FOOTPRINT ECOLOGY

North Norfolk Local Plan HRA

Submission version

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Summary

The Conservation of Habitats and Species Regulations 2017 (as amended) require local authorities to assess the impact of their Local Plan on the internationally important sites for biodiversity in and around their administrative areas. Together, these Special Protection Areas, Special Areas of Conservation and Ramsar sites are known as European sites. The task is achieved by means of a Habitats Regulations Assessment (HRA).

An HRA asks very specific questions of a plan. Firstly, it 'screens' the plan to identify if there is a risk that certain policies or allocations may have a 'likely significant effect' on a European site, alone or (if necessary) in-combination with other plans and projects. If the risk of likely significant effects can be ruled out, then the plan may be adopted but if they cannot, the plan must be subjected to the greater scrutiny of an 'appropriate assessment' to find out if the plan will have an 'adverse effect on the integrity' of the European sites.

Following an appropriate assessment, a Plan may only be adopted if an adverse effect on the integrity of the site can be ruled out.

This report provides the HRA for the North Norfolk Local Plan proposed submission version (Publication stage, Regulation 19, October 2021) and builds upon previous HRA work undertaken alongside previous stages of the Plan. There are a wide range of European sites within and in proximity of North Norfolk District and these support a very wide range of qualifying features.

Screening identified likely significant effects for a range of European sites, in relation to urban effects, recreation and hydrological issues. These were taken to appropriate assessment. Following appropriate assessment, it is concluded that the North Norfolk Local Plan, proposed submission version, is in conformity with the Habitats Regulations, and at a plan level a conclusion of no adverse effects, alone or in-combination, on European site integrity can be drawn.

The HRA provides recommendations for particular checks at project level HRA and continued progression of strategic mitigation for recreation through the Norfolk Green Infrastructure and Recreation Avoidance and Mitigation Strategy (GIRAMs).

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Acknowledgements

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1. Introduction

Context

1.1 This document provides the Habitats Regulations Assessment (HRA) to accompany the North Norfolk Local Plan at submission. The HRA has been updated at each stage of the Plan and will be finalised to accompany the Local Plan at adoption.

The North Norfolk Local Plan

1.2 The North Norfolk Local Plan sets out where new homes, jobs and infrastructure will be created over the period 2016-2036, in order to meet the housing, employment and other needs of the District. The Plan, once adopted, will replace the currently adopted Core Strategy and Site Allocations Development Plans.

1.3 The new Plan covers the whole of the administrative area of North Norfolk apart from that part which lies within the Broads Area, for which the local planning authority is the Broads Authority, who produce a separate Local Plan. As such the North Norfolk Local Plan covers a wide area from Wells-next-the-sea and Fakenham in the west to Hoveton, Ludham in the east.

1.4 The Plan has been through various iterations, with a draft plan (Regulation 18 stage) produced in 2019. An HRA (Hoskin & Saunders, 2019) was produced to accompany the Regulation 18 version. This HRA builds on that previous HRA.

Habitats Regulations Assessment process

1.5 The designation, protection and restoration of European wildlife sites is embedded in the Conservation of Habitats and Species Regulations 2017, as amended, which are commonly referred to as the 'Habitats Regulations'. Importantly, the most recent amendments (the Conservation of Habitats and Species (amendment) (EU Exit) Regulations 2019[1]) take account of the UK departure from the EU.

[1] The amending regulations generally seek to retain the requirements of the 2017 Regulations but with adjustments for the UK's exit from the European Union. See Regulation 4, which also confirms that the interpretation of these Regulations as they had effect, or any guidance as it applied, before exit day, shall continue to do so.

1.6 Regulation 105 *et seq* addresses the assessment of local plans and determines the scope of this HRA alongside recent Government Guidance on the interpretation and application of the Regulations[2] .

European sites

1.7 'European sites' are the cornerstone of UK nature conservation policy. Each forms part of a 'national network' of sites that are afforded the highest degree of protection in domestic policy and law. They comprise Special Protection Areas (SPA) classified under the 1979 Birds Directive, and Special Areas of Conservation (SAC) designated under the 1992 Habitats Directive. As a matter of policy, potential SPAs (pSPAs), possible SACs (pSACs) and those providing formal compensation for losses to European sites, are also given the same protection[3].

1.8 Together, the network comprises over 275 sites extending over 3,750,000ha[4], and safeguards the most valuable and threatened habitats and species across the country and Europe. Prior to Brexit, this formed part of the EU-wide Natura 2000 network of SPAs and SACs to form the largest coordinated network of protected areas in the world.

1.9 The designations made under the European Directives still apply and the term, 'European site' remains in use. According to long-established Government policy[5], European sites also comprise 'Wetlands of International Importance' (or Ramsar sites) although these do not form part of the national network.

1.10 The overarching objective of the national network is to maintain, or where appropriate restore, habitats and species listed in Annexes I and II of the Habitats Directive to a Favourable Conservation Status, and contribute to

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[2] Habitats regulations assessments: protecting a European site. Defra and Natural England. 24 February 2021. https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site (accessed 4 March 2021)

[3] For the avoidance of doubt, the list of statutory European sites also comprises: A site submitted by the UK to the European Commission (EC) before Exit Day (a candidate SAC or cSAC) as eligible for selection as a Site of Community Importance (SCI) but not yet entered on the ECs list of SCI, until such time as the Appropriate Authority has designated the site or it has notified the statutory nature conservation body that it does not intend to designate the site. After Exit Day, no further cSACs will be submitted to the EU. Statutory European sites also include SCI included on a list of such sites by the European Commission from cSACs submitted by the UK before the UK left the EU, until such time as the UK designates the site when it will become a fully designated SAC.

[4] https://jncc.gov.uk/our-work/special-protection-areas-overview/ (accessed 4 March 2021)

[5] ODPM Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System (16 August 2005), to be read in conjunction with the current NPPF, other Government guidance and the current version of the Habitats Regulations.

ensuring, in their area of distribution, the survival and reproduction of wild birds and securing compliance with the overarching aims of the Wild Birds Directive.

1.11 The appropriate authorities must have regard to the importance of protected sites, coherence of the national site network and threats of degradation or destruction (including deterioration and disturbance of protected features) on SPAs and SACs.

Role of the competent authority

1.12 Although this HRA has been prepared to help the Council discharge its duties under the Habitats Regulations, the Council is the competent authority, and it must decide whether to accept this report or otherwise. Further, it should be noted that this HRA has been prepared for the purposes of preparing and examining the Plan. Individual allocations will need to be reviewed when they become the subject of an individual planning application, to ensure that if further assessment under the Habitats Regulