth. Consultation with 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. This will be explored further at Regulation 19.

6.3.11

At the time of writing, traffic modelling data was not available for the VCHAP and as such this Regulation 18 HRA screening assessment focuses on determining whether there are roads within 200m of a European site, which may result in increased traffic flows as a consequence of the VCHAP above thresholds set out in best practice methodologies, and where a European site has the potential to be sensitive to a reduction in air quality.

6.3.12

It is widely accepted that air quality impacts are greatest within 200m of a road source, decreasing with distance^{44,45,46}. **Table 6.2** identifies roads within 200m of any European site that has been identified as being sensitive to changes in air quality (in either Natural England's SIP or Supplementary Advice data) and which is located within the air quality study area (**Paragraph 6.3.10**). This has allowed European sites to be screened into / out of the assessment in terms of air quality impacts for further consideration in the HRA process at Appropriate Assessment.

⁴⁴ 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.

⁴⁵ Natural England (2016) The ecological effects of air pollution from road transport: an updated review. Natural England Commissioned Report NECR 199.

⁴⁶ Bignal, 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: Identification of roads within 200m of European sites where likely significant air quality impacts may occur as a result of changes in AADT flows from VCHAP within the air quality study area

European site vulnerable to changes in air quality (as identified in Natural England's SIP or Supplementary Advice)	Strategic road links (A and B roads) located within 200m of European site	European site screened in for further consideration in HRA in terms of air quality
River Wensum SAC	A1067, B1110 and B1154	Yes
Norfolk Valley Fens SAC	A47, B1149 and B1075	Yes
The Broads SAC	B1150, A149, A47, A1064 and A146	Yes
Broadland SPA	B1150, A1064 and A146	Yes
Broadland Ramsar	B1150, A1064 and A146	Yes
Breckland SAC	A11, A134 and A1075	Yes
Breckland SPA	A11, A1066, B1111, A1088, A134, A1075, A1134, A1065, A1122,	Yes
Great Yarmouth North Deans SPA	None	No
Winterton-Horsey Dunes SAC	None	No
Paston Great Barn SAC	B1159	No. 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 / incombination breech of air quality thresholds.
Waveney & Little Ouse Valley Fens SAC	B1113	Yes
Redgrave & South Lopham Fens Ramsar	B1113	Yes (not identified in Ramsar information sheet but identified in SAC SIP for Waveney & Little Ouse Valley Fens SAC which is coincident with Ramsar designation).
Benacre to Easton Bavents SPA	B1127	Yes

6.3.13 As noted above, European sites which have been screened in will be considered further through the HRA process at Regulation 19 following best practice guidance.

6.4 Hydrology

- 6.4.1 Potential hydrological effects of urbanisation within European sites can be associated with an alteration in water balance and reduced water quality.
- 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 European sites or watercourses which run through them. Water mains leakage and sewer infiltration may also affect the water balance.

In addition, urbanisation 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.

- Features for which a European site is designated are often sensitive to changes in water balances and water quality. Therefore, urbanisation affecting drainage streams which flow through or ground water which feeds into a European site has the potential to adversely affect the features for which it is designated.
- The Plan area lies within the Anglian river management basin and within the Broadland Rivers surface water management catchment 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 rivers⁴⁷:
 - 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 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 Trowse⁴⁸.

⁴⁷ Environment Agency. Catchment Data Explorer. https://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/5 Date Accessed: 25/09/20

⁴⁸ Data taken from Environment Agency Catchment Data Explorer. Reference above.

6.4.6

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.

6.4.7

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)"⁴⁹.

6.4.8

A review of Environment Agency monitoring data⁵⁰ indicates that in 2019, out of 603 surface waterbodies in the Anglian River Basin District Area, 22 were classified as being of bad ecological status and 603 as failing chemical status testing. Out of 31 ground waterbodies, 14 were classified as being of poor quantitative status and 15 as poor chemical status.

6.4.9

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 stress⁵¹.

6.4.10

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's WRMP⁵², 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 Ml/d by 2045 which results in a reduction in the baseline supply-demand balance from a total regional surplus of 150 Ml/d in 2020, to a total regional deficit of -30 Ml/d by 2025 and -144 Ml/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.

⁴⁹ 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]

⁵⁰ Environment Agency (2019) Water Quality Monitoring Data Archive. 2019 Cycle 2 Available at: https://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/5/Summary [Date Accessed: 25/09/20]

⁵¹ Environment Agency. Areas of water stress: final classification. Available at: https://www.iow.gov.uk/azservices/documents/2782-FE1-Areas-of-Water-Stress.pdf [Date Accessed: 25/09/20].

⁵² 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: 25/09/20]

6.4.11	An HRA was undertaken alongside the preparation of the WRMP ⁵³ . This concluded
	there would be no adverse effects on the integrity of any European 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.
6.4.12	Water companies divide their supply into Water Resource Zones (WRZs). South

- 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 WCS looks at the impact of growth in the whole GNLP area upon water supply (and as such water supply in the VCHAP area). It also looks at the implication of this upon ecologically designated sites including European sites. The WCS sets out options to ensure the minimisation of water use over the GNLP period and explores a number of water neutrality scenarios.
- 6.4.13 The GNLP area falls within the Broadland Catchment Abstraction Management Area (CAMS)⁵⁴. This indicates that all rivers are defined as having restricted or no water available for licensing during periods of low flow.
- 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 issue of permits.
- AECOM prepared a Water Cycle Study (WCS)⁵⁵ 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.
- 6.4.16 The Anglian River Basin Management Plan (RBMP)⁵⁶ 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.

⁵³ Mott McDonald. 2019. Anglian Water - Water Resources Management Plan Habitats Regulations Assessment Task II: Appropriate Assessment Final for Publication.

⁵⁴ Environment Agency. May 2017. Broadland Abstraction Licensing Strategy.

⁵⁵ AECOM. January 2021. Greater Norwich Water Cycle Study. Final Draft.

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_RBD_Part_1_river_basin_management_plan.pdf [Date Accessed: 25/09/20]

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6.4.17

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. The Plan area sits 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 RBMP⁵⁷. 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 European sites, alone or in combination with other plans or projects. It notes the requirement for project level HRA where necessary for lower tier plans.

6.4.18

In order to scope those European sites that will be considered further in the HRA process in terms of hydrology impacts (alone and in-combination), an assessment has been made of their hydrological connectivity with the Plan area. The WCS identifies that the following European 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.

6.4.19

In addition, the following European sites, which are known to be sensitive to hydrological impacts, are also hydrologically linked to the Plan area and will therefore also be considered further.

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

6.4.20

All other European 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 associated with VCHAP. As such these sites have been scoped out of the HRA in terms of hydrological impacts (including water quality and water quantity issues) (see **Appendix D**).

⁵⁷ 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: 25/09/20]

6.5 Public access and disturbance

6.5.1 Public access/disturbance can take a number of forms. Physical disturbance as a result of urbanisation may include damage to habitats through erosion, troubling of grazing stock, causing changes in behaviour to animals such as birds at nesting and feeding sites, spreading invasive species, litter and fly-tipping, tree climbing, wildfire and arson, noise and light pollution and vandalism. Typically, disturbance of habitat and species is the unintentional consequence of people's presence which can impact breeding success and survival. In particular, problems can be associated with dogs and cats, such as predation, disturbing birds and dog fouling.

Urbanisation effects typically occur where development is located close to a European site boundary. These may include impacts such as noise disturbance, lighting effects, cat predation, fly-tipping, wildfire, littering and vandalism. Strategic mitigation schemes elsewhere in the UK have set a presumption against development (i.e. no net increase in residential dwellings) on the basis of site-specific evidence to safeguard against these impacts of approximately 400m to 500m. As such this buffer distance will be applied in the case of urbanisation effects at the screening stage on a site by site basis, taking into consideration the sensitivities of each European site individually. The following European sites are therefore considered to be sensitive to urbanisation threats as they are located within or adjacent to the Plan area.

- River Wensum SAC;
- Broadland SPA;
- Broadland Ramsar;
- Breydon Water SPA; and
- Breydon Water Ramsar.
- 6.5.3 A common approach taken across the UK to address recreational impacts at European sites is to establish a zone of influence. This is the area within which there are likely to be significant effects arising from recreational activities undertaken by additional residents due to growth. This is often calculated by taking the distance at which 75% of interviewees have travelled to reach a particular site (based on a review of visitor survey data).

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 European sites across Norfolk⁵⁸. The European sites which formed the focus of this commission included the following:

- Breckland SAC;
- Breckland SPA;
- Norfolk Valley Fens SAC;
- North Norfolk Coast SAC;
- North Norfolk Coast SPA;
- North Norfolk Coast Ramsar;
- Roydon Common & Dersingham Bog SAC;

6.5.4

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

- Roydon Common & Dersingham Bog Ramsar;
- The Broads SAC:
- Broadland SPA;
- Broadland Ramsar;
- The Wash SPA;
- The Wash Ramsar;
- Winterton Horsey Dunes / Great Yarmouth North Denes SAC;
- Winterton Horsey Dunes / Great Yarmouth North Denes SPA; and
- Brevdon Water SPA; and
- Breydon Water Ramsar.
- Visitor surveys were undertaken in 2015 and 2016 at 35 agreed sites across these European site designations 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 highlighted 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. The report noted that increased recreation pressure has the potential to impact a European 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 individual sites.
 - 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 Green Infrastructure (GI) and Recreational Impact Avoidance and Mitigation Strategy (RAMS)⁵⁹. This strategy is currently in draft form (subject to approval by the Norfolk Strategic Planning Group) and is referred to as GIRAMS. Once approved, this strategy is intended to form part of the evidence base for each local planning authority (LPA) Local Plan and provides the basis for future agreements through the NSPF.

6.5.7

⁵⁹ 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

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The emerging GIRAMS provides two overarching recommendation in relation to GI and RAMS. This commission applied to European sites within the county including the Norfolk coastal European sites, 'The Broads', 'The Brecks' and other European sites throughout the county such as the River Wensum, the Ouse Washes, the Redgrave & South Lopham Valley Fens Ramsar site (covered by Waveney and Little Ouse Valley Fens SAC).

6.5.9

In relation to GI provision the strategy identifies that there is no need for a 'county-wide' or 'county-level' solution regarding GI provision in addition to those measures already in place at the strategic and localised level, to enable Local Plan growth. It however sets out detailed recommendations or 'opportunities' in regard to ensuring improvements to the GI network across Norfolk in relation to all new development. It emphasises the requirement for LPAs to secure appropriate GI provision at the local level, appropriate to the scale of development and to recommended standards, with year-round connection to the local countryside. It also sets out an aspirational target for GI provision.

6.5.10

The strategy notes that RAMS is intended to deal with recreational impacts occurring in-combination with other plans and projects. It states that predicted impacts from residential development alone need to be avoided by sufficient GI on or nearby each development site as outlined above and as per Natural England's interim advice to the Norfolk LPAs⁶⁰. Whilst the strategy notes that there are a number of Zones of Influence (ZOI) for recreational impacts for individual European Sites in each LPA area, depending on the geographical position, a single county wide tariff area is recommended for the sake of simplicity. This tariff has been calculated on the basis of the RAMS mitigation package, to cover the lifetime of the Local Plans in perpetuity⁶¹.

6.5.11

The Greater Norwich Infrastructure Plan⁶² 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 green infrastructure. It sets out a number of projects for delivery of green infrastructure.

6.5.12

The ZOI set out in the GIRAMS has been applied to the scoping of European sites (Appendix D).

⁶⁰ Interim advice letter to Norfolk LPAs from Natural England (12/08/2019)

⁶¹ The term "in perpetuity" has a legal definition of 125 years (The Perpetuities and Accumulations Act 2009).

⁶² Greater Norwich Growth Board. May 2020. Greater Norwich Infrastructure Plan. https://www.greaternorwichgrowth.org.uk/delivery/greater-norwich-infrastructure-plan/

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6.5.13

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 Natura 2000 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 Strategy has been approved by Great Yarmouth Borough Council. The Mitigation and Monitoring Strategy applies a series of measures for development within a 5km zone of influence of these European sites including early warning monitoring, monitoring and access management measures (e.g. provision of way marked routes, interpretation boards and wardening). The scale and nature of mitigation required is defined through the application of a number of habitat impact zones. These habitat impact zones have been applied to the scoping of European sites (**Appendix D**).

6.5.14

North of the River Blyth, Footprint Ecology recognised that the key concern from recreation pressure was disturbance to populations of Little Tern. 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 European sites for this species in Norfolk and Suffolk. The zone of influence established by Footprint Ecology has been applied when scoping European sites within the HRA study area (Appendix D).

6.5.15

At the HRA screening stage (**Section 7**), the location of individual strategic sites in relation to potential buffer zones has been taken into consideration. Particular note has also been given to impacts on functionally linked habitat outside the boundary of European sites (see below).

6.6 Habitat fragmentation and loss

6.6.1

There are a number of European sites located within the VCHAP area. In addition, there is potential for the VCHAP to result in the loss of habitat outside a European site through allocation of sites. Supporting habitat, also referred to as functionally linked habitat⁶⁴, may be located some distance from a European site. The fragmentation of habitats through the loss of connecting corridors would have the potential to hinder the movement of qualifying species.

6.6.2

European sites located within the Plan area are listed below. These sites have therefore been scoped into the HRA for further consideration in terms of screening of habitat fragmentation and loss LSEs.

River Wensum SAC;

⁶³ Great Yarmouth Borough Council. 2019. Habitats Monitoring and Mitigation Strategy.

⁶⁴ "The term 'functional linkage' refers to the role or 'function' that land or sea beyond the boundary of a European site might fulfil in terms of ecologically supporting the populations for which the site was designated or classified. Such land is therefore 'linked' to the European site in question because it provides an important role in maintaining or restoring the population of qualifying species at favourable conservation status". Source: Natural England. 2016. Commissioned Report. NECR207. Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects - a review of authoritative decisions.

- Norfolk Valley Fens SAC;
- The Broads SAC;
- Broadland SPA; and
- Broadland Ramsar.
- At the HRA screening stage (**Section 7**) each VCHAP allocation has been analysed in the context of their potential to provide suitable habitat to support the qualifying features of the relevant European site. Where suitable habitat is identified its likelihood to provide an important role in maintaining or restoring the qualifying features at a favourable conservation status will be taken into consideration.

6.7 European sites

6.7.1 The output of the scoping exercise is provided in **Appendix D**. This provides a detailed explanation as to how European sites have been scoped into / out of the assessment and summarises which threats and pressures will be considered at each European site as part of the screening exercise. **Table 6.2** provides a summary of the scoping outputs.

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Table 6.2: Scoping summary for European sites within HRA study area

<u>Key:</u> ✓ - Scoped in

× - Scoped out

European sites	Air Pollution	Hydrology	Public Access and Disturbance	Habitat Loss and Fragmentation
River Wensum SAC	✓	✓	✓	✓
Norfolk Valley Fens SAC	✓	✓	✓	√
The Broads SAC	√	✓	√	✓
Broadland SPA	✓	✓	✓	√
Broadland Ramsar	✓	✓	✓	✓
Breydon Water SPA	×	✓	✓	×
Breydon Water Ramsar	×	✓	✓	×
Great Yarmouth North Deans 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 SAC	✓	×	✓	×
Breckland SPA	✓	×	✓	×
Benacre to Easton Bavents Lagoons SAC	×	×	×	×
Benacre to Easton Bavents Lagoons SPA	✓	×	×	×
Dew's Ponds SAC	×	×	×	×
The Wash and North Norfolk Coast SAC	×	×	✓	×
The Wash SPA	×	×	✓	×
The Wash Ramsar	×	×	✓	×
The Greater Wash SPA	×	×	×	×
North Norfolk Coast SPA	×	×	✓	×
North Norfolk Coast SAC	×	×	✓	×
North Norfolk Coast Ramsar	×	×	✓	×
Southern North Sea SAC	×	×	×	×
Outer Thames Estuary SPA	×	x	×	×

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Hainsborough,				
Hammond and	×	×	×	×
Winterton SAC				

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7.1.1

7 VCHAP Screening (HRA Stage 1)

7.1 Policy and allocations pre-screening

- Each policy and allocation of the Emerging Strategy for Growth 2020 2038 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 pre-screening exercise. It is noted that this screening exercise may need to be updated as the local planning develops and policies are refined, with a final screening undertaken of the Publication Version of the VCHAP at Regulation 19.
- 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 most policies. This is because the policies 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.
 - Category L: Policies or proposals which might be likely to have a significant effect in combination.
- 7.1.4 The following policies will therefore be explored in the Appropriate Assessment (Stage 2 of the HRA process) in more detail. **Table 7.1** provides a summary of policies and allocations that have been screened into the HRA.

Table 7.1: Summary of pre-screened policies (Note: only policies screened into the HRA have been included in the summary table below. The pre-screening outcome for all policies is provided at **Appendix E**)

Policy Number	Policy Name	Pre Screening Category	
SNVC Objective 1	SNVC Objective 1 - Meet housing needs	Category I	
Village Cluster Allocations Policies			
2	Alpington, Yelverton and Bergh Apton	Category L	
3	Aslacton, Great Moulton and Tibenham	Category L	
4	Bardford Barford, Marlingford, Colton and Wramplingham	Category L	
5	Banham Broom, Kimberley, Carleton Forehoe, Runhall and Brandon Parva	Category L	
6	Bawburgh	Category L	
7	Bressingham	Category L	
8	Brooke, Kirstead and Howe	Category L	
9	Bunwell	Category L	
10	Burston, Shimpling and Gissing	Category L	
12	Dickleburgh	Category L	
13	Ditchingham, Broome, Hedenham and Thwaite	Category L	
14	Earsham	Category L	
16	Gillingham, Geldeston, and Stockton	Category L	
17	Hales and Heckingham, Langley with Hardley, Carleton St Peter, Claxton, Raveningham and Sisland	Category L	
18	Hempnall, Topcroft Street, Morningthorpe, Fritton, Shelton and Hardwick	Category L	
22	Kirby Cane and Ellingham	Category L	
23	Little Melton and Great Melton	Category L	
25	Mulbarton, Bracon Ash, Swardeston and East Carleton	Category L	
26	Needham, Brockdish, Starston and Wortwel	Category L	
27	Newton Flotman and Swainsthorpe	Category L	
28	Pulham Market and Pulham St Mary	Category L	
29	Rockland St Mary, Hellington and Holverston	Category I and Category	
30	Roydon	Category I and Category	
32	Scole	Category L	
33	Seething and Mundham	Category L	
34	Spooner Row and Suton	Category L	
35	Stoke Holy Cross, Shotesham and Caistor St Edmund & Bixley	Category L	
37	Tacolneston and Forncett End	Category L	

Policy Number	Policy Name	Pre Screening Category
38	Tasburgh	Category L
39	Tharston, Hapton and Flordon	Category L
40	Thurlton and Norton Subcourse	Category L
42	Tivetshall St Mary and Tivetshall St Margaret	Category L
43	Toft Monks, Aldeby, Haddiscoe, Wheatacre and Burgh St Peter	Category L
45	Wicklewood	Category L
46	Winfarthing and Shelfanger	Category L
47	Woodton and Bedingham	Category L
48	Wrenningham, Ashwellthorpe and Fundenhall	Category L

- 7.1.5 The above policies and allocations have been screened in as having potential LSEs at the following European sites:
 - River Wensum SAC air pollution, hydrology and public access and disturbance;
 - Norfolk Valley Fens SAC air pollution, hydrology and public access and disturbance:
 - The Broads SAC air pollution, hydrology and public access and disturbance;
 - Broadland SPA air pollution, hydrology and public access and disturbance;
 - Broadland Ramsar air pollution, hydrology and public access and disturbance;
 - Breydon Water SPA -hydrology and public access and disturbance;
 - Breydon Water Ramsar -hydrology and public access and disturbance;
 - Great Yarmouth North Deans SPA public access and disturbance;
 - Winterton-Horsey Dunes SAC public access and disturbance;
 - Waveney & Little Ouse Valley Fens SAC air pollution;
 - Redgrave and South Lopham Fens Ramsar air pollution;
 - Brecklands SAC air pollution and public access and disturbance;
 - Brecklands SPA air pollution and public access and disturbance;
 - Benacre to Easton Bavents Lagoons SPA air pollution;
 - The Wash and North Norfolk Coast SAC public access and disturbance;
 - The Wash SPA public access and disturbance;
 - The Wash Ramsar public access and disturbance;
 - North Norfolk Coast SPA public access and disturbance;
 - North Norfolk Coast SAC public access and disturbance; and
 - North Norfolk Coast Ramsar public access and disturbance.

7.2 Screening Conclusion

7.2.1

On the basis of the HRA screening exercise which has considered whether or not LSEs may arise as a consequence of proposals in the draft VCHAP, it is concluded that the VCHAP will be screened into the HRA process. The next stage of the HRA process will be Stage 2 - Appropriate Assessment. The screening assessment takes no account of mitigation measures that the VCHAP may incorporate to mitigate adverse impacts upon European sites. In summary, screening indicates that there is the potential for likely significant effects (LSEs) at a European site as a result of the VCHAP.

8 Next Steps: Appropriate Assessment (HRA Stage 2)

8.1 LSEs for consideration in the HRA Appropriate Assessment

- 8.1.1 The screening stage has concluded that the VCHAP will be screened in for further consideration in Stage 2 of the HRA process Appropriate Assessment. The purpose of the Appropriate Assessment stage is to undertake an objective scientific assessment of the implications of the Local Plan upon the qualifying features of each European site in light of its conservation objectives.
- 8.1.2 Whilst scoping of an Appropriate Assessment is not a statutory requirement, it is best practice to set out the methods for the next stage of the HRA process to ensure that it is focused, and all parties agree on the methods adopted.
- 8.1.3 The following sections outlines Appropriate Assessment work that will be undertaken at Stage 2 of the HRA process.

8.2 Air Quality

8.2.1 Best practice guidance has been followed to screen in LSEs in terms of air quality. This guidance will continue to be followed in the Appropriate Assessment. The HRA process will look at traffic data in more detail, ensure consultation with the Norfolk County Council Transport Team and draw on air pollution data for individual European sites where relevant including source attribution data. This assessment will be undertaken in the context of growth proposed in the VCHAP. This process will inform any, more detailed, air quality work which may be required as part of the HRA Appropriate Assessment process.

8.3 Hydrology

8.3.1 Spatial site information was not available for the 1,200 dwellings which form the VCHAP at the time of preparing the WCS in support of the GNLP. The WCS instead used approximate locations for this growth using reasoned judgement and consultation with planners. The WCS notes that once allocated, the 1,200 dwellings allocated in the VCHAP should be considered through a site-specific assessment separate to the GNLP. It is therefore recommended that consideration be given to an update of the WCS specific to VCHAP growth in order to more accurately define water quality and water quantity impacts at European sites at the HRA Appropriate Assessment stage.

8.4 Public Access and Disturbance

8.4.1 The HRA Appropriate Assessment will include a review of final allocations and policy wording in the context of the emerging GIRAMS recommendations. It will in particular focus on the quality and quantity of Green Infrastructure (GI) provision to support future growth, ensuring no adverse effects on the integrity of any European site.

8.5 Habitat Loss and Fragmentation

into consideration.

8.5.1 Any changes to VCHAP allocations at Regulation 19 will be analysed in the Appropriate Assessment where necessary in the context of their potential to provide suitable habitat to support the qualifying features of relevant European sites. Where suitable habitat is identified its likelihood to provide an important role in maintaining or restoring the qualifying features at a favourable conservation status will be taken

9 Policy Considerations

9.1 Introduction

9.1.1 Whilst it is noted that the VCHAP core policies need to strike a balance between not repeating what will be in the GNLP Strategic Policies, or already contained in the South Norfolk's Development Management Polices and Government's National policy, early observations suggest that the draft Regulation 18 VCHAP policies may benefit from the following recommendations. It is noted that the plan making process is iterative and further recommendations will also be possible at later stages in the plan making process.

9.2 Air Quality

9.2.1 Development set out in VCHAP should aim to promote growth at sustainable locations which reduces reliance on the private car and as such also reduces traffic related emissions.

9.3 Hydrology

9.3.1 Core policy or individual village cluster allocations policy wording may need to be updated to reflect the output of any VCHAP WCS update. Development of specific site allocations may need to be phased to reflect potential completion of required new infrastructure or upgrade works at Water Recycling Centres (WRC) and changes to discharge permits may be required to ensure the protection of water quality at European sites.

9.3.2 Given the location of South Norfolk in a water stress area⁶⁵ and the presence of sensitive water dependent European sites in the HRA study area, the concept of water efficiency at allocations could be explored further with water companies and the Environment Agency. Water efficiency has the potential to improve resilience to climate change and ensure impacts upon water supply at European sites is maintained. It is noted that the GNLP Policy 2 provides guidance on achievement of water efficiency measures which will apply to VCHAP and as such cross referenced.

9.4 Public Access and Disturbance

9.4.1 As noted, the GIRAMS is in draft form (awaiting approval from the Norfolk Strategic Planning Group) and a mechanism for its delivery has not yet been developed. As the plan making process progresses, it is recommended that the VCHAP policies be strengthened to reflect policy recommendations set out in the emerging GIRAMS to ensure that there will be no adverse effect on the integrity of any European site either alone or in-combination with other plans and projects. As noted at **Section 6.5**, GIRAMS is comprised of two parts – GI and RAMS, therefore, in addition to the RAMS tariff, there will need to be implementation of effective GI across the Plan Area.

⁶⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/244333/water-stressed-classification-2013.pdf



⁶⁶ https://www.gnlp.org.uk/sites/gnlp/files/2021-02/01%20GNLP%20GI%20Study%20Report.pdf

⁶⁷ The Wildlife Trusts. 2020. Nature Recovery Network Handbook. Available at: https://www.wildlifetrusts.org/sites/default/files/2020-10/Nature Recovery Network Handbook LO SINGLES.pdf
[Date Accessed: 26/01/21]

10 Conclusions

10.1 Need for Appropriate Assessment

10.1.1 It is concluded that the VCHAP will be screened in for Stage 2 Appropriate Assessment because, taking no account of mitigation measures that the plan may incorporate, it is considered that it is likely to have a significant effect on a European

10.1.2 The following European sites have been screened into the HRA process and LSEs from the Local Plan, alone and in-combination, will be explored in further detail through an Appropriate Assessment (stage 2 of the HRA process):

- River Wensum SAC:
- Norfolk Valley Fens;
- The Broads SAC;
- Broadland SPA;
- Broadland Ramsar;
- Breydon Water SPA;
- Breydon Water Ramsar;
- Great Yarmouth North Deans SPA;
- Winterton-Horsey Dunes SAC;
- Waveney & Little Ouse Valley Fens SAC;
- Redgrave and South Lopham Fens Ramsar;
- Brecklands SAC;
- Brecklands SPA;
- Benacre to Easton Bavents Lagoons SPA;
- The Wash and North Norfolk Coast SAC;
- The Wash SPA;
- The Wash Ramsar:
- North Norfolk Coast SPA;
- North Norfolk Coast SAC; and
- North Norfolk Coast Ramsar.

10.2 Recommendations

10.2.1 Further work that will be required to inform an appropriate assessment of the VCHAP on the integrity of European sites (stage 2 of the HRA process) is outlined in **Chapter 8**. This work will allow an assessment of the implications of the Local Plan (alone and in-combination) on the conservation objectives of each European site. It will be undertaken alongside the plan's development to ensure the outputs are incorporated as effectively as possible.

- 10.2.2 In addition, **Chapter 9** sets out some preliminary policy recommendations which the Council may wish to consider further.
- 10.2.3 The outputs of the Appropriate Assessment may result in the need to consider more detailed mitigation measures in order to ensure that the VCHAP has no adverse impact on the integrity of any European site.

10.3	Next steps
10.3.1	The purpose of this report is to ensure that the HRA forms an integral element of the plan-making process and that best practice is followed.
10.3.2	The HRA screening process will be revisited as part of the Regulation 19 stage of the plan making process if new policies emerge or existing policy proposals are modified following the Regulation 18 Local Plan consultation stage.
10.3.3	Stage 2 of the HRA process – the Appropriate Assessment - will now be undertaken to better define LSEs upon European sites. An HRA Report will then be prepared at the Regulation 19 stage of the plan making process to support the Council, as the Competent Authority, make the Integrity Test in terms of the HRA.
10.3.4	It is considered best practice to engage with Natural England (and other stakeholders) upon the outputs of the screening exercise and also upon the scope of the HRA appropriate assessment. This will ensure that all parties are in agreement with the direction of the HRA.
10.3.5	The Regulation 19 HRA report (which will detail the outputs of Stages 1 and 2 of the HRA process) will be submitted to Natural England for formal consultation. The Council must 'have regard' to Natural England's 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 the final HRA report as their own.

Appendix A: In-Combination Assessment

Plans and Policies	Plan Status	Summary of housing/employment	HRA Output and Key Considerations
Greater Norwich Authorities Local Plan for the Broads ¹	The GNLP covers the three authorogonal documentation is provided in Second Adopted May 2019.		An HRA was undertaken in support of the Local Plan for the Broads ² . This focused on risk associated with new housing and the promotion of tourism, boating and water's edge development and navigation. LSEs considered included disturbance to wildlife, and deterioration of habitat, particularly through nutrient enrichment, arising or increasing as a result of the plan. The HRA noted the requirement for lower tier project level HRA for a number of projects promoted through the local plan. It concluded that the plan would not lead to adverse effects on European site integrity, and would be compliant with the Habitats Regulations upon adoption. The combined impact of neighbouring authority growth, in-combination with the VHCAP, on air quality, hydrology and public access and disturbance impacts will be considered further in the HRA process.
The Breckland Local Plan ³	Adopted 28 th November 2019.	The Local Plan will provide for no less than 15,298 new homes between 2011 and	An HRA was undertaken in support of the Breckland Local Plan ⁴ . This drew on mitigation measures to protect the European sites such as buffer zones for Stone Curlew. It also recommended other mitigation measures for integration into the Plan in particular at Policy ENVO2 and ENVO3. It focused on the following impacts:

¹ Broads Authority. May 2019. Local Plan for the Broads Plan period 2015 to 2036. Available at: https://www.broads-authority.gov.uk/ data/assets/pdf file/0036/259596/Local-Plan-for-the-Broads.pdf [Date Accessed: 21/04/21]

 $^{^2}$: Liley, D., Hoskin, R., Lake, S. and Panter, C. 2019. Habitats Regulations Assessment of the Local Plan for the Broads at Modifications stage. Unpublished report by Footprint Ecology.

³ Breckland Council. 2019. Local Plan 2019. Available at: https://www.breckland.gov.uk/media/16659/Adopted-Breckland-Local-Plan/pdf/Local-Plan 2019.pdf?m=637520995029430000 [Date Accessed: 21/04/21]

⁴ Liley, D. & Hoskin, R. 2017. Habitat Regulations Assessment of the Breckland Local Plan Part 1 Publication Stage. Footprint Ecology, unpublished report for Breckland Council

Plans and Policies	Plan Status	Summary of housing/employment	HRA Output and Key Considerations
		2036, an average of 612 dwellings per annum. For the period 2011 – 2036, 64 hectares of employment land will be allocated to allow for a range and choice of employment sites to meet economic need and demand	 Impacts of built development on stone curlew Recreational disturbance to birds Urbanisation effects on habitats Air quality and road improvements Water supply, water quality, wastewater discharge and flood risk It concluded no adverse effects upon site integrity at any European site. The combined impact of neighbouring authority growth, in-combination with the VHCAP, on air quality, hydrology and public access and disturbance impacts will be considered further in the HRA process.
Great Yarmouth Local Plan Part 2 ⁵ Great Yarmouth Core Strategy ⁶	The Council submitted the Great Yarmouth Local Plan Part 2 to the Government on 31 July 2020 for independent examination. The Core Strategy (Local Plan Part 1) was adopted in December 2015.	Part 2 makes provision for 5,303 new homes over the plan period.	An HRA was undertaken in support of the Local Plan Part 2 ⁷ . It refers to the HRA undertaken for the Great Yarmouth Local Plan Part 1: the Core Strategy ⁸ . It draws on mitigation provided through the Great Yarmouth Borough Monitoring and Mitigation Strategy which was put in place at the time of the Core Strategy HRA. Following input to policy wording it concludes no adverse effects on site integrity. The combined impact of neighbouring authority growth, in-combination with the VHCAP, on air quality, hydrology and public access and disturbance impacts will be considered further in the HRA process.

⁵ Great Yarmouth Borough Council. 2020. Great Yarmouth Local Plan Part 2. Available at: https://www.great-yarmouth.gov.uk/media/5062/Local-Plan-Part-2---Final-Draft-Plan/pdf/Local Plan Part 2 Final Draft Plan.pdf [Date Accessed: 21/04/21]

⁶ Great Yarmouth Borough Council. 2015. Great Yarmouth Local Plan. Core Strategy 2013 – 2030. Available at: <a href="https://www.great-yarmouth.gov.uk/media/1884/Adopted-Local-Plan-Core-Strategy-December-2015/pdf/Local-Plan-Core-Strategy-

⁷ Hoskin, R., Liley, D. & Caals, Z. 2019. Habitats Regulations Assessment of the Great Yarmouth Local Plan Part 2. Unpublished report for Great Yarmouth Borough Council.

⁸ Footprint Ecology. 2015. Habitats Regulations Assessment of the Great Yarmouth Local Plan - Core Strategy at Submission for Examination. Report for Great Yarmouth Borough Council.

Plans and Policies	Plan Status	Summary of housing/employment	HRA Output and Key Considerations
East Suffolk District - Waveney Local Plan ⁹ (East Suffolk District comprises Waveney District Council and Suffolk Coastal District)	Adopted 20 th March 2019.	8,223 new homes	An HRA was undertaken in support of the local plan ¹⁰ . The HRA informed policy wording and recommended a mitigation approach for Minsmere – Walberswick SPA/SAC/Ramsar site and Benacre to Easton Bavents SPA/SAC, to mitigate for potential increased recreation pressure and disturbance of site interest features. Following incorporation of these measures it concluded no adverse effects on any European site integrity. The combined impact of neighbouring authority growth, in-combination with the VHCAP, on air quality, hydrology and public access and disturbance impacts will be considered further in the HRA process.
Babergh and Mid Suffolk Joint Local Plan ¹¹	Local Plan was formally submitted to the Secretary of State for Housing, Communities and Local Government for independent Examination on 31 March 2021.	7,904 net additional dwellings (416 dwellings per annum) within the Babergh district over the plan period (2018 – 2037). 10,165 net additional dwellings (535 dwellings per annum) within the Mid	An HRA was undertaken in support of the local plan ¹² . This focused on the following LSEs: - Habitat loss and fragmentation / land take by development; - Loss of functionally linked land (land outside the SPA and Ramsar site); - Increase of any type of disturbance; - Changes in water availability, or water quality; - Changes in atmospheric pollution levels. At the following European sites: - Stour and Orwell Estuaries SPA - Stour and Orwell Estuaries Ramsar site

⁹ East Suffolk Council. 2019. Waveney Local Plan. Covering the former Waveney Local Planning Authority Area. Available at: https://www.eastsuffolk.gov.uk/assets/Planning/Waveney-Local-Plan/Adopted-Waveney-Local-Plan-including-Erratum.pdf Date Accessed: 21/04/21]

¹⁰ Hoskin, R. & Liley, D. 2018. Habitats Regulations Assessment of the Waveney Local Plan. Unpublished report for Waveney District Council.

¹¹ Babergh and Mid Suffolk Joint. 2020. Babergh and Mid Suffolk Joint Local Plan. Pre-Submission Regulation 19. Available at: https://www.babergh.gov.uk/assets/Strategic-Planning/JLPExamination/CoreDocLibrary/A-SubmissionDocs/A01-Part-1-Objective-and-Strategic-Policies-Part-2-Local-Policies.pdf [Date Accessed: 21/04/21]

¹² Place Services. 2020. Babergh and Mid Suffolk Joint Local Plan. Habitats Regulations Assessment. Available at: https://www.babergh.gov.uk/assets/Strategic-Planning/JLPExamination/CoreDocLibrary/A-SubmissionDocs/A05-BMSDC-JLP-Reg-19-HRA-AA-Oct20.pdf [Date Accessed: 21/04/21]

Plans and Policies	Plan Status	Summary of housing/employment	HRA Output and Key Considerations
		Suffolk district over the plan period (2018 - 2037).	 Deben Estuary SPA Deben Estuary Ramsar site Minsmere – Walberswick SPA Minsmere – Walberswick Ramsar site Minsmere to Walberswick Heaths & Marshes SAC Redgrave and South Lopham Fens Ramsar site Waveney & Lt Ouse Valley Fens SAC It concluded that the Plan would not have any adverse effect on integrity (AEOI) on any European Sites, either alone or in combination with other plans and projects. It noted inclusion of mitigation including requirement for project level HRA. The combined impact of neighbouring authority growth, in-combination with the VHCAP, on air quality, hydrology and public access and disturbance impacts will be considered further in the HRA process.
Norfolk County Council Minerals and Waste Local Plan Review ¹³	Regulation 18 consultation	The M&WLPR includes a vision and strategic objectives for waste management and minerals development for the Plan period to 2036. It includes a spatial strategy (allocating sites) for new waste management facilities and new minerals development.	The M&WLPR was supported by a draft HRA ¹⁴ . It applied a 5km study area for consideration of LSEs at European sites. It concluded no LSEs from any policies forming the plan, noting that developers wanting to extract mineral from specific sites or land within a preferred area or area of search contained in the Norfolk Minerals and Waste Local Plan will still need to apply for and be granted planning permission before mineral extraction can take place. The combined impact of minerals and waste allocations, in-combination with VHCAP growth, on air quality and hydrology will be considered further in the HRA process.

¹³ Norfolk County Council. Minerals and Waste Local Plan Review. Available at: https://norfolk.oc2.uk/document/49/4016#d4016 [Date Accessed: 21/04/21]

¹⁴ Norfolk County Council. 2019. Norfolk Minerals and Waste Local Plan Review. Draft Habitats Regulations Assessment. Available at: https://norfolk.oc2.uk/docfiles/50/draft_hra_task_1.pdf [Date Accessed: 21/04/21]

Plans and Policies	Plan Status	Summary of housing/employment	HRA Output and Key Considerations
Norfolk County Council Local Transport Plan 4 Strategy 2021 – 2036 ¹⁵	Plan currently under review. Consultation completed on draft version of plan.	The plan aims to address issues such as air quality and carbon reduction and tackles infrastructure issues in relation to major road, bus and rail connections. It sets out a series of strategies and policies.	An HRA was not available at the time of writing. The combined impact of Local Transport Plan strategies, in-combination with VHCAP growth, on traffic related air quality will be considered further in the HRA process.
Anglian Water Water Resource Management Plan ¹⁶	Current	n/a	An HRA was prepared in support of this plan ¹⁷ . See detailed provided in Section 6.4 of the Regulation 18 HRA Report. This will be taken into consideration in the assessment of hydrology impacts.
Environment Agency Broadland Catchment Abstraction Licencing Strategy ¹⁸	Current	n/a	See detailed provided in Section 6.4 of the Regulation 18 HRA Report. This will be taken into consideration in the assessment of hydrology impacts.
Greater Norwich Water Cycle Study ¹⁹	n/a	n/a	See detailed provided in Section 6.4 of the Regulation 18 HRA Report. This will be taken into consideration in the assessment of hydrology impacts.

¹⁵ Norfolk County Council. Norfolk County Council Local Transport Plan 4 Strategy 2021 – 2036. Available at: https://www.norfolk.gov.uk/-/media/norfolk/downloads/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/roads-and-transport/local-transport-plan-4-draft-strategy.pdf [Date Accessed: 21/04/21]

¹⁶ Anglian Water. December 2019. Water Resource Management Plan.

¹⁷ Mott McDonald. 2019. Anglian Water - Water Resources Management Plan Habitats Regulations Assessment Task II: Appropriate Assessment Final for Publication.

¹⁸ Environment Agency. May 2017. Broadland Abstraction Licensing Strategy.

¹⁹ AECOM. January 2021. Greater Norwich Water Cycle Study. Final Draft.

Plans and Policies	Plan Status	Summary of housing/employment	HRA Output and Key Considerations
Anglian River Basin Management Plan ²⁰	Current	n/a	See detailed provided in Section 6.4 of the Regulation 18 HRA Report. An HRA was undertaken alongside the preparation of the RBMP ²¹ . This will be taken into consideration in the assessment of hydrology impacts.
Emerging Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy ²²	n/a	n/a	See detailed provided in Section 6.5 of the Regulation 18 HRA Report. This will be taken into consideration in the assessment of public access and disturbance impacts.
Greater Norwich Infrastructure Plan ²³	n/a	n/a	See detailed provided in Section 6.5 of the Regulation 18 HRA Report. This will be taken into consideration in the assessment of public access and disturbance impacts.
Norwich Northern Distributor Link Road ²⁴	Timescales as follows: - Early 2021 – Outline Business Case completed and submitted and contractor appointed. - Mid-2021 – Pre-planning application public consultation.	The Norwich Western Link will connect the Broadland Northway, formerly known as the Northern Distributor Road (NDR), from the A1067 to the A47 west of Norwich.	Detailed HRA related information on the Norwich Northern Distributor Link Road is not currently available. The Norwich Northern Distributor Road will be subject to HRA at planning application stage. It is likely that the scheme would be a project with potentially serious effects (PPSE) as it would have the potential for a potentially serious effect upon on one or more European site alone. It is therefore likely that a PPSE will survive or fail the Integrity Test according to its effects alone. Sufficient information is not available at the time of writing to allow a detailed in-combination assessment with the VCHAP. It is therefore considered reasonable to not consider the effect of this project in combination with the VCHAP.

²⁰ Environment Agency. Updated December 2015. Part 1: Anglian River Basin District. River Basin Management Plan.

²¹ 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/system/uploads/attachment_data/file/496430/RBMP_HRA_Anglian_FINAL_Jan_2016.pdf [Date Accessed: 25/09/20]

²² Place Services. March 2021. Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy. Habitats Regulations Strategy Document.

²³ Greater Norwich Growth Board. May 2020. Greater Norwich Infrastructure Plan. https://www.greaternorwichgrowth.org.uk/delivery/greater-norwich-infrastructure-plan/

²⁴ Norfolk County Council. https://www.norfolk.gov.uk/roads-and-transport/major-projects-and-improvement-plans/norwich/norwich-western-link

Plans and Policies	Plan Status	Summary of housing/employment	HRA Output and Key Considerations
			It may be necessary to consider this scheme as part of a future HRA in-combination assessment work, should alone impacts be proven to be unlikely.

Appendix B: European Sites Conservation Objectives

River Wensum SAC¹

Conservation objectives:

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

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

Qualifying Features:

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

S1016. Vertigo moulinsiana; Desmoulin's whorl snail

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

S1096. Lampetra planeri; Brook lamprey

S1163. Cottus gobio; Bullhead

Threats and Pressures at European site which may be affected by VCHAP^{2,3}:

- Water Pollution;
- Water Abstraction;
- Impacts on riparian zone habitats; and
- Air Quality.

¹ Natural England (2018) River Wensum SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/4906653837426688 [Date Accessed: 22/09/20]

² Natural England (2014) River Wensum SAC SIP. Available at: http://publications.naturalengland.org.uk/file/5795274547003392 [Date Accessed: 22/09/20]

³ Natural England (2019) River Wensum SAC Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/6254570196172800 [Date Accessed: 22/09/20]

Norfolk Valley Fens SAC⁴

Conservation objectives:

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

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

Qualifying Features:

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

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

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

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

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

H91EO. Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*); Alder woodland on floodplains*

S1014. Vertigo angustior; Narrow-mouthed whorl snail

S1016. Vertigo moulinsiana; Desmoulin's whorl snail

Threats and Pressures at European site which may be affected by VCHAP^{5,6}:

- Hydrological Change;
- Water Pollution;
- Water Abstraction; and
- Air Pollution impact of atmospheric nitrogen deposition.

^{*} Priority natural habitats or species

⁴ Natural England (2019) Norfolk Valley Fens SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/4744233475112960 [Date Accessed: 22/09/20]

⁵ Natural England (2014) Norfolk Valley Fens SAC SIP. Available at: http://publications.naturalengland.org.uk/file/4592297601662976 [Date Accessed: 22/09/20]

⁶ Natural England (2019) Norfolk Valley Fens SAC Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/5508865827536896 [Date Accessed: 22/09/20]

The Broads SAC7

Conservation objectives:

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

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

Qualifying Features:

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

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

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

H7140. Transition mires and quaking bogs; Very wet mires often identified by an unstable `quaking` surface

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

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

H91EO. Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae,

Salicion albae); Alder woodland on floodplains*

S1016. Vertigo moulinsiana; Desmoulin`s whorl snail

S1355. Lutra lutra; Otter

S1903. Liparis loeselii; Fen orchid

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

* Priority natural habitats or species

Threats and Pressures at European site which may be affected by VCHAP^{8,9}:

- Water Pollution;
- Inappropriate Water Levels;
- Hydrological Changes;
- Water Abstraction; and

⁷ Natural England (2018) The Broads SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/6427605842788352 [Date Accessed: 22/09/20]

⁸ Natural England (2018) Broadland SIP (covering Broadland SPA and The Broads SAC). Available at: http://publications.naturalengland.org.uk/file/6218680128241664 [Date Accessed: 22/09/20]

⁹ Natural England (2019) The Broads SAC Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/6067900213624832 [Date Accessed: 22/09/20]

• Air Pollution.

Broadland SPA¹⁰

Conservation objectives:

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

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

Qualifying features:

A021 Botaurus stellaris; Great bittern (Breeding)

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

A038 Cygnus cygnus; Whooper swan (Non-breeding)

A050 Anas penelope; Eurasian wigeon (Non-breeding)

A051 Anas strepera; Gadwall (Non-breeding)

A056 Anas clypeata; Northern shoveler (Non-breeding)

A081 Circus aeruginosus; Eurasian marsh harrier (Breeding)

A082 Circus cyaneus; Hen harrier (Non-breeding)

A151 Philomachus pugnax; Ruff (Non-breeding)

Threats and Pressures at European site which may be affected by VCHAP^{11,12}:

- Water Pollution;
- Inappropriate Water Levels;
- Hydrological Changes;
- Water Abstraction;
- Public Access and Disturbance; and
- Air Pollution.

¹⁰ Natural England (2019) Broadland SPA Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/5433101912375296 [Date Accessed: 22/09/20]

¹¹ Natural England (2018) Broadland SIP (covering Broadland SPA and The Broads SAC). Available at: http://publications.naturalengland.org.uk/file/6218680128241664 [Date Accessed: 22/09/20]

¹² Natural England (2019) Broadland SPA Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/4516754755944448 [Date Accessed: 22/09/20]

Broadland Ramsar¹³

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

Ramsar Criterion	Justification for the application of each criterion		
2	Ramsar criterion 2 - The site supports a number of rare species and habitats within the biogeographical zone context, including the followir Habitats Directive Annex I feature		
	H7210 Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> Calcium-rich fen dominated by great fen sedge (saw sedge).		
	H7230 Alkaline fens Calcium-rich springwater-fed fens.		
	H91EO Alluvial forests with <i>Alnus glutinosa</i> and Fraxinus excelsior (<i>Alno Padion, Alnion incanae, Salicion albae</i>) Alder woodland on floodplains, a the Annex II species		
	S1016 <i>Vertigo moulinsiana</i> Desmoulin`s whorl snail		
	S1355 <i>Lutra lutra</i> Otter		
	S1903 <i>Liparis loeselii</i> Fen orchid.		
6	The site supports outstanding assemblages of rare plants and invertebrates including nine British Red Data Book plants and 136 British Red Data Book invertebrates. Ramsar criterion 6 - species/populations occurring at levels of international importance.		
	Qualifying Species/populations (as identified at designation): Species with peak counts in winter:		
	Tundra swan , <i>Cygnus</i> columbianus bewickii, NW Europe 196 individuals, representing an average of 2.4% of the GB population (5 year peak mean 1998/9- 2002/3)		
	Eurasian wigeon , <i>Anas</i> penelope, NW Europe 6769 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1998/9-2002/3)		
	Gadwall , <i>Anas strepera</i> strepera, NW Europe 545 individuals, representing an average of 3.1% of the GB population (5 year peak mean 1998/9- 2002/3)		

¹³ JNCC. 2008. Information Sheet on Ramsar Wetlands. Broadland Ramsar https://jncc.gov.uk/jncc-assets/RIS/UK11010.pdf [Date Accessed: 22/10/20].

Northern shoveler,

Europe

Anas clypeata, NW & C

	ntified subsequent to designation for tion under criterion 6. Species with peak
Pink-footed goose , Anser brachyrhynchus, Greenland, Iceland/UK	4263 individuals, representing an average of 1.7% of the population (5 year peak mean 1998/9-2002/3)
Greylag goose , <i>Anser</i> anser anser, Iceland/UK, Ireland	1007 individuals, representing an average of 1.1% of the population (Source period not collated)

247 individuals, representing an average of

1.6% of the GB population (5 year peak

mean 1998/9-2002/3)

Threats and Pressures at European site which may be affected by VCHAP: None identified in Ramsar Information Sheet.

Breydon Water SPA¹⁴

Conservation objectives:

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

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

Qualifying Features:

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

A132 Recurvirostra avosetta; Pied avocet (Non-breeding)

A140 Pluvialis apricaria; European golden plover (Non-breeding)

A142 Vanellus vanellus; Northern lapwing (Non-breeding)

A151 Philomachus pugnax; Ruff (Non-breeding)

A193 Sterna hirundo; Common tern (Breeding)

A Waterbird assemblage

Threats and Pressures at European site which may be affected by VCHAP¹⁵:

Public Access and Disturbance; and

¹⁴ Natural England (2019) Breydon Water SPA Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/4822248376762368 [Date Accessed: 22/09/20]

¹⁵ Natural England (2018) Breydon Water SPA SIP. Available at: http://publications.naturalengland.org.uk/file/5893824219447296 [Date Accessed: 22/09/20]

• Hydrology Changes.

Breydon Water Ramsar¹⁶

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

Ramsar Criterion	Justification for the application of each criterion	
5	Ramsar criterion 5 - Assembl	lages of international importance
	Species with peak counts in winter: 68175 waterfowl (5 year peak me 1998/99-2002/2003)	
6	Ramsar criterion 6 – species/populations occurring at levels of international importance.	
	Qualifying Species/populations (as identified at designation): Species with peak counts in winter:	
	columbianus bewickii	171 individuals, representing an average of 2.1% of the GB population (5 year peak mean 1998/9- 2002/3)
	Vanellus vanellus	20142 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)
		fied subsequent to designation for on under criterion 6. Species with peak
	Anser brachyrhynchus	5816 individuals, representing an average of 2.4% of the population (5 year peak mean 1998/9-2002/3)
	nenelone NW Furone	15624 individuals, representing an average of 1% of the population (5 year peak mean 1998/9- 2002/3)
	Anas clyppata NIW & C	478 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9- 2002/3)
	Pluvialis apricaria	0656 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9-2002/3)

¹⁶ JNCC. 2008. Information Sheet on Ramsar Wetlands. Breydon Water Ramsar https://jncc.gov.uk/jncc-assets/RIS/UK11008.pdf [Date Accessed: 22/10/20].

Iceland & Faroes/E Atlantic		
Black-tailed godwit , <i>Limosa limosa islandica</i> , Iceland/W Europe	1100 individuals, representing an average of 3.1% of the population (5 year peak mean 1998/9-2002/3)	
Threats and Pressures at Europ None identified in Ramsar Infor	pean site which may be affected by VCHAP:	

Great Yarmouth North Deans SPA¹⁷

Conservation objectives:

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

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

Qualifying Features:

A195 Sterna albifrons; Little tern (Breeding)

Threats and Pressures at European site which may be affected by VCHAP^{18,19}:

- Public Access and Disturbance;
- Hydrological Changes;
- Air Pollution.

Winterton Horsey Dunes SAC²⁰

Conservation objectives:

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

¹⁷ Natural England (2019) Great Yarmouth North Denes SPA Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/6450939770961920 [Date Accessed: 22/09/20]

¹⁸ Natural England (2018) Great Yarmouth Winterton Horsey SIP (to cover Great Yarmouth North Denes SPA and Winterton-Horsey Dunes SAC). Available at: http://publications.naturalengland.org.uk/file/6277135286665216 [Date Accessed: 22/09/20]

¹⁹ Natural England (2012) Great Yarmouth and North Denes SPA Regulation 33 Advice. Available at: http://publications.naturalengland.org.uk/file/3957913 [Date Accessed: 22/09/20]

²⁰ Natural England (2018) Winterton-Horsey Dunes SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/6564347065401344 [Date Accessed: 24/09/20]

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

Qualifying Features:

H2110. Embryonic shifting dunes

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

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

H2190. Humid dune slacks

*Priority Species.

Threats and Pressures at European site which may be affected by VCHAP^{21,22}:

- Public Access and Disturbance;
- Hydrological Changes; and
- Air Pollution.

Paston Great Barn SAC²³

Conservation objectives:

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

- The extent and distribution of the habitats of qualifying species;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which the habitats of qualifying species rely;
- The populations of qualifying species; and
- The distribution of qualifying species within the site.

Qualifying Features:

S1308. Barbastella barbastellus; Barbastelle bat

Threats and Pressures at European site which may be affected by VCHAP^{24,25}:

- Offsite habitat availability / management (loss and changes to hydrological conditions supporting foraging habitat);
- Public access and disturbance (unauthorised access);
- Air Quality (impacts upon broadleaved woodland habitat).

²¹ Natural England (2018) Great Yarmouth Winterton Horsey SIP (to cover Great Yarmouth North Denes SPA and Winterton-Horsey Dunes SAC). Available at: http://publications.naturalengland.org.uk/file/6218680128241664 [Date Accessed: 24/09/20]

²² Natural England (2019) Winterton-Horsey Dunes SAC Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/5063465840672768 [Date Accessed: 24/09/20]

²³ Natural England (2019) Paston Great Barn SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/5114399593594880 [Date Accessed: 22/09/20]

²⁴ Natural England (2015) Paston Great Barn SAC SIP. Available at: http://publications.naturalengland.org.uk/file/5348069707087872 [Date Accessed: 24/09/20]

²⁵ Natural England (2019) Paston Great Barn SAC Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/5001414501990400 [Date Accessed: 24/09/20]

Overstrand Cliffs SAC²⁶

Conservation objectives:

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

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

Qualifying Features:

H1230. Vegetated sea cliffs of the Atlantic and Baltic coasts

Threats and Pressures at European site which may be affected by VCHAP^{27,28}:

- Water quality; and
- Air Quality.

Waveney & Little Ouse Valley Fens SAC²⁹

Conservation objectives:

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

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

Qualifying Features:

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

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

S1016. Vertigo moulinsiana; Desmoulin's whorl snail

* Priority natural habitats or species

²⁶ Natural England (2018) Overstrand Cliffs SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/6578860724584448 [Date Accessed: 22/09/20]

²⁷ Natural England (2014) Overstrand Cliffs SAC SIP. Available at: http://publications.naturalengland.org.uk/file/6475449683148800 [Date Accessed: 24/09/20]

²⁸ Natural England (2015) Overstrand Cliffs SAC Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/5574891690524672 [Date Accessed: 24/09/20]

²⁹ Natural England (2018) Waveney & Little Ouse Valley Fens SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/5174901589934080 [Date Accessed: 22/09/20]

Threats and Pressures at European site which may be affected by VCHAP^{30,31}:

- Water Pollution;
- Water Levels' and
- Air pollution.

Redgrave and South Lopham Fens Ramsar³²

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

Ramsar Criterion	Justification for the application of each criterion
2	The site supports many rare and scarce invertebrates, including a population of the fen raft spider Dolomedes plantarius.
3	The site supports many rare and scarce invertebrates, including a population of the fen raft spider Dolomedes plantarius. The diversity of the site is due to the lateral and longitudinal zonation of the vegetation types characteristic of valley mires.

Threats and Pressures at European site which may be affected by VCHAP:

Water quality.

³⁰ Natural England (2015) Waveney & Little Ouse Valley Fens SAC SIP. Available at: http://publications.naturalengland.org.uk/file/5005196964921344 [Date Accessed: 24/09/20]

³¹ Natural England (2019) Waveney & Little Ouse Valley Fens SAC Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/6068391618281472 [Date Accessed: 24/09/20]

³² JNCC. 2008. Information Sheet on Ramsar Wetlands. Redgrave and South Lopham Fens Ramsar https://jncc.gov.uk/jncc-assets/RIS/UK11056.pdf [Date Accessed: 22/10/20].

Breckland SAC33

Conservation objectives:

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

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

Qualifying Features:

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

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

H4030. European dry heaths

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

H91EO. Alluvial forests with *Alnus glutinosa* and Fraxinus excelsior (*Alno-Padion, Alnion incanae, Salicion albae*); Alder woodland on floodplains*

S1166. Triturus cristatus; Great crested newt

* Priority natural habitats or species

Threats and Pressures at European site which may be affected by VCHAP^{34,35}:

- Water pollution;
- Planning permission general (housing noted);
- Air pollution;
- Public access and disturbance; and
- Habitat fragmentation.

Breckland SPA³⁶

Conservation objectives:

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

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

³³ Natural England (2018) Breckland SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/6441039158312960 [Date Accessed: 22/09/20]

³⁴ Natural England (2015) Breckland SIP (Covering Breckland SAC and Breckland SPA). Available at: http://publications.naturalengland.org.uk/file/5005196964921344 [Date Accessed: 24/09/20]

³⁵ Natural England (2019) Breckland SAC. Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/6754976231849984 [Date Accessed: 24/09/20]

³⁶ Natural England (2019) Breckland SPA Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/4973014479536128 [Date Accessed: 22/09/20]

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

Qualifying Features:

A133 Burhinus oedicnemus; Stone-curlew (Breeding) A224 Caprimulgus europaeus; European nightjar (Breeding) A246 Lullula arborea; Woodlark (Breeding)

Threats and Pressures at European site which may be affected by VCHAP^{37,38}:

- Water pollution;
- Planning permission general (housing noted);
- Air pollution;
- Public access and disturbance; and
- Habitat fragmentation.

Benacre to Easton Bavents Laggoons SAC³⁹

Conservation objectives:

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

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

Qualifying Features:

H1150. Coastal lagoons*

* Priority natural habitats or species

Threats and Pressures at European site which may be affected by VCHAP^{40,41}:

- Public access and disturbance;
- Air quality; and
- Water pollution.

³⁷ Natural England (2015) Breckland SIP (Covering Breckland SAC and Breckland SPA). Available at: http://publications.naturalengland.org.uk/file/5005196964921344 [Date Accessed: 24/09/20]

³⁸ Natural England (2019) Breckland SPA. Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/5048975426322432 [Date Accessed: 24/09/20]

³⁹ Natural England (2019) Benacre to Easton Bavents Lagoons SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/6005842830950400 [Date Accessed: 22/09/20]

⁴⁰ Natural England (2015) Benacre to Easton Bavents SIP (Covering Benacre to Easton Bavents Lagoons SAC and Benacre to Easton Bavents SPA). Available at: http://publications.naturalengland.org.uk/file/5868757182316544 [Date Accessed: 24/09/20]

⁴¹ Natural England (2019) Benacre to Easton Bavents Lagoons SAC. Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/5503127986110464 [Date Accessed: 24/09/20]

Benacre to Easton Bavents Laggoons SPA⁴²

Conservation objectives:

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

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

Qualifying Features:

A021 Botaurus stellaris; Great bittern (Breeding)

A081 Circus aeruginosus; Eurasian marsh harrier (Breeding)

A195 Sterna albifrons; Little tern (Breeding)

Threats and Pressures at European site which may be affected by VCHAP^{43,44}:

- Public access and disturbance;
- Air quality; and
- Water pollution.

Dew's Ponds SAC⁴⁵

Conservation objectives:

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

- The extent and distribution of the habitats of qualifying species;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which the habitats of qualifying species rely;
- The populations of qualifying species; and
- The distribution of qualifying species within the site.

Qualifying Features:

S1166. Triturus cristatus; Great crested newt

⁴² Natural England (2019) Benacre to Easton Bavents Laggoons SPA Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/5222146070806528 [Date Accessed: 23/09/20]

⁴³ Natural England (2015) Benacre to Easton Bavents SIP (Covering Benacre to Easton Bavents Lagoons SAC and Benacre to Easton Bavents SPA). Available at: http://publications.naturalengland.org.uk/file/5868757182316544 [Date Accessed: 24/09/20]

⁴⁴ Natural England (2019) Benacre to Easton Bavents Lagoons SPA. Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/5503127986110464 [Date Accessed: 24/09/20]

⁴⁵ Natural England (2018) Dew's Point SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/5809266204344320 [Date Accessed: 23/09/20]

Threats and Pressures at European site which may be affected by VCHAP^{46,47}:

- Water quality; and
- Air quality.

The Wash and North Norfolk Coast SAC⁴⁸

Conservation objectives:

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

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

Qualifying Features:

H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks

H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats

H1150. Coastal lagoons*

H1160. Large shallow inlets and bays

H1170. Reefs

H1310. Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand

H1330. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

H1420. Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi);

Mediterranean saltmarsh scrub

S1355. Lutra lutra; Otter

S1365. Phoca vitulina; Common seal

* Priority natural habitats or species

Threats and Pressures at European site which may be affected by VCHAP⁴⁹:

- Water levels;
- Public access and disturbance; and
- Air pollution.

⁴⁶ Natural England (2014) Dew's Point SAC SIP. Available at: http://publications.naturalengland.org.uk/file/5689361702060032 [Date Accessed: 24/09/20]

⁴⁷ Natural England (2015) Dew's Point SAC. Conservation Objectives Supplementary Advice. Available at: http://publications.naturalengland.org.uk/file/6663816760786944 [Date Accessed: 24/09/20]

⁴⁸ Natural England (2018) The Wash and North Norfolk Coast SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/5213489320951808 [Date Accessed: 23/09/20]

⁴⁹ Natural England (2014) The Wash and North Norfolk Coast SIP (to cover Gibraltar Point SPA, N Norfolk Coast SPA, North Norfolk Coast SAC, The Wash and North Norfolk Coast SAC and The Wash SPA). Available at: http://publications.naturalengland.org.uk/file/6240487188987904 [Date Accessed: 24/09/20]

The Wash SPA⁵⁰

Conservation objectives:

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

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

Qualifying Features:

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

A040 Anser brachyrhynchus; Pink-footed goose (Non-breeding)

A046a Branta bernicla bernicla; Dark-bellied brent goose (Non-breeding)

A048 Tadorna tadorna; Common shelduck (Non-breeding)

A050 Anas penelope; Eurasian wigeon (Non-breeding)

A051 Anas strepera; Gadwall (Non-breeding)

A054 *Anas acuta*; Northern pintail (Non-breeding)

A065 Melanitta nigra; Black (common) scoter (Non-breeding)

A067 Bucephala clangula; Common goldeneye (Non-breeding)

A130 Haematopus ostralegus; Eurasian oystercatcher (Non-breeding)

A141 Pluvialis squatarola; Grey plover (Non-breeding)

A143 Calidris canutus; Red knot (Non-breeding)

A144 Calidris alba; Sanderling (Non-breeding)

A149 Calidris alpina alpina; Dunlin (Non-breeding)

A156 Limosa limosa islandica; Black-tailed godwit (Non-breeding)

A157 Limosa lapponica; Bar-tailed godwit (Non-breeding)

A160 *Numenius arquata*; Eurasian curlew (Non-breeding)

A162 *Tringa totanus*; Common redshank (Non-breeding)

A169 Arenaria interpres; Ruddy turnstone (Non-breeding)

A193 Sterna hirundo; Common tern (Breeding)

A195 Sterna albifrons; Little tern (Breeding)

Waterbird assemblage

Threats and Pressures at European site which may be affected by VCHAP⁵¹:

- Water levels;
- Public access and disturbance; and
- Air pollution.

The Wash Ramsar⁵²

Ramsar sites do not have the Conservation Objectives in the same way as SPAs and SACs. Information regarding the designation of Ramsar sites is contained in INCC Ramsar Information

⁵⁰ Natural England (2019) The Wash SPA Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/4748062010638336 [Date Accessed: 23/09/20]

⁵¹ Natural England (2014) The Wash and North Norfolk Coast SIP (to cover Gibraltar Point SPA, N Norfolk Coast SPA, North Norfolk Coast SAC, The Wash and North Norfolk Coast SAC and The Wash SPA). Available at: http://publications.naturalengland.org.uk/file/6240487188987904 [Date Accessed: 24/09/20]

⁵² JNCC. 2008. The Wash Information Sheet on Ramsar Wetlands. The Wash Ramsar https://jncc.gov.uk/jncc-assets/RIS/UK11072.pdf [Date Accessed: 23/10/20].

Sheets. Ramsar Criteria are the criteria for identifying Wetlands of International Importance. The relevant criteria and ways in which this site meets the criteria are presented in the table below.

Ramsar Criterion	Justification for the application	of each criterion
1	Ramsar criterion 1	
		bay comprising very extensive saltmarshes, d and mud, shallow water and deep channels.
3	Ramsar criterion 5	
	including saltmarshes, interti waters. The saltmarshes and primary source of organic ma	r-relationship between its various components idal sand and mud flats and the estuarine the plankton in the estuarine water provide a aterial which, together with other organic he high productivity of the estuary.
5	winter:	Il importance: Species with peak counts in eak mean 1998/99-2002/2003)
6		/populations occurring at levels of
	Qualifying Species/population	ons (as identified at designation):
	Species with peak counts in	n spring/autumn
	Haematonus ostralegus	15616 individuals, representing an average of 1.5% of the population (5 year peak mean 1998/9-2002/3)
	squatarola F	13129 individuals, representing an average of 5.3% of the population (5 year peak mean 1998/9-2002/3 - spring peak)
	caputus islandica W &	68987 individuals, representing an average of 15.3% of the population (5 year peak mean 1998/9-2002/3)
	alba Fastern Atlantic	3505 individuals, representing an average of 2.8% of the population (5 year peak mean 1998/9-2002/3)
	Numenius arquata	9438 individuals, representing an average of 2.2% of the population (5 year peak mean 1998/9-2002/3)

Common redshank , Tringa totanus totanus,	6373 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9-2002/3)
Ruddy turnstone , Arenaria interpres interpres, NE Canada, Greenland/W Europe & NW Africa	888 individuals, representing an average of 1.7% of the GB population (5 year peak mean 1998/9- 2002/3)

Species with peak counts	s in spring/autumn:
Pink-footed goose , Anser brachyrhynchus, Greenland, Iceland/UK	29099 individuals, representing an average of 12.1% of the population (5 year peak mean 1998/9-2002/3)
Dark-bellied brent goose, <i>Branta bernicla</i> <i>bernicla</i> ,	20861 individuals, representing an average of 9.7% of the population (5 year peak mean 1998/9-2002/3)
Common shelduck , <i>Tadorna tadorna</i> , NW Europe	9746 individuals, representing an average of 3.2% of the population (5 year peak mean 1998/9-2002/3)
Northern pintail , <i>Anas</i> <i>acuta</i> , NW Europe	431 individuals, representing an average of 1.5% of the GB population (5 year peak mean 1998/9- 2002/3)
Dunlin , <i>Calidris alpina</i> <i>alpina</i> , W Siberia/W Europe	36600 individuals, representing an average of 2.7% of the population (5 year peak mean 1998/9-2002/3)
Bar-tailed godwit , <i>Limosa lapponica</i> <i>lapponica</i> , W Palearctic	16546 individuals, representing an average of 13.7% of the population (5 year peak mean 1998/9-2002/3)

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Species with peak counts	s in spring/autumn:
Ringed plover , Charadrius hiaticula, Europe/Northwest Africa	1500 individuals, representing an average of 2% of the population (5 year peak mean 1998/9- 2002/3)
Black-tailed godwit , <i>Limosa limosa islandica</i> , Iceland/W Europe	6849 individuals, representing an average of 19.5% of the population (5 year peak mean 1998/9-2002/3)

	Species with peak counts	in winter:
	European golden plover , <i>Pluvialis apricaria</i> <i>apricaria</i> , <i>P. a. altifrons</i> Iceland & Faroes/E Atlantic	22033 individuals, representing an average of 2.3% of the population (5 year peak mean 1998/9-2002/3)
	Northern lapwing , Vanellus vanellus, Europe - breeding	46422 individuals, representing an average of 1.3% of the population (5 year peak mean 1998/9-2002/3)

Threats and Pressures at European site which may be affected by VCHAP:

None identified in Ramsar Information Sheet.

The Greater Wash SPA⁵³

Conservation objectives:

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

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

Qualifying Features:

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

A065 *Melanitta nigra*; Common scoter (Non-breeding)

A177 Hydrocoloeus minutus; Little gull (Non-breeding)

A191 Sterna sandvicensis; Sandwich tern (Breeding)

A193 Sterna hirundo; Common tern (Breeding)

A195 Sternula albifrons; Little tern (Breeding)

North Norfolk Coast SPA⁵⁴

Conservation objectives:

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

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

⁵³ Natural England (2019) The Greater Wash SPA Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/4748062010638336 [Date Accessed: 23/09/20]

⁵⁴ Natural England (2019) North Norfolk Coast SPA Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/4597105251581952 [Date Accessed: 23/09/20]

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

Qualifying Features:

A021 Botaurus stellaris; Great bittern (Breeding)

A040 Anser brachyrhynchus; Pink-footed goose (Non-breeding)

A046a Branta bernicla bernicla; Dark-bellied brent goose (Non-breeding)

A050 *Anas penelope*; Eurasian wigeon (Non-breeding)

A081 Circus aeruginosus; Eurasian marsh harrier (Breeding)

A084 Circus pygargus; Montagu's harrier (Breeding)

A132 Recurvirostra avosetta; Pied avocet (Breeding)

A143 Calidris canutus; Red knot (Non-breeding)

A191 Sterna sandvicensis; Sandwich tern (Breeding)

A193 Sterna hirundo; Common tern (Breeding)

A195 Sterna albifrons; Little tern (Breeding)

Waterbird assemblage

Threats and Pressures at European site which may be affected by VCHAP⁵⁵:

- Water levels:
- Public access and disturbance; and
- Air pollution.

North Norfolk Coast SAC56

Conservation objectives:

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

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

Qualifying Features:

H1150. Coastal lagoons*

H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves

H1420. Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi);

Mediterranean saltmarsh scrub

H2110. Embryonic shifting dunes

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

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

Natural England (2014) The Wash and North Norfolk Coast SIP (to cover Gibraltar Point SPA, N Norfolk Coast SPA, North Norfolk Coast SAC, The Wash and North Norfolk Coast SAC and The Wash SPA). Available at: http://publications.naturalengland.org.uk/file/6240487188987904 [Date Accessed: 24/09/20]

⁵⁶ Natural England (2018) North Norfolk Coast SAC Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/5187288007180288 [Date Accessed: 23/09/20]

H2190. Humid dune slacks S1355. *Lutra lutra*; Otter S1395. *Petalophyllum ralfsii*; Petalwort * Priority natural habitats or species

Threats and Pressures at European site which may be affected by VCHAP⁵⁷:

- Water levels;
- Public access and disturbance; and
- Air pollution.

North Norfolk Coast Ramsar58

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

Ramsar Criterion	Justification for the application of each criterion	
1	Ramsar criterion 1 The site is one of the largest expanses of undeveloped coastal habitat of its type in Europe. It is a particularly good example of a marshland coast with intertidal sand and mud, saltmarshes, shingle banks and sand dunes. There are a series of brackish-water lagoons and extensive areas of freshwater grazing marsh and reed beds.	
2	Ramsar criterion 2 Supports at least three British Red Data Book and nine nationally scarce vascular plants, one British Red Data Book lichen and 38 British Red Data Book invertebrates.	
5	Assemblages of international importance: Species with peak counts in winter: 98462 waterfowl (5 year peak mean 1998/99-2002/2003)	
6	Ramsar criterion 6 – species/populations occurring at levels of international importance. Qualifying Species/populations (as identified at designation):	
	Species regularly supported during the breeding season: Sandwich tern , Sterna (Thalasseus) sandvicensis sandvicensis, W Europe 4275 apparently occupied nests, representing an average of 7.7% of the breeding population (Seabird 2000 Census)	

⁵⁷ Natural England (2014) The Wash and North Norfolk Coast SIP (to cover Gibraltar Point SPA, N Norfolk Coast SPA, North Norfolk Coast SAC, The Wash and North Norfolk Coast SAC and The Wash SPA). Available at: http://publications.naturalengland.org.uk/file/6240487188987904 [Date Accessed: 24/09/20]

⁵⁸ JNCC. 2008. Information Sheet on Ramsar Wetlands. North Norfolk Coast Ramsar https://jncc.gov.uk/jncc-assets/RIS/UK11048.pdf [Date Accessed: 23/10/20].

Common tern , <i>Sterna</i> <i>hirundo hirundo</i> , N & E Europe	408 apparently occupied nests, representing an average of 4% of the GB population (Seabird 2000 Census)	
Little tern , <i>Sterna</i> <i>albifrons albifrons</i> , W Europe	291 apparently occupied nests, representing an average of 2.5% of the breeding population (Seabird 2000 Census)	
Species with peak counts in spring/autumn:		
Red knot , <i>Calidris</i> canutus islandica, W & Southern Africa (wintering)	30781 individuals, representing an average of 6.8% of the population (5 year peak mean 1998/9-2002/3)	
Species with peak counts	in winter:	
Pink-footed goose , Anser brachyrhynchus, Greenland, Iceland/UK	16787 individuals, representing an average of 6.9% of the population (5 year peak mean 1998/9-2002/3)	
Dark-bellied brent goose, <i>Branta bernicla</i> <i>bernicla</i> ,	8690 individuals, representing an average of 4% of the population (5 year peak mean 1998/9- 2002/3)	
Eurasian wigeon , <i>Anas</i> penelope, NW Europe	17940 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9-2002/3)	
Northern pintail , <i>Anas</i> <i>acuta</i> , NW Europe	1148 individuals, representing an average of 1.9% of the population (5 year peak mean 1998/9-2002/3)	
Species/populations identi	ified subsequent to designation for possible rariterion 6.	
Species with peak counts	Species with peak counts in spring/autumn:	
Ringed plover , Charadrius hiaticula, Europe/Northwest Africa	1740 individuals, representing an average of 2.3% of the population (5 year peak mean 1998/9-2002/3)	
Sanderling , Calidris alba, Eastern Atlantic	1303 individuals, representing an average of 1% of the population (5 year peak mean 1998/9- 2002/3)	

	Bar-tailed godwit , <i>Limosa lapponica</i> <i>lapponica</i> , W Palearctic	3933 individuals, representing an average of 3.2% of the population (5 year peak mean 1998/9-2002/3)	
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Threats and Pressures at European site which may be affected by VCHAP:

None identified in Ramsar Information Sheet.

Southern North Sea SAC⁵⁹

Conservation objectives:

To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for Harbour Porpoise in UK waters:

In the context of natural change, this will be achieved by ensuring that:

- 1. Harbour porpoise is a viable component of the site;
- 2. There is no significant disturbance of the species; and
- 3. The condition of supporting habitats and processes, and the availability of prey is maintained.

Qualifying Features:

1351: Harbour porpoise (*Phocoena phocoena*)

Threats and Pressures at European site which may be affected by VCHAP⁶⁰:

• Public access and disturbance (boating).

Outer Thames Estuary SPA⁶¹

Conservation objectives:

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

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

Qualifying Features:

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

A193 Sterna hirundo; Common tern (Breeding)

A195 Sternula albifrons; Little tern (Breeding)

⁵⁹ JNCC (2019) Southern North Sea SAC Conservation Objectives. Available at: http://data.jncc.gov.uk/data/206f2222-5c2b-4312-99ba-d59dfd1dec1d/SouthernNorthSea-conservation-advice.pdf [Date Accessed: 23/09/20]

⁶⁰ JNCC. Natural England. March 2019. Harbour Porpoise (Phocoena phocoena) Special Area of Conservation: Southern North Sea Conservation Objectives and Advice on Operations. Available at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010079/EN010079-002860-ExA%3B%20ISH6%3B%2010.D7.12%20Harbour%20Porpoise%20SAC%20Conservation%20Objectives%20and%20Advice.pdf [Date Accessed: 23/09/20]

⁶¹ Natural England (2019) Outer Thames Estuary SPA Conservation Objectives. Available at: http://publications.naturalengland.org.uk/file/5184120712069120 [Date Accessed: 23/09/20]

Threats and Pressures at European site which may be affected by VCHAP⁶²:

• No threats identified that could be increased / effected by VCHAP.

Hainsborough, Hammond and Winterton SAC 63

Conservation objectives:

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

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

Qualifying Features:

1170 Reefs

1110 Sandbanks which are slightly covered by sea water all the time

Threats and Pressures at European site which may be affected by VCHAP⁶⁴:

• Recreation.

⁶² Natural England (2015) Outer Thames Estuary SPA SIP. Available at: http://publications.naturalengland.org.uk/file/5877617494327296 [Date Accessed: 24/09/20]

 $^{^{63}}$ JNCC Hainsborough, Hammond and Winterton SAC. Available at: https://incc.gov.uk/our-work/haisborough-hammond-and-winterton-mpa/ [Date Accessed: 23/09/20]

⁶⁴ Natural England. Hainsborough, Hammond and Winterton SAC. Available at: https://designatedsites.naturalengland.org.uk/Marine/FAPMatrix.aspx?SiteCode=UK0030369&SiteName=hais&Sit

Appendix C: Site of Special Scientific Interest Condition Data

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
			6 Favourable	n/a
			12 Unfavourable - recovering	n/a
River Wensum SAC	River Wensum SSSI	55	37 Unfavourable – declining	Dominant vegetation. Opportunities for river restoration. Hydrological connectivity not appropriate.
	Badley Moor SSSI	4	4 Favourable	n/a
	Booton Common SSSI	1	1 Unfavourable - recovering	n/a
	Buxton Heath SSSI	1	1 Unfavourable - recovering	n/a
	Coston Fen, Funhall SSSI	1	1 Unfavourable - no change	n/a
	East Walton and Adcock's Common SSSI	3	3 Unfavourable - recovering	n/a
	Flordon Common SSSI	2	1 Favourable	n/a
Norfolk Valley Fens			1 Unfavourable - recovering	n/a
SAC	Foulden Common SSSI		2 Favourable	n/a
			4 Unfavourable - recovering	n/a
		7	1 Unfavourable – declining	The designated interest features S2, S25, M13, M22 & M24 all failed the condition assessment on the quantity of positive indicator species present. The cover of litter was also above the desired threshold and the unit is at risk from the development of scrub.

¹ Natural England. Designated Site View. https://designatedsites.naturalengland.org.uk/. Site condition data is provided for the SSSIs which legally underpin European site designations [Date Accessed: 23/04/21].

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
	Great Cressingham Fen SSSI	1	1 Unfavourable - recovering	n/a
	Hotl Lowes SSSI		1 Favourable	n/a
	3301	2	1 Unfavourable - recovering	n/a
	Potter & Scarning Fens, East Dereham SSSI	2	2 Unfavourable - recovering	n/a
	Sheringham and Beeston Regis Commons SSSI	2	2 Unfavourable - recovering	n/a
	Southrepps Common SSSI	1	1 Unfavourable - recovering	n/a
	Swangey Fen, Attleborough		5 Favourable	n/a
	SSSI	6	1 Unfavourable - recovering	n/a
	Thompson Water, Carr and Common SSSI	11	8 Favourable	n/a
			2 Unfavourable - recovering	n/a
			1 Unfavourable – declining	Currently this site is considered unfavourable, due to the lack of any broadleaved pondweeds, not meeting the TP target and oxygen concentrations too low to support characteristic fauna. The change in macrophyte community structure is likely to be a response to the availability of nutrients and is also a cause for concern.
	Alderfen Broad SSSI	-	1 Favourable	n/a
		3	2 Unfavourable - recovering	n/a
The Broads SAC	Ant Broads and Marshes		24 Favourable	n/a
	SSSI	35	8 Unfavourable - recovering	n/a
			3 Unfavourable – declining	Possible nutrient enrichment.

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
	Barnby Broad and Marshes		11 Favourable	n/a
	SSSI	24	13 Unfavourable - recovering	n/a
	Broad Fen, Dilham SSSI	1	1 Unfavourable - recovering	n/a
	Bure Broads and Marshes		5 Favourable	n/a
	SSSI	14	4 Unfavourable – no change	n/a
			5 Unfavourable - recovering	n/a
	Burgh Common and		4 Favourable	n/a
	Muckfleet Marshes SSSI	9	1 Unfavourable – no change	n/a
			4 Unfavourable - recovering	n/a
	Calthorpe Broad SSSI	3	2 Favourable	n/a
			1 Unfavourable - recovering	n/a
	Cantley Marshes SSSI	3	23 Favourable	n/a
	Crostwick Marsh SSSI	1	1 Unfavourable – no change	n/a
	Damgate Marshes, Acle		6 Favourable	n/a
	SSSI	10	4 Unfavourable - recovering	n/a
	Decoy Car, Acle SSSI		4 Favourable	n/a
		6	2 Unfavourable - recovering	n/a
	Duncan's Marsh, Claxton SSSI	2	2 Unfavourable - recovering	n/a
	Geldeston Meadows SSSI	2	2 Unfavourable – no change	n/a
		2	2 Unfavourable – declining	No comment provided.
	Hall Farm Fen, Hemsby SSSI	1	1 Favourable	n/a
	Halvergate Marshes SSSI		21 Favourable	n/a
		36	2 Unfavourable – no change	n/a

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
			9 Unfavourable - recovering	n/a
	Hardley Flood SSSI	2	2 Favourable	n/a
	Limpenhoe Meadows SSSI	1	1 Unfavourable - recovering	n/a
	Ludham – Potter Heigham Marshes SSSI	6	6 Favourable	n/a
	Poplar Farm Meadows, Langley SSSI	1	1 Favourable	n/a
	Priory Meadows,		1 Favourable	n/a
	Hickling SSSI	2	1 Unfavourable - recovering	n/a
	Shallam Dyke Marshes,		2 Favourable	n/a
	Thurne SSSI	8	6 Unfavourable – no change	n/a
	Sprat's Water and Marshes, Carlton Colville SSSI	12	7 Favourable	n/a
			2 Unfavourable - no change	n/a
			3 Unfavourable - recovering	n/a
	Smallburgh Fen SSSI	1	1 Favourable	n/a
	Stanley and Alder Carrs, Aldeby SSSI	3	3 Unfavourable - recovering	n/a
	Trinity Broads SSSI		15 Favourable	n/a
		23	1 Unfavourable – no change	n/a
			7 Unfavourable - recovering	n/a
	Upper Thurne Broads and		11 Favourable	n/a
	Marshes SSSI		3 Unfavourable – no change	n/a
		19	2 Unfavourable - recovering	n/a
			3 Unfavourable – declining	Water quality and abstraction.
		18	8 Favourable	n/a

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European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
	Upton Broad & Marshes SSSI		1 Unfavourable – no change	n/a
			9 Unfavourable - recovering	n/a
	Yare Broads and Marshes		7 Favourable	n/a
	SSSI		9 Unfavourable – no change	n/a
		28	5 Unfavourable - recovering	n/a
			5 Unfavourable – declining	Nutrient enrichment. Overfeeding of duck for shooting with possible contribution from agricultural run-off.
	Alderfen Broad SSSI		1 Favourable	n/a
	3331	3	2 Unfavourable - recovering	n/a
	Ant Broads and Marshes SSSI	35	24 Favourable	n/a
			8 Unfavourable - recovering	n/a
			3 Unfavourable – declining	Possible nutrient enrichment.
	Barnby Broad and Marshes SSSI		11 Favourable	n/a
		24	13 Unfavourable - recovering	n/a
	Broad Fen, Dilham SSSI	1	1 Unfavourable - recovering	n/a
Broadland SPA and Ramsar	Bure Broads and Marshes	14	5 Favourable	n/a
	SSSI		4 Unfavourable - no change	n/a
			5 Unfavourable - recovering	n/a
	Burgh Common and		4 Favourable	n/a
	Muckfleet Marshes SSSI	9	1 Unfavourable – no change	n/a
			4 Unfavourable - recovering	n/a
	Calthorpe Broad SSSI	_	2 Favourable	n/a
		3	1 Unfavourable - recovering	n/a
	Cantley Marshes SSSI	3	23 Favourable	n/a

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
	Crostwick Marsh SSSI	1	1 Unfavourable – no change	n/a
	Decoy Car, Acle SSSI		4 Favourable	n/a
	Acie 333i	6	2 Unfavourable - recovering	n/a
	Duncan's Marsh, Claxton SSSI	2	2 Unfavourable - recovering	n/a
	Geldeston Meadows SSSI	2	2 Unfavourable – no change	n/a
		2	2 Unfavourable – declining	No comment provided.
	Hall Farm Fen, Hemsby SSSI	1	1 Favourable	n/a
	Halvergate Marshes SSSI		21 Favourable	n/a
		36	2 Unfavourable – no change	n/a
			9 Unfavourable - recovering	n/a
	Hardley Flood SSSI	2	2 Favourable	n/a
	Limpenhoe Meadows SSSI	1	1 Unfavourable - recovering	n/a
	Ludham - Potter Heigham Marshes SSSI	6	6 Favourable	n/a
	Poplar Farm Meadows, Langley SSSI	1	1 Favourable	n/a
	Priory Meadows,		1 Favourable	n/a
	Hickling SSSI	2	1 Unfavourable - recovering	n/a
	Shallam Dyke Marshes,		2 Favourable	n/a
	Thurne SSSI	8	6 Unfavourable – no change	n/a
	Sprat's Water and Marshes,		7 Favourable	n/a
	Carlton Colville	12	2 Unfavourable - no change	n/a
			3 Unfavourable - recovering	n/a
	Smallburgh Fen SSSI	1	1 Favourable	n/a

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
	Stanley and Alder Carrs, Aldeby SSSI	3	3 Unfavourable - recovering	n/a
	Upper Thurne Broads and		11 Favourable	n/a
	Marshes SSSI		3 Unfavourable - no change	n/a
		19	2 Unfavourable - recovering	n/a
			3 Unfavourable – declining	Water quality and abstraction.
	Upton Broad & Marshes SSSI		8 Favourable	n/a
		18	1 Unfavourable - no change	n/a
			9 Unfavourable - recovering	n/a
	Yare Broads and Marshes		7 Favourable	n/a
	SSSI	28	9 Unfavourable - no change	n/a
			5 Unfavourable - recovering	n/a
			5 Unfavourable – declining	Nutrient enrichment. Overfeeding of duck for shooting with possible contribution from agricultural run-off.
	Breydon Water SSSI	15	15 Favourable	n/a
Breydon Water SPA	Halvergate Marshes SSSI	42	29 Favourable	n/a
and Ramsar			3 Unfavourable - no change	n/a
			10 Unfavourable - recovering	n/a
	Great Yarmouth North Denes SSSI	2	2 Favourable	n/a
Great Yarmouth North Deans SPA	Winterton- Horsey Dunes		7 Favourable	n/a
	SSSI	12	4 Unfavourable - no change	n/a
			1 Unfavourable - recovering	n/a
		12	7 Favourable	n/a

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
Winterton-Horsey	Winterton- Horsey Dunes		4 Unfavourable - no change	n/a
Dunes SAC	SSSI		1 Unfavourable - recovering	n/a
	Blo' Norton and		3 Favourable	n/a
	Thelnetham Fens SSSI	6	3 Unfavourable – recovering	n/a
Waveney & Little Ouse	Redgrave and Lopham Fens SSSI	4	4 Unfavourable – recovering	n/a
Valley SAC	Weston Fen, Suffolk SSSI	İ	5 Favourable	n/a
		10	2 Unfavourable - no change	n/a
			3 Unfavourable - recovering	n/a
Redgrave and South Lopham Fens Ramsar	Redgrave and Lopham Fens SSSI	4	4 Unfavourable – recovering	n/a
	Barnhamcross Common SSSI	2	2 Unfavourable – recovering	n/a
	Berner's Heath,		1 Favourable	n/a
Breckland SAC	Icklingham SSSI	3	2 Destroyed	Agriculture. Unit 6 and 7 are part of a field designated as Berner's Heath SSSI. Specialist advice is to undertake a notification amendment to include this area of land within the Breckland Farmland SSSI and to have stone curlew as the sole interest feature. Following such an amendment this area could be considered favourable.
	Bridgham & Brettenham	-	2 Favourable	n/a
	Heaths SSSI	6	4 Unfavourable – recovering	n/a
	Cavenham – Icklingham Heaths SSSI	27	14 Favourable	n/a
			1 Unfavourable - no change	n/a
			11 Unfavourable - recovering	n/a

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
			1 Destroyed	Site is destroyed therefore no change since last assessment.
	Cranwich Camp SSSI	1	1 Unfavourable - recovering	n/a
	Deadman's Grave,		3 Favourable	n/a
	Icklingham SSSI	6	2 Unfavourable - recovering	n/a
			1 Unfavourable - declining	Agriculture
	East Wretham Heath SSSI		1 Favourable	n/a
			4 Unfavourable – recovering	n/a
		6	1 Unfavourable - declining	Ringmere: there has been a considerable loss of aquatic species since the last assessment, but all terrestrial and amphibious characteristic species previously recorded were present. High nutrient levels recorded in previous water analysis suggest nutrients are impacting the mere. Langmere: the near absence of open water made it impossible to assess the aquatic zone, but the mud and inundation zones were well developed and in good condition. However, there are some factors that point towards elevated nutrient levels at Langmere,.
	Field Barn Heaths, Hilborough SSSI	1	1 Unfavourable – recovering	n/a
	Foxhole Heath, Eriswell SSSI	1	1 Favourable	n/a
	Gooderstone Warren SSSI	4	4 Unfavourable – recovering	n/a
	Grime's Grave SSSI	_	1 Favourable	n/a
		3	2 Unfavourable – recovering	n/a

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
	Lakenheath Warren SSSI		5 Unfavourable - no change	n/a
		11	6 Unfavourable - recovering	n/a
	RAF Lakenheath SSSI	4	4 Favourable	n/a
	Stanford Training Area		29 Favourable	n/a
			2 Unfavourable – no change	n/a
		81	28 Unfavourable - recovering	n/a
			2 Unfavourable - declining	Unsuitable bat habitat (Unit 072). Poor diversity of aquatic vegetation (Unit 089).
	Thetford Golf Course & Marsh SSSI		1 Favourable	n/a
		8	2 Unfavourable - no change	n/a
			5 Unfavourable - recovering	n/a
	Thetford Heaths SSSI	4	2 Favourable	n/a
			1 Unfavourable – no change	n/a
			1 Unfavourable - recovering	n/a
	Wangford Warren and		1 Favourable	n/a
	Carr SSSI	5	4 Unfavourable - recovering	n/a
	Weather and Horn Heaths,		2 Unfavourable - declining	Agriculture
	Eriswell SSSI	3	Partially destroyed	The majority of this unit has been destroyed by the construction of the dualled A11.
	Weeting Heath SSSI		2 Favourable	n/a
	3331	6	1 Unfavourable – no change	n/a
			3 Unfavourable - recovering	n/a
	Barnham Heath SSSI		1 Favourable	n/a
Breckland SPA		2	1 Unfavourable - recovering	n/a

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
	Barnhamcross Common SSSI	2	2 Unfavourable – recovering	n/a
	Berner's Heath,		1 Favourable	n/a
	Icklingham SSSI	3	2 Destroyed	Agriculture. Unit 6 and 7 are part of a field designated as Berner's Heath SSSI. Specialist advice is to undertake a notification amendment to include this area of land within the Breckland Farmland SSSI and to have stone curlew as the sole interest feature. Following such an amendment this area could be considered favourable.
	Breckland Farm SSSI	70	70 Favourable	n/a
	Breckland Forest SSSI		2 Favourable	n/a
	1 Orest 3331	7	4 Unfavourable – recovering	n/a
	Bridgham & Brettenham Heaths SSSI Cavenham – Icklingham Heaths SSSI	6	2 Favourable	n/a
			4 Unfavourable - recovering	n/a
		27	14 Favourable	n/a
			1 Unfavourable – no change	n/a
			11 Unfavourable - recovering	n/a
			1 Destroyed	Site is destroyed therefore no change since last assessment.
	Cranberry Rough	4	1 Favourable	n/a
	Hockham SSSI		3 Unfavourable - recovering	n/a
	Cranwich Camp SSSI	1	1 Unfavourable - recovering	n/a
	Deadman's Grave, Icklingham SSSI	6	3 Favourable	n/a
			2 Unfavourable – recovering	n/a
			1 Unfavourable - declining	Agriculture

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European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
	East Wretham Heath SSSI		1 Favourable	n/a
			4 Unfavourable – recovering	n/a
		6	1 Unfavourable - declining	Ringmere: there has been a considerable loss of aquatic species since the last assessment, but all terrestrial and amphibious characteristic species previously recorded were present. High nutrient levels recorded in previous water analysis suggest nutrients are impacting the mere. Langmere: the near absence of open water made it impossible to assess the aquatic zone, but the mud and inundation zones were well developed and in good condition. However, there are some factors that point towards elevated nutrient levels at Langmere,.
	Eriswell Low Warren SSSI	1	1 Favourable	n/a
	Field Barn Heaths, Hilborough SSSI	1	1 Unfavourable – recovering	n/a
	Foxhole Heath, Eriswell SSSI	1	1 Favourable	n/a
	Gooderstone Warren SSSI	4	4 Unfavourable – recovering	n/a
	Grime's Grave SSSI	3	1 Favourable	n/a
			2 Unfavourable – recovering	n/a
	How Hill Track SSSI	1	1 Favourable	n/a
		11	5 Unfavourable – no change	n/a
			6 Unfavourable - recovering	n/a
		3	1 Favourable	n/a

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
	Little Heath, Barnham SSSI		1 Unfavourable - recovering	n/a
			1 Unfavourable – declining	Agriculture
	Old Bodney Camp SSSI	2	2 Favourable	n/a
	Rex Graham Reserve SSSI	1	1 Favourable	n/a
	Stanford Training Area	81	29 Favourable	n/a
			2 Unfavourable - no change	n/a
			28 Unfavourable - recovering	n/a
			2 Unfavourable - declining	Unsuitable bat habitat (Unit 072). Poor diversity of aquatic vegetation (Unit 089).
	Thetford Golf Course & Marsh SSSI	8	1 Favourable	n/a
			2 Unfavourable – no change	n/a
			5 Unfavourable - recovering	n/a
	Thetford Heaths SSSI	4	2 Favourable	n/a
			1 Unfavourable - no change	n/a
			1 Unfavourable - recovering	n/a
	Wangford Warren and Carr SSSI	5	1 Favourable	n/a
			4 Unfavourable - recovering	n/a
	Weather and Horn Heaths, Eriswell SSSI	3	2 Unfavourable - declining	Agriculture
			Partially destroyed	The majority of this unit has been destroyed by the construction of the dualled A11.
	Weeting Heath SSSI	6	2 Favourable	n/a
			1 Unfavourable – no change	n/a
			3 Unfavourable - recovering	n/a
		5	1 Favourable	n/a

European site	SSSI Name	No. of SSSI Units	Conservation Status of SSSI Units ¹	Reason for unfavourable declining status where applicable.
	West Stow Heath SSSI		4 Unfavourable - recovering	n/a
	Pakefield to Easton Bavents SSSI	51	30 Favourable	n/a
			4 Unfavourable – no change	n/a
Benacre to Easton Bavents Lagoons SAC and SPA			17 Unfavourable - recovering	n/a
			1 Unfavourable – declining	Water pollution
			Partially destroyed	Coastal erosion
	Gibraltar Point SSSI		2 Favourable	n/a
The Wash and North Norfolk Coast SAC	3331	5	2 Unfavourable - recovering	n/a
			1 Unfavourable – declining	Air pollution
	North Norfolk Coast SSSI		67 Favourable	n/a
		70	3 Unfavourable - recovering	n/a
	The Wash SSSI	60	48 Favourable	n/a
			11 Unfavourable - recovering	n/a
			1 Unfavourable – declining	No reason stated
	The Wash SSSI	60	48 Favourable	n/a
The Wash SPA/Ramsar			11 Unfavourable - recovering	n/a
			1 Unfavourable – declining	No reason stated
North Norfolk Coast SAC	North Norfolk Coast SSSI	70	67 Favourable	n/a
			3 Unfavourable - recovering	n/a
North Norfolk Coast SPA and Ramsar	North Norfolk Coast SSSI	70	67 Favourable	n/a
			3 Unfavourable - recovering	n/a
	Morston Cliff	1	1 Unfavourable - recovering	n/a

Appendix D: Scoping: European site threats and pressures

Table D.1: Scoping of Pressures and threats at European sites that may be affected by the VCHAP.

<u>Kev:</u> Yellow shading = European site / threat scoped into HRA process

Note: Only threats and pressures which are likely to be affected by VCHAP have been included in this element of the scoping exercise

European sites	Air Pollution	Hydrology	Public Access and Disturbance	Habitat Loss and Fragmentation
River Wensum SAC	SAC located within Plan area. NE Supplementary Advice identifies SAC as being sensitive to changes in air quality. SAC located within HRA air quality study area. A number of strategic road links are located within 200m of SAC. European site scoped in and will be included in HRA screening of allocations and policies in terms of air pollution impacts.	SAC located within Plan area. SIP and NE Supplementary Advice identify SAC as being sensitive to water pollution and water abstraction. SAC hydrologically connected to Plan area. European site scoped in and will be included in HRA screening of allocations and policies in terms of hydrology impacts.	SIP and NE Supplementary Advice does not identify public access and disturbance as a threat to the SAC. Given the location of the SAC within the Plan area this site has been screened in in terms of potential urbanisation impacts.	No allocation set out in the Regulation 18 version of the VCHAP is coincident with a European site designation boundary or any habitat identified as being functionally linked. Given the site location within the plan boundary, this will be kept under review as the VCHAP plan making process progresses.
Norfolk Valley Fens SAC	SAC located within and adjacent to Plan area. SIP and NE Supplementary Advice identifies SAC as being sensitive to changes in air quality. SAC located within HRA air quality study area. A number of strategic road links are located within 200m of SAC. European site scoped in and will be included in HRA screening of allocations and policies in terms of air pollution impacts.	SAC located within and adjacent to Plan area. SIP and NE Supplementary Advice identify SAC as being sensitive to water pollution, water abstraction and hydrological change. SAC hydrologically connected to Plan area. European site scoped in and will be included in HRA screening of allocations and policies in terms of hydrology impacts.	SIP and NE Supplementary Advice does not identify public access and disturbance as a threat at the SAC. However, impacts associated with public access and disturbance impacts have been considered through the Footprint Ecology commission and emerging GIRAMS strategy. European site scoped in and will be included in HRA screening of allocations and policies in terms of public access and disturbance impacts.	No allocation set out in the Regulation 18 version of the VCHAP is coincident with a European site designation boundary or any habitat identified as being functionally linked. Given the site location within the plan boundary, this will be kept under review as the VCHAP plan making process progresses.

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The Broads SAC	SAC located within and adjacent to Plan area. SIP and NE Supplementary Advice identifies SAC as being sensitive to changes in air quality. SAC located within HRA air quality study area. A number of strategic road links are located within 200m of SAC. European site scoped in and will be included in HRA screening of allocations and policies in terms of air pollution impacts.	SAC located within and adjacent to Plan area. SIP and NE Supplementary Advice identify SAC as being sensitive to water pollution, water abstraction and hydrological change. The broads and marshes (including Broadland SPA and The Broads SAC) are functionally linked to the River Yare and the River Bure. SAC hydrologically connected to Plan area. European site scoped in and will be included in HRA screening of allocations and policies in terms of hydrology impacts.	SIP and NE Supplementary Advice does not identify public access and disturbance as a threat at the SAC. However, impacts associated with public access and disturbance impacts have been considered through the Footprint Ecology commission and emerging GIRAMS strategy. European site scoped in and will be included in HRA screening of allocations and policies in terms of public access and disturbance impacts.	No allocation set out in the Regulation 18 version of the VCHAP is coincident with a European site designation boundary or any habitat identified as being functionally linked. Given the site location within the plan boundary, this will be kept under review as the VCHAP plan making process progresses.
Broadland SPA	SPA located within and adjacent to Plan area. SIP and NE Supplementary Advice identifies SPA as being sensitive to changes in air quality. SPA located within HRA air quality study area. A number of strategic road links are located within 200m of SPA. European site scoped in and will be included in HRA screening of allocations and policies in terms of air pollution impacts.	SPA located within and adjacent to Plan area. SIP and NE Supplementary Advice identified SPA as being sensitive to water pollution, water abstraction and hydrological change. The broads and marshes (including Broadland SPA and The Broads SAC) are functionally linked to the River Yare and the River Bure. SPA hydrologically linked to Plan area. European site scoped in and will be included in HRA screening of allocations and policies in terms of hydrology impacts.	SIP and NE Supplementary Advice identify public access and disturbance as a threat at the SPA. Impacts associated with public access and disturbance impacts have been considered through the Footprint Ecology commission and emerging GIRAMS strategy. European site scoped in and will be included in HRA screening of allocations and policies in terms of public access and disturbance impacts.	No allocation set out in the Regulation 18 version of the VCHAP is coincident with a European site designation boundary or any habitat identified as being functionally linked. Given the site location within the plan boundary, this will be kept under review as the VCHAP plan making process progresses.

Broadland Ramsar	Ramsar located within and adjacent to Plan area. Ramsar information sheet does not identify any threats and pressures. However, it is noted that this is dated 2008 and information available for Broadland SPA and The Broads SAC has been used to inform this scoping decision. Ramsar locate within HRA air quality study area. A number of strategic road links are located within 200m of Ramsar. European site scoped in and will be included in HRA screening of allocations and policies in terms of air pollution impacts.	Ramsar located within and adjacent to Plan area. Ramsar information sheet does not identify any threats and pressures. However, it is noted that this is dated 2008 and information available for Broadland SPA and The Broads SAC has been used to inform this scoping decision. Ramsar hydrologically linked to Plan area. European site scoped in and will be included in HRA screening of allocations and policies in terms of hydrology impacts.	Ramsar located within and adjacent to Plan area. Ramsar information sheet does not identify any threats and pressures. However, it is noted that this is dated 2008 and information available for Broadland SPA and The Broads SAC has been used to inform this scoping decision. European site scoped in and will be included in HRA screening of allocations and policies in terms of public access and disturbance impacts.	No allocation set out in the Regulation 18 version of the VCHAP is coincident with a European site designation boundary or any habitat identified as being functionally linked. Given the sites location within the plan boundary, this will be kept under review as the VCHAP plan making process progresses.
Breydon Water SPA	SIP and NE Supplementary Advice do not identify the SPA as being sensitive to changes in air quality. Site scoped out in terms of air quality impacts.	SPA located adjacent to Plan area. SIP and NE Supplementary Advice identified SPA as being sensitive to hydrological change. SPA hydrologically linked to Plan area. European site scoped in and will be included in HRA screening of allocations and policies in terms of hydrology impacts.	SIP and NE Supplementary Advice identify public access and disturbance as a threat at the SPA. Impacts associated with public access and disturbance impacts have been considered through the Footprint Ecology commission and emerging GIRAMS strategy. European site scoped in and will be included in HRA Screening of allocations and policies in terms of public access and disturbance impacts.	SIP and NE Supplementary Advice does not identify the SPA as being sensitive to habitat loss and fragmentation threats. Site scoped out in terms of habitat loss and fragmentation impacts.
Breydon Water Ramsar	As above	As above	As above	As above
Great Yarmouth North Deans SPA	SIP and NE Supplementary Advice identifies SPA as being sensitive to changes in air quality.	SIP notes that hydrological threats at the SPA are associated with "Changes in the hydro-chemistry of the	SIP and NE Supplementary Advice identify public access and disturbance as a threat at the SPA.	SPA located outside the Plan area. European site scoped out of HRA due to location in terms of habitat loss and fragmentation impacts.

	SPA located within national statistics	dune slacks has been	Impacts associated with public	
	commuter zones.	observed over a number of	access and disturbance impacts	
	There are no strategic road links	years that is potentially	have been considered through	
	within 200m of the SPA	impacting the dune slacks".	the Footprint Ecology	
	European site scoped out of HRA for		commission and emerging	
	·	The VCHAP may increase		
	further consideration in terms of air	nutrient loading from WRC	GIRAMS strategy at this SPA.	
	pollution impacts.	discharges to shallow coastal	European site scoped in and will	
		waters (which is identified in	be included in HRA Screening of	
		the Regulation 33 advice as a	allocations and policies in terms	
		vulnerability).	of public access and disturbance	
		However, given the location	impacts.	
		of the SPA in a northerly		
		direction up the coast		
		(approx. 15km to the north of		
		the where the River Yare		
		discharges into the sea) the		
		SPA is not considered to be		
		hydrologically linked and this		
		European site is therefore		
		scoped out of further		
		consideration in the HRA in		
		terms of hydrology impacts.		
	SIP and NE Supplementary Advice	SIP notes that hydrological	SIP and NE Supplementary	SAC located outside the Plan area.
	identifies SAC as being sensitive to	threats at the SAC are	identify public access and	European site scoped out of HRA due to
	changes in air quality.	associated with "Changes in	disturbance as a threat at the	location in terms of habitat loss and
	SAC located within national statistics	the hydro-chemistry of the	SAC.	fragmentation impacts.
	commuter zones.	dune slacks has been	Impacts associated with public	
	There are no strategic road links	observed over a number of	access and disturbance impacts	
	within 200m of the SAC	years that is potentially	are being considered through	
	European site scoped out of HRA for	impacting the dune slacks".	Footprint Ecology commission	
AA7 1 1 11	further consideration in terms of air	The VCHAP my increase	and emerging GIRAMS strategy	
Winterton Horsey	pollution impacts.	nutrient loading from WRC	at this SAC.	
Dunes SAC		discharges to shallow coastal	European site scoped in and will	
		waters (identified in the	be included in HRA Screening of	
		Regulation 33 advice as a	allocations and policies in terms	
		vulnerability).	of public access and disturbance	
		However, given the location	impacts.	
		of the SAC in a northerly	,	
		direction up the coast		
		(approx. 15km to the north of		
		the where the River Yare		
		the where the tiver rule		

		discharges into the sea) the SAC is not considered to be hydrologically linked and this European site is scoped out of further consideration in the HRA in terms of hydrology impacts.		
Paston Great Barn SAC	SAC located approx. 25.5km from Plan area. SIP and NE Supplementary However, given the location of the SPA in a northerly direction up the coast identifies SAC as being sensitive to changes in air quality. SAC located within HRA air quality study area, however the only strategic road within 200m of SAC (B1159) ends to the east of the SAC (and before it reaches it) and is therefore unlikely to form a key commuter route associated with development set out in the VCHAP. European site scoped out of the HRA in terms of air pollution impacts.	SIP and NE Supplementary Advice identified SAC as not being sensitive to hydrological impacts. European site scoped out of HRA in terms of hydrology impacts.	SIP and NE Supplementary Advice identifies SAC as being sensitive to public access and disturbance due to a permissive path to the south of the site. Impacts are likely to be local given the nature of the SAC. Given the location of the SAC from the Plan area it is considered that impacts associated with public access and disturbance threats from VCHAP are unlikely. As such this site is scoped out of the HRA in terms of public access and disturbance threats.	SAC located approx. 25.5km from Plan area. The SAC is noted to be sensitive to impacts on foraging habitat for the Barbastelle bat. Impacts on potentially functionally linked bat habitat have taken into consideration current best practice including that available from the Bat Conservation Trust in respect of Core Sustenance Zones (CSZ). For the Barbastelle bat the CSZ is noted to be 6km (with a precautionary buffer of 7km applied) ^{1,2} . Given the distance of the SAC from the Plan area impacts on habitat loss / fragmentation from the VCHAP have been scoped out of the HRA.
Overstrand Cliffs SAC	SAC is outside the HRA air quality study area and as such it is considered that VCHAP will not give rise to emissions which are likely to reach this European site.	NE Supplementary Advice notes that the SAC is vulnerable to water quality impacts. The SAC is located on the north Norfolk coast and is not hydrologically linked to the Plan area. As such this European site is scoped out of further consideration in the HRA in terms of hydrology impacts.	The SIP and NE Supplementary Advice does not identify public access and disturbance threats at this SAC. As such this European site is scoped out of further consideration in the HRA in terms of public access and disturbance threats.	The SIP and NE Supplementary Advice do not identify habitat loss and fragmentation as a threat at this SAC – noting that the site's main vulnerability is to inappropriate coastal management. Given the location of this SAC approx. 28.6km to the north of the Plan area this European site is scoped out of further consideration in the HRA in terms of habitat loss / fragmentation threats.

¹ Bat Conservation Trust. 2016. Bat Surveys for Professional Ecologist. Good Practice Guidelines. Third Edition.

² Bat Conservation Trust. 2016. Core Sustenance Zone. https://cdn.bats.org.uk/pdf/Resources/Core Sustenance Zones Explained 04.02.16.pdf?mtime=20190219173135&focal=none

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Waveney & Little Ouse Valley Fens SAC	SAC located adjacent to Plan area. SIP and NE Supplementary Advice identifies SAC as being sensitive to changes in air quality. SAC locate within HRA air quality study area. B1113 is located within 200m of SAC. European site scoped in and will be included in HRA screening of allocations and policies in terms of air pollution impacts.	SAC located adjacent to Plan area to the west. SIP and NE Supplementary Advice identify SAC as being sensitive to water pollution, and water levels. SAC is located upstream of Plan area and therefore not hydrologically connected to European site and scoped out of further HRA screening in terms of hydrology impacts.	SIP and NE Supplementary Advice does not identify public access and disturbance as a threat at the SAC. European site scoped out of further HRA screening in terms of public access and disturbance impacts. However, it is noted that this SAC is covered by emerging GIRAMS.	SIP and NE Supplementary advice does not identify habitat loss and fragmentation as a threat at the SAC. European site scoped out of further HRA screening in terms of habitat loss and fragmentation impacts.
Redgrave and South Lopham Fens Ramsar	Ramsar information sheet does not identify air quality as a threat – however the potential impact will be considered further as noted above.	Ramsar information sheet notes that site is sensitive to changes in water quality. Ramsar is located upstream of Plan area and therefore not hydrologically connected to European site scoped out of further HRA screening in terms of hydrology impacts.	Ramsar information sheet does not identify public access and disturbance as a threat at the Ramsar. European site scoped out of further HRA screening in terms of public access and disturbance impacts.	Ramsar information sheet does not identify habitat loss and fragmentation as a threat at the Ramsar. European site scoped out of further HRA screening in terms of habitat loss and fragmentation impacts.
Breckland SAC	NE Supplementary Advice identifies SAC as being sensitive to changes in air quality. SAC located to the west of the Plan area and within HRA air quality study area. A number of strategic road links are located within 200m of SAC. European site scoped in and will be included in HRA screening of allocations and policies in terms of air pollution impacts.	SAC is located upstream of the Plan area and as such is not hydrologically linked. European site scoped out of further HRA screening in terms of hydrology impacts.	SIP and NE Supplementary Advice identify public access and disturbance as a threat at the SAC. Public access and disturbance impacts have been considered through the Footprint Ecology commission and emerging GIRAMS strategy at this SAC. European site scoped in and will be included in HRA screening of allocations and policies in terms of public access and disturbance impacts.	SIP and NE Supplementary Advice identify SPA as vulnerable to habitat loss. The SPA is located 10km from the Plan area. As such, this European site scoped out in terms of habitat loss and fragmentation impacts.
Breckland SPA	NE SIP and Supplementary Advice identifies SPA as being sensitive to changes in air quality.	SPA is located upstream of the Plan area and as such is not hydrologically linked.	SIP and NE Supplementary Advice identify public access and disturbance as a threat at the SPA.	SIP and NE Supplementary Advice identify SPA as vulnerable to habitat loss. The SPA is located 9km from the Plan area and outside the Stone Curlew buffer area (a 1500m zone

	SPA located to the west of the Plan area and within HRA air quality study area. A number of strategic road links are located within 200m of SPA. European site scoped in and will be included in HRA screening of allocations and policies in terms of air pollution impacts.	European site scoped out of further HRA screening in terms of hydrology impacts.	Public access and disturbance impacts has been considered through the Footprint Ecology commission and emerging GIRAMS strategy at this SPA. European site scoped in and will be included in HRA screening of allocations and policies in terms of public access and disturbance	around the parts of the Breckland SPA where stone curlews are present and likely to use adjacent habitat for breeding and foraging). As such, this European site is scoped out in terms of habitat loss and fragmentation impacts.
Benacre to Easton Bavents Lagoons SAC	Site not identified as being sensitive to changes in air quality in SIP and Supplementary Advice. European site scoped out in terms of air pollution impacts.	The SAC is located approx. 8.5km to the south east of the Plan area. It is located in the catchment of the Hundred River and is not hydrologically linked to the Plan area. European site scoped out of further HRA screening in terms of hydrology impacts.	impacts. Habitats for which the SAC is designated are not identified to be vulnerable to recreation impacts in SIP. As such can be scoped out from further consideration in the HRA in terms of public access and disturbance impacts.	SIP and NE Supplementary Advice do not identify the SAC as being vulnerable to habitat loss / fragmentation. Due to the location of the SAC 8.5km from the Plan area this European site scoped out in terms of habitat loss and fragmentation impacts.
Benacre to Easton Bavents Lagoons SPA	NE Supplementary Advice identifies SPA (in terms of supporting habitat) as being sensitive to changes in air quality. SPA located to the south east of the Plan area and within HRA air quality study area. The B1127 is located within 200m of SPA. European site scoped in and will be included in HRA screening of allocations and policies in terms of air pollution impacts.	The SPA is located approx. 8.5km to the south east of the Plan area. It is located in the catchment of the Hundred River and is not hydrologically linked to the Plan area. European site scoped out of further HRA Screening in terms of hydrology impacts.	The SIP notes that the popularity of the beaches and the Ness for walking and dog-walking means the suitability of these areas for terns is greatly reduced. The SPA is located 8.5km from the Plan area. It is recognised that there are closer sections of coastline to the plan area. It is noted that a strategic Mitigation Strategy has been put in place by Babergh District Council, Ipswich Borough Council, Mid Suffolk District Council and East Suffolk Council ³ . This strategy includes specific	SIP and NE Supplementary Advice do not identify the SPA as being vulnerable to habitat loss / fragmentation. Due to the location of the SPA 8.5km from the Plan area this European site scoped out in terms of habitat loss and fragmentation impacts.

³ Hoskin, R., Liley, D. & Panter, C. (2019). Habitats Regulations Assessment Recreational Disturbance Avoidance and Mitigation Strategy for Ipswich Borough, Babergh District, Mid Suffolk District and East Suffolk Councils – Technical Report. Footprint Ecology.

Regulation 18 - HRA Report May 2021 LC-651 S.Norfolk VCHAP HRA Reg 18 HRA Appendix D Scoping Threats and Pressures 2 100521RI.docx measures for Benacre to Easton Bavents, which are intended to complement the management measures being implemented for North Denes. The Plan area is located outside the zone of influence of this Mitigation Strategy and as such this site has been scoped out of further HRA screening in terms of public access and disturbance impact. The SAC is not considered in the NE Supplementary Advice identifies SAC is located approximately SIP and NE Supplementary Advice do not SAC as being sensitive to changes in 16km to the south east of the SIP or NE Supplementary Advice identify the SAC as being vulnerable to Plan area. The SAC is not habitat loss / fragmentation. Due to the air quality. as being sensitive to public SAC located within HRA air quality hydrologically connected to access and disturbance threats. location of the SPA 16km from the Plan area the Plan area. European site scoped out of study area. this European site scoped out in terms of Dew's Ponds SAC There are no strategic road links European site scoped out of further HRA Screening in terms of habitat loss and fragmentation impacts. within 200m of the SAC further HRA screening in public access and disturbance European site scoped out of HRA for terms of hydrology impacts. impacts. further consideration in terms of air pollution impacts. SAC is outside the HRA air quality The SIP notes that structures SIP and NE Supplementary SIP and NE Supplementary Advice do not study area and as such it is which control water along the Advice identify public access and identify the SAC as being vulnerable to disturbance as a threat at the habitat loss / fragmentation. Given it is considered that VCHAP will not give North Norfolk Coast have SAC. rise to emissions which are likely to fallen into disrepair. The issue located approx. 33km to the north of the reach this European site. is preventing appropriate Public access and disturbance Plan area, this European site is scoped out in impacts have been considered water level controls for terms of habitat loss and fragmentation The Wash and breeding birds. through the Footprint Ecology impacts. North Norfolk The SAC is not hydrologically commission and emerging Coast SAC connected to the Plan area. GIRAMS strategy. European site scoped out of European site scoped in and will be included in HRA screening of further HRA Screening in terms of hydrology impacts. allocations and policies in terms of public access and disturbance impacts.

SIP and NE Supplementary

identify public access and

SPA.

disturbance as a threat at the

The SIP notes that structures

North Norfolk Coast have

which control water along the

fallen into disrepair. The issue

The Wash SPA

SAC is outside air quality study area

VCHAP will not give rise to emissions

and as such it is considered that

SIP and NE Supplementary Advice do not

identify the SAC as being vulnerable to

habitat loss / fragmentation. Gives it is

located approx. 33km to the north of the

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	which are likely to reach this European site.	is preventing appropriate water level controls for breeding birds. The SPA is not hydrologically connected to the Plan area. European site scoped out of further HRA screening in terms of hydrology impacts.	Public access and disturbance impacts have been considered through Footprint Ecology commission and emerging GIRAMS strategy. European site scoped in and will be included in HRA screening of allocations and policies in terms of public access and disturbance impacts.	Plan area, this European site is scoped out in terms of habitat loss and fragmentation impacts.
The Wash Ramsar	SAC is outside air quality study area and as such it is considered that VCHAP will not give rise to emissions which are likely to reach this European site.	No threats and pressures are identified in the Ramsar Information Sheet. However, consideration will be given to the above threats and pressures as per SAC and SPA scoping.	No threats and pressures are identified in the Ramsar Information Sheet. However, consideration will be given to the above threats and pressures as per SAC and SPA scoping.	No threats and pressures are identified in the Ramsar Information Sheet. However, consideration will be given to the above threats and pressures as per SAC and SPA scoping.
The Greater Wash SPA	SAC is outside air quality study area and as such it is considered that VCHAP will not give rise to emissions which are likely to reach this European site.	The landward boundary of this SPA is mean high water at the coast, and the seaward boundary lies approximately 14 nautical miles from the shore. Given the Plan area is located approx. 9km from the closest section of coastline to this SPA, and its designation for sea bids, it is considered that this site can be scoped out from further consideration in the HRA as LSEs are unlikely.	The landward boundary of this SPA is mean high water at the coast, and the seaward boundary lies approximately 14 nautical miles from the shore. Given the Plan area is located approx. 9km from the closest section of coastline to this SPA, and its designation for sea bids, it is considered that this site can be scoped out from further consideration in the HRA as LSEs are unlikely.	The landward boundary of this SPA is mean high water at the coast, and the seaward boundary lies approximately 14 nautical miles from the shore. Given the Plan area is located approx. 9km from the closest section of coastline to this SPA, and its designation for sea bids, it is considered that this site can be scoped out from further consideration in the HRA as LSEs are unlikely.
North Norfolk Coast SPA	SAC is outside air quality study area and as such it is considered that VCHAP will not give rise to emissions which are likely to reach this European site.	The SPA is not hydrologically linked to the Plan area. It is therefore considered that this site can be scoped out from further consideration in the HRA as hydrology impacts are unlikely.	The SPA is noted to be vulnerable to public access and disturbance threats with high levels of visitor pressure along this stretch of coastline. Public access and disturbance impacts have been considered through the Footprint Ecology	Given the location of the SPA approx. 31km to the north of the Plan area it is considered that this site can be scoped out from further consideration in the HRA as impacts due to habitat loss / fragmentation are unlikely.

LC-651 S.Norfolk VCHAP HRA Reg 18 HRA Appendix D Scoping Threats and Pressures 2 100521RI.docx commission and emerging GIRAMS strategy. European site scoped in and will be included in HRA screening of allocations and policies in terms of public access and disturbance impacts. The SAC is noted to be SAC is outside air quality study area The SAC is not hydrologically Given the location of the SPA approx. 31km and as such it is considered that linked to the Plan area. It is vulnerable to public access and to the north of the Plan area it is considered disturbance threats with high VCHAP will not give rise to emissions therefore considered that this that this site can be scoped out from further which are likely to reach this site can be scoped out from levels of visitor pressure along consideration in the HRA as impacts due to European site. further consideration in the this stretch of coastline. habitat loss / fragmentation are unlikely. HRA as hydrology impacts are Public access and disturbance unlikely. impacts have been considered North Norfolk through the Footprint Ecology Coast SAC commission and emerging GIRAMS strategy. European site scoped in and will be included in HRA screening of allocations and policies in terms of public access and disturbance impacts. No threats and pressures are SAC is outside air quality study area No threats and pressures are No threats and pressures are identified in the and as such it is considered that identified in the Ramsar identified in the Ramsar Ramsar Information Sheet. However. Information Sheet. However, VCHAP will not give rise to emissions Information Sheet. However, consideration will be given to the above North Norfolk which are likely to reach this consideration will be given to consideration will be given to the threats and pressures as per SAC and SPA Coast Ramsar European site. the above threats and above threats and pressures as scoping. pressures as per SAC and SPA per SAC and SPA scoping. scoping. The landward boundary of this SAC The landward boundary of The landward boundary of this The landward boundary of this SAC is mean is mean high water at the coast, and this SAC is mean high water SAC is mean high water at the high water at the coast, and the seaward at the coast, and the seaward the seaward boundary lies coast, and the seaward boundary boundary lies approximately 14 nautical approximately 14 nautical miles from miles from the shore. The majority of this boundary lies approximately lies approximately 14 nautical the shore. The majority of this site 14 nautical miles from the miles from the shore. The site lies offshore, though it does extend into Southern North lies offshore, though it does extend shore. The majority of this majority of this site lies offshore, coastal areas of Norfolk and Suffolk crossing Sea SAC into coastal areas of Norfolk and site lies offshore, though it though it does extend into the 12 nautical mile boundary. JNCC and NE Suffolk crossing the 12 nautical mile does extend into coastal areas coastal areas of Norfolk and advice does not identify habitat loss as a boundary. JNCC and NE advice does of Norfolk and Suffolk Suffolk crossing the 12 nautical threat. It is therefore considered that this not identify air quality as a threat. It crossing the 12 nautical mile mile boundary. The SAC is an site can be scoped out from further

area of importance for harbour

porpoise.

boundary. JNCC and NE

advice does not identify

is therefore considered that this site

can be scoped out from further

consideration in the HRA in terms of habitat

loss / fragmentation.

	consideration in the HRA in terms of air quality.	hydrology as a threat. It is therefore considered that this site can be scoped out from further consideration in the HRA in terms of hydrology.	JNCC and NE identify that this SAC is vulnerable to increased boating activity. It is unlikely that development in the VCHAP will increase boating recreational pressure and therefore this SAC has been scoped out of further consideration in the HRA in terms of public access and disturbance impacts.	
Outer Thames Estuary SPA	The SPA is a European Marine Site. NE note that the Outer Thames Estuary SPA is located on the southeast coast of England, stretching from Caister-on-Sea in Norfolk down the Suffolk coast to Sheerness on the Kent coastline, and reaching as far as Canvey Island into the Thames Estuary. The SPA is divided into three discreet areas: the outer estuary of the Thames (including Kent and Essex coastal waters); the Suffolk and south Norfolk coastal waters; and an offshore area further northeast. The site crosses the 12 nautical mile boundary along the Norfolk coast and therefore lies partly in territorial and partly in offshore waters. The SIP does not identify air quality as a threat. It is therefore considered that this site can be scoped out from further consideration in the HRA in terms of air quality.	The SPA is a European Marine Site. NE note that the Outer Thames Estuary SPA is located on the southeast coast of England, stretching from Caister-on-Sea in Norfolk down the Suffolk coast to Sheerness on the Kent coastline, and reaching as far as Canvey Island into the Thames Estuary. The SPA is divided into three discreet areas: the outer estuary of the Thames (including Kent and Essex coastal waters); the Suffolk and south Norfolk coastal waters; and an offshore area further northeast. The site crosses the 12 nautical mile boundary along the Norfolk coast and therefore lies partly in territorial and partly in offshore waters. The SIP does not identify hydrology as a threat. It is therefore considered that this site can be scoped out from further consideration in the HRA in terms of hydrological impacts.	The SPA is a European Marine Site. NE note that the Outer Thames Estuary SPA is located on the southeast coast of England, stretching from Caister- on-Sea in Norfolk down the Suffolk coast to Sheerness on the Kent coastline, and reaching as far as Canvey Island into the Thames Estuary. The SPA is divided into three discreet areas: the outer estuary of the Thames (including Kent and Essex coastal waters); the Suffolk and south Norfolk coastal waters; and an offshore area further northeast. The site crosses the 12 nautical mile boundary along the Norfolk coast and therefore lies partly in territorial and partly in offshore waters. The SIP does not identify recreation as a threat. It is therefore considered that this site can be scoped out from further consideration in the HRA in terms of public access and disturbance.	The SPA is a European Marine Site. NE note that the Outer Thames Estuary SPA is located on the southeast coast of England, stretching from Caister-on-Sea in Norfolk down the Suffolk coast to Sheerness on the Kent coastline, and reaching as far as Canvey Island into the Thames Estuary. The SPA is divided into three discreet areas: the outer estuary of the Thames (including Kent and Essex coastal waters); the Suffolk and south Norfolk coastal waters; and an offshore area further northeast. The site crosses the 12 nautical mile boundary along the Norfolk coast and therefore lies partly in territorial and partly in offshore waters. The SIP does not identify habitat loss as a threat. It is therefore considered that this site can be scoped out from further consideration in the HRA in terms of habitat loss / fragmentation threats.

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Hainsborough, Hammond and Winterton SAC	The SAC is predominantly located beyond 12 nautical miles out to sea. It is therefore considered that this site can be scoped out from further consideration in the HRA in terms of air quality.	The SAC is predominantly located beyond 12 nautical miles out to sea. It is therefore considered that this site can be scoped out from further consideration in the HRA in terms of hydrology.	The SAC is predominantly located beyond 12 nautical miles out to sea and boating activity is unlikely to be increased due to development set out in the VCHAP. It is therefore considered that this site can be scoped out from further consideration in the HRA in terms of public access and dicturbance.	The SAC is predominantly located beyond 12 nautical miles out to sea. It is therefore considered that this site can be scoped out from further consideration in the HRA in terms of habitat loss / fragmentation.
			of public access and disturbance.	

Appendix E: Regulation 18 Policy and Allocations Pre-Screening Summary

Table E.1: Pre-screening summary of the Regulation 18 VCHAP policies and allocations

The assessment findings presented in this report provide a preliminary screening assessment which is proportionate to this stage of the plan making process (Regulation 18) and is intended to help shape and guide the plan's development. A final HRA report will accompany the submission version of the VCHAP at Regulation 19. If new policies emerge, existing policy proposals are modified or site allocations change following the Regulation 18 Local Plan consultation stage, they will be re-screened and presented in the final HRA report.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion		
The Plan Objecti	The Plan Objectives					
SNVC Objective 1	SNVC Objective 1 - Meet housing needs		This objective sets out growth for South Norfolk over the plan period for housing. The impact of individual allocations alone has been screened for LSEs within the village cluster allocations policies section of this appendix. The cumulative impact of Local Plan growth has the potential to create LSEs at European sites as follows: • Possible LSEs in terms of increased air pollution from traffic sources. • Possible LSEs due to increased public access and disturbance pressures. • Possible LSEs due to hydrological changes. This objective is screened in under Category I (air quality, public access and disturbance and hydrology).	Screened in.		
SNVC Objective 2	SNVC Objective 2 - Protecting village communities and support rural services and facilities		This objective aims to guide housing development to support communities and village facilities and services. It does not trigger any development or change and can therefore be screened out under Category B.	Screened out.		

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
SNVC Objective 3	SNVC Objective 3 - Protect the character of villages and their settings		This objective aims to guide housing development to protect the character of villages and their settings. The policy is positive in nature aiming to protect village character, it does not trigger any development or change and can therefore be screened out under Category D.	Screened out.
Core Policies				
Policy SNVC1	Policy SNVC1 - Standard requirements		This policy sets out the Council's commitment to take a positive approach to development. The policy is positive in nature, it does not trigger any development or change and can therefore be screened out under Category B.	Screened out.
Policy SNVC2	Policy SNVC2 - Design		This policy sets out the Council's commitment to take a positive approach to development. The policy is positive in nature, it does not trigger any development or change and can therefore be screened out under Category B.	Screened out.
Policy SNVC3	Policy SNVC3 - Housing Mix		This policy sets out requirements in terms of housing mix in new development. It does not trigger any development or change itself and can therefore be screened out under Category F.	Screened out.
Village Cluster A	llocations Policies	5		
1 - Alburgh and Denton	No shortlisted (reasonable alternative) sites in this cluster.		n/a	Screened out.
2 - Alpington, Yelverton and	Preferred Allocation Site: SNO400 - Church Meadow, Alpington	25 dwellings	Broadland SPA and The Broads SAC are located at their closest point approx. 4km from these allocations. The River Yare is located approximately 5km to the north east of these allocations, with the lake and ditch system associated with these features approx. 4km to their north east. Given the size of these individual allocations, an impact alone is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans	Screened in.
Bergh Apton	Preferred Allocation Site: SN0529SL,	Settlement Limit Extension on a site of 0.37 hectares	 and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. 	

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	Nichols Road, Alpington		This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
	Preferred Allocation Site: SNO412 - Former concrete works, Church Road, Bergh Apton	25 dwellings		
	Shortlisted (Reasonable Alternative) Site: SN0433	25 dwellings		
	Preferred Allocation Site: SN0459, Land off Church Road.	25 dwellings	The closest European site is the Norfolk Valley Fens SAC which is located approx. 6km to the north east of these allocations its closest point. In addition, components of the Waveney & Little Ouse Valley Fens SAC, and the Redgrave & South Lopham Fens Ramsar and Norfolk Valley Fens SAC are located approx. 13km and 14km to the south west and north west respectively at their closest point to these allocations.	
3 - Aslacton,	Aslacton		Given the size of these individual allocations, an impact alone is unlikely to be significant.	
Great Moulton and Tibenham		Settlement	The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	Screened in.
	Shortlisted (Reasonable Alternative) Site: SN2118	Limit Extension on a site of 0.54	 Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. 	
		hectares.	This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
4 - Bardford	Shortlisted		Allocation is located within approx. 160m of the River Tiffey (a tributary of the River Yare). The closest European site is the Norfolk Valley Fens SAC, which is located approx. 4.7km of the west of the allocation under this policy.	
Barford, Marlingford,	(Reasonable	50 dwellings	Given the size of this allocation, an impact alone is unlikely to be significant.	Screened in.
Colton and Wramplingham	Alternative) Site: SN0552	30 aweiiiigs	The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	Screened III.
			 Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. 	

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
			Possible LSEs due to hydrological changes.	
			This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
	Preferred Allocation Site: N0018SL, Land north of Norwich Road, adj 101	Settlement Limit Extension on a site of 0.18 hectares		
5 - Banham	Preferred Allocation Site: SN2110, Land south of Norwich Road, Barnham Broom	Settlement Limit Extension on a site of 0.4 hectares	The closest European sites is Norfolk Valley Fens SAC, which is located approx. 1.1km to the west of the allocations under this policy at its closest point. The River Yare flows within 55m of these allocations at its closest point.	
Broom, Kimberley, Carleton Forehoe, Runhall and Brandon Parva	Preferred Allocation Site: SN4051, Land on the corner of Bell Road and Norwich Road, Barnham Broom	45 dwellings	Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European_sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	Screen in.
	Shortlisted (Reasonable Alternative) Site: SN0055	25 dwellings		
	Shortlisted (Reasonable Alternative) Site: SN0174	25 dwellings		

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	Reasonable Alternative Site: SN0196	25 dwellings		
6 - Bawburgh	Preferred Allocation Site: SN4053, Land to the east of Stocks Hill	35 dwellings	This allocation is located approx. 165m to the south of the River Yare. The closest European site is the River Wensum SAC which flows approx. 3.4km to the north west of this allocation. Given the size of this allocation, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	Screened in.
	Preferred Allocation Site: SN3019, Land west of School Road	12 dwellings	The closest European site is the Waveney & Little Ouse Valley Fens SAC and the Redgrave & South Lopham Fens Ramsar which is located approx. 2.1km at its closest point to the south west.	
7 - Bressingham	Preferred Allocation Site: SN4036 - Land to the east of School Road	40 dwellings	Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: • Possible LSEs in terms of increased air pollution from traffic sources. • Possible LSEs due to increased public access and disturbance pressures. • Possible LSEs due to hydrological changes.	Screened in.
	Shortlisted (Reasonable Alternative) Site: SN4037	25 dwellings	This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
8 - Brooke, Kirstead and Howe	Preferred Allocation Site: SN0432REVA, East of Norwich Road	25 dwellings	The closest European site is The Broads SAC and Broadland SPA which are located approx. 6.7km at their closest point to the north east of these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	Screened in.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	Preferred Allocation Site: SNO432REVB, West of Norwich Road	25 dwellings	 Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology). 	
	Shortlisted (Reasonable Alternative) Site: SN2119	25 dwellings		
	Preferred Allocation Site: SN0537, Land to the north of Bunwell Street	25 dwellings	The closest European site is Norfolk Valley Fens SAC which is located approx. 6.6km at its closest point to the north east of these allocations.	
9 - Bunwell	Shortlisted (Reasonable Alternative) Site: SN0538REV	25 dwellings	Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans	Screened in.
	Shortlisted (Reasonable Alternative) Site: SN0539	19 dwellings	 Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology). 	
	Shortlisted (Reasonable Alternative) Site: SN2126	16 dwellings		
10 - Burston, Shimpling and Gissing	Preferred allocation site location unknown.	Allocation of approx. 25 dwellings	The closest European site to this cluster boundary is Waveney & Little Ouse Valley Fens SAC and the Redgrave & South Lopham Fens Ramsar which is located approx. 7.6km at its closest point to its south west.	Screened in.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
		within cluster boundary.	Given the size of the proposed dwelling provision within this cluster, an impact alone from this policy is unlikely to be significant.	
			The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	
			 Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. 	
			This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
11 - Carleton Rode	No shortlisted (reasonable alternative) sites in this cluster.		n/a	Screened out.
			The closest European site to this cluster boundary is Waveney & Little Ouse Valley Fens SAC and the Redgrave & South Lopham Fens Ramsar which is located approx. 9.9km at its closest point to its south west.	
	Preferred	Allocation of approx. 25	Given the size the proposed dwelling provision within this cluster, an impact alone from this policy is unlikely to be significant.	
12 - Dickleburgh	allocation site location unknown.	dwellings within cluster	The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	Screened in.
	dikilowii.	boundary.	 Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. 	
			This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
	Preferred Allocation		The closest European site is Broadland SPA and The Broads SAC which are located approx. 3.9km at their closest point to the south east of these allocations.	
13 - Ditchingham,	Site: SN0373, Land between	35 dwellings	Given the size of these allocations, an impact alone from this policy is unlikely to be significant.	
Broome, Hedenham and	Thwaite Road and Tunneys		The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	Screened in.
Thwaite	Lane		Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs the training and public process and distribute and process.	
	Preferred Allocation	Settlement Limit	 Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. 	

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	Site: SN2011SL, Land off Lamberts Way, Ditchingham	Extension on a site of 0.4 hectares	This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
	Shortlisted (Reasonable Alternative) Site: SN0345	25 dwellings		
	Shortlisted (Reasonable Alternative) Site: SN4020	15 dwellings		
	Preferred Allocation Site: SNO218, Land north of The Street	35 dwellings	The closest European site is The Broads SAC which are located approx. 7.2km at its closest point to the east of these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans	
14 - Earsham	Shortlisted (Reasonable Alternative) Site: SN0390	Settlement Limit Extension on a site of approximately 0.5ha	 and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	Screened in.
15 - Forncett St Mary and Forncett St Peter	No shortlisted (reasonable alternative) sites in this cluster.		n/a	Screened out.
16 - Gillingham, Geldeston, and Stockton	Preferred Allocation Site: SNO437, Land off Kells	20 dwellings	Components of the The Broads SAC are located within 743m at their closest point to these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant.	Screened in.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	Way, Geldeston		The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	
	Preferred Allocation Site: SNO478, Land south of GIL 1, Gillingham	35 dwellings	 Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology). 	
	Shortlisted (Reasonable Alternative) Site: SN0274 REVA or REVB	25 dwellings		
17 - Hales and Heckingham, Langley with Hardley, Carleton St Peter, Claxton, Raveningham and Sisland	Preferred Allocation Site: Part of SN0308, Land off Briar Lane, Hales	35 dwellings	The closest European site is The Broads SAC which is located approx. 2km at its closest point to the north of this allocation. Given the size of this allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	Screened in.
18 - Hempnall, Topcroft Street, Morningthorpe, Fritton, Shelton and Hardwick	Preferred Allocation Site: SN0220SL, Land at Millfields Preferred Allocation Site: SN1015, Land adjacent to the primary	15 dwellings 20 dwellings	The closest European site is the Norfolk Valley Fens SAC which is located approx. 5.7km at its closest point to the north west of these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	Screened in.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	school, The Street			
19 - Heywood	No shortlisted (reasonable alternative) sites in this cluster.	n/a	n/a	Screened out.
20 - Keswick and Intwood	No shortlisted (reasonable alternative) sites in this cluster.	n/a	n/a	Screened out.
21 - Kettingham	No shortlisted (reasonable alternative) sites in this cluster.	n/a	n/a	Screened out.
	Preferred Allocation Site: SNO305, Land South of Mill Road, Ellingham	12 dwellings	The closest European sites are Broadland SPA and The Broads SAC which are located approx. 2.4km at their closest point to the south east of these allocations.	
22 - Kirby Cane and Ellingham	Preferred Allocation Site: SN0348, Land to the South of Old Yarmouth Road, Kirby Row, Kirby Cane	13 dwellings	Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: • Possible LSEs in terms of increased air pollution from traffic sources. • Possible LSEs due to increased public access and disturbance pressures. • Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	Screened in.
	Preferred Allocation Site: SN3018,	12 dwellings		

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	Florence Way, Ellingham			
	Preferred Allocation Site: SN1046REV, Glenhaven, Great Melton Road, Little Melton	Settlement Limit Extension on a site of 0.69 hectares	The closest European sites are the River Wensum SAC and Norfolk Valley Fens SAC which are located approx. 4.3km to the north east and 9.2km to the west respectively at their closest point to these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes.	
23 - Little Melton and Great Melton	Preferred Allocation Site: SN4052, Land south of School Lane and east of Manor Farm Barns, Little Melton	25 dwellings		Screened in.
	Shortlisted (Reasonable Alternative) Site: SNO488	25 dwellings	This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
	Shortlisted (Reasonable Alternative) Site: SN2044	25 dwellings		
24 - Morley and Deopham	No shortlisted (reasonable alternative) sites in this cluster.	n/a	n/a	Screened out.
25 - Mulbarton, Bracon Ash, Swardeston	Preferred Allocation Site: SN0204,	25 dwellings	The closest European site is the Norfolk Valley Fens SAC which is located approx. 3.1km to the south west at its closest point to these allocations.	Screened in.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
and East Carleton	Bobbins Way, Swardeston)		Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans	
	Preferred Allocation Site: SN2038, South of Rectory Lane, Mulbarton	35 dwellings	 and projects however has the potential to create LSEs at European_sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology). 	
	Preferred Allocation Site: SN2036, Land at the junction of High Road and Low Road, Wortwell	10 dwellings	The closest European site is the Waveney & Little Ouse Valley Fens SAC and the Redgrave & South Lopham Fens Ramsar which is located approx. 15.1km to the west at its closest point to these	
26 - Needham, Brockdish, Starston and Wortwel	Preferred Allocation Site: SN2065REV, Land north of High Road and Harmans Lane, Needham	15 dwellings	allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: • Possible LSEs in terms of increased air pollution from traffic sources. • Possible LSEs due to increased public access and disturbance pressures. • Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	Screened in.
	Preferred Allocation Site: SN4069SL, Land south of Scole Road, Brockdish	Settlement Limit Extension on a site of 0.18 hectares		
	Preferred Allocation	25 dwellings		Screened in.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
27 - Newton	Site: SN4024, Land off Alan Avenue, Newton Flotman		The closest European site is the Norfolk Valley Fens SAC which is located approx. 2.4km to the south west at its closest point to these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans	
Flotman and Swainsthorpe	Shortlisted (Reasonable Alternative) Site: SN4025	25 dwellings	 and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology). 	
	Preferred Allocation Site: 24, Ladbrookes, Tattlepot Lane, Pulham Market	20 dwellings	The closest European site is the Waveney & Little Ouse Valley Fens SAC and the Redgrave & South	
28 - Pulham Market and Pulham St Mary	Preferred Allocation Site: SN1052REV, Land at Norwich Road, Pulham St Mary	Lopham Fens Ramsar which allocations. Given the size of these allocations the cumulative impact of this and projects however has the Pulham Lopham Fens Ramsar which allocations. Given the size of these allocations the cumulative impact of this and projects however has the Pulham	Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: • Possible LSEs in terms of increased air pollution from traffic sources. • Possible LSEs due to increased public access and disturbance pressures.	Screened in.
	Reasonable Alternative Site: SNO418	15 dwellings	Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
	Shortlisted (Reasonable Alternative) Site: SN1027	20 dwellings		
29 - Rockland St Mary,	Preferred Allocation Site: SN2007,	15 dwellings	The closest European sites are Broadland SPA and The Broads SAC which are along the River Yare and are located approx. 450m to the east at their closest point to these allocations.	Screened in.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
Hellington and Holverston	Land south of New Inn Hill, Rockland St Mary		Given the proximity of these allocations to the Broads SAC and Broadland SPA, there is the potential for a likely significant effect of this policy alone due to increased public access and disturbance pressures. LSEs in-combination with other VCHAP policies, and other plans and projects at other European sites	
	Preferred Allocation Site: SN0531, Land south of New Inn Hill, Rockland St Mary (part)	10 dwellings	 may include: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category I (public access and disturbance) and Category L (air quality, public access and disturbance and hydrology). 	
	Preferred Allocation Site: SN2064REV, Land to the south of The Street, Rockland St Mary	25 dwellings		
30 - Roydon	Preferred allocation site location unknown.	Allocation of approx. 25 dwellings within cluster boundary.	The closest European site to this cluster boundary is Waveney & Little Ouse Valley Fens SAC and the Redgrave & South Lopham Fens Ramsar which is located approx. 251m at its closest point to the west of the cluster boundary. Given the proximity of this cluster these European sites, there is the potential for a likely significant effect of this policy alone due to increased public access and disturbance pressures. LSEs in-combination with other VCHAP policies, and other plans and projects at other European sites may include: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category I (public access and disturbance) and Category L (air quality, public access and disturbance and hydrology).	Screened in.
31 - Saxlingham Nethergate	No shortlisted (reasonable alternative)	n/a	n/a	Screened out.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	sites in this cluster.			
		Allocation of approx. 25 dwellings within cluster boundary.	The closest European site to this cluster boundary is Waveney & Little Ouse Valley Fens SAC and the Redgrave & South Lopham Fens Ramsar which is located approx. 7.2km at its closest point to its south west.	
	Preferred		Given the size the proposed dwelling provision within this cluster, an impact alone from this policy is unlikely to be significant.	Screened in.
32 - Scole	allocation site location unknown.		The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	
	unknown.		 Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. 	
			This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
33 - Seething and Mundham	Preferred Allocation Site: SN0405, Land to North and South of Brooke Road, Seething	20 dwellings	The closest European site is the Broads SAC which is located approx. 5.5km to the west at its closest point to these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
	Preferred Allocation Site: SN2148, Land to the west of Mill Lane, Seething	12 dwellings		Screened in.
	Preferred Allocation Site: SN0406SL, Land to the west of Seething	Settlement Limit Extension on a site of 0.46 hectares		

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	Street, Seething			
	Preferred Allocation Site: SN0587SL, Land to the west of Seething Street, Seething	Settlement Limit Extension on a site of 0.36 hectares		
	Preferred Allocation Site: SN0444, Land west of Bunwell Road, Spooner Row	15 dwellings	The closest European site is the Norfolk Valley Fens SAC which is located approx. 8.4km to the south west at its closest point to these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
34 - Spooner Row and Suton	Preferred Allocation Site: SN0567, Land south of Station Road and west of Queensland, Spooner Row	15 dwellings		Screened in.
	Preferred Allocation Site: SN02082, Land south of Station Road and east of Top Common	15 dwellings		

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
35 - Stoke Holy Cross, Shotesham and Caistor St Edmund & Bixley	Preferred Allocation Site: SN0202, Land north of and adjoining Long Lane, Stoke Holy Cross	25 dwellings	The closest European site is the Norfolk Valley Fens SAC which is located approx. 7.1km to the south west at its closest point to this allocation. Given the size of this allocation, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: • Possible LSEs in terms of increased air pollution from traffic sources. • Possible LSEs due to increased public access and disturbance pressures. • Possible LSEs due to hydrological changes.	Screened in.
	C1033		This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
36 - Surlingham, Bramerton and Kirby Bedon	No shortlisted (reasonable alternative) sites in this cluster.	n/a	n/a	Screened out.
37 - Tacolneston and Forncett End	Preferred Allocation Site: SN1057, Land to the west of Norwich Road (part)	20 dwellings	The closest European site is the Norfolk Valley Fens SAC which is located approx. 4.4km to the north east at its closest point to these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	Screened in.
	Shortlisted (Reasonable Alternative) Site: SN0602	14 dwellings	 Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology). 	
38 - Tasburgh	Preferred Allocation Site: SN4079, Land north of Church Road and west of Tasburgh School	30 dwellings	The closest European site is the Norfolk Valley Fens SAC which is located approx. 2km to the north west at its closest point to these allocations. Given the size of this allocation, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes.	Screened in.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
			This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
70 71	Preferred Allocation		The closest European sites is Norfolk Valley Fens SAC which is located approx. 685m to the north east at its closest point to this allocation. Given the size of this allocation, an impact alone from this policy is unlikely to be significant.	
39 - Tharston, Hapton and	Site: SN4048 , Land to the	12 dwellings	The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	Screened in.
Flordon	north of The Street, Hapton		 Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology). 	
	Preferred Allocation Site: SN0149, Land adjacent to Holly Cottage, west of Beccles Road, Thurlton	cation SN0149, d adjacent olly age, west eccles d,	The closest European site is the Broads SAC and Broadland SPA which is located approx. 2.9km to the north west at its closest point to this allocation.	
			Given the size of this allocation, an impact alone from this policy is unlikely to be significant.	
40 - Thurlton and Norton Subcourse			The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	Screened in.
Subcourse			 Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology). 	
41 - Thurton and Ashby St Mary	No shortlisted (reasonable alternative) sites in this cluster.	n/a	n/a	Screened out.
42 - Tivetshall St Mary and Tivetshall St Margaret	Preferred Allocation Site: SNO319, Pear Tree Farm, West of The Street, Tivetshall St Margaret	e: SN0319, ar Tree 25 dwellings	The closest European site is the Waveney & Little Ouse Valley Fens SAC and the Redgrave & South Lopham Fens Ramsar which is located approx. 12.2km to the south west at its closest point to these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant.	Screened in.
		The Street, Tivetshall St		The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	Preferred Allocation Site: SN3002SL, Land south of Green Pastures, west of The Street, Tivetshall St Margaret	Settlement Limit Extension on a site of 0.18 hectares	Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology). The closest European sites at their closest point to these allocations are as follows: Breydon Water SPA – 5.2km to the north Broadland SPA – 1.5km to the south Outer Thames Estuary SPA – 8km to the east The Broads SAC – 1.5km to the south Southern North Sea SAC – 8km to the east Southern North Sea SAC – 8km to the east Fine ground in the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: Possible LSEs due to increased air pollution from traffic sources. Possible LSEs due to increased air pollution from traffic sources. Possible LSEs due to increased air pollution from traffic sources. Possible LSEs due to increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes.	
	Shortlisted (Reasonable Alternative) Site: SN0318	10 dwellings		
	Shortlisted (Reasonable Alternative) Site: SN2103	15 dwellings		
43 - Toft Monks, Aldeby, Haddiscoe, Wheatacre and Burgh St Peter	Preferred Allocation Site: SNO414, Land south of Beccles Road, Haddiscoe	25 dwellings		
	Preferred Allocation Site: SN4017, Land north of Staithe Road, Burgh St Peter	12 dwellings		Screened in.
	Preferred Allocation Site: SN4015SL,	Settlement Limit Extension on		

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	Land west of Mill Road, Burgh St Peter	a site of 0.18 hectares		
44 - Wacton	No shortlisted (reasonable alternative) sites in this cluster.	n/a	n/a	Screened out.
45 - Wicklewood	Preferred Allocation Site: SN0577REVA and REVB, Land to the south of Wicklewood Primary School	30 dwellings	The closest European site is the Norfolk Valley Fens SAC which is located approx. 4.3km to the north at its closest point to these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
	Preferred Allocation Site: SN4045SL, Land south of Hackford Road	12 dwellings		Screened in.
	Shortlisted (Reasonable Alternative) Site: SN4064	15 dwellings		
46 - Winfarthing and Shelfanger	Preferred Allocation Site: SN4050, Land to the west of Hall	15 dwellings	The closest European site is the Waveney & Little Ouse Valley Fens SAC and the Redgrave & South Lopham Fens Ramsar which is located approx. 6km to the south west at its closest point to these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant.	Screened in.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
	Road, Winfarthing		The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows:	
	Preferred Allocation Site: SN4055, Land off The Street, Winfarthing	25 dwellings	 Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology). 	
	Shortlisted (Reasonable Alternative) Site: SN0399B	Settlement Limit Extension on a site of 0.4 hectares		
47 - Woodton and Bedingham	Preferred Allocation Site: SN0262, Land north of Church Road, Woodton	10 - 15 dwellings	The closest European sites are The Broads SAC and Broadland SPA which are located approx. 9.1km to the north east at their closest point to these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
	Preferred Allocation Site: SN0268SL, Land north of Church Road, Woodton	Settlement Limit Extension on a site of 0.47 hectares		Screened in.
	Preferred Allocation Site: SN0278, Land south of Church Road, Woodton	25 dwellings		
48 - Wrenningham,	Preferred Allocation	12 dwellings		Screened in.

Objective Number	Policy Name	Relevant information	Pre Screening for LSE	Pre Screening Conclusion
Ashwellthorpe and Fundenhall	Site: SN0017SL - Land to the west of New Road, Ashwellthorpe		The closest European site is the Norfolk Valley Fens which is located approx. 2.6km to the south east at its closest point to these allocations. Given the size of these allocations, an impact alone from this policy is unlikely to be significant. The cumulative impact of this policy in-combination with other growth in the VCHAP and other plans and projects however has the potential to create LSEs at European sites as follows: Possible LSEs in terms of increased air pollution from traffic sources. Possible LSEs due to increased public access and disturbance pressures. Possible LSEs due to hydrological changes. This policy is screened in under Category L (air quality, public access and disturbance and hydrology).	
	Preferred Allocation Site: SN0242- Land to the west of New Road, Ashwellthorpe	10 dwellings		
	Preferred Allocation Site: SN2183 - Land south of Wymondham Road, Wreningham	25 dwellings		





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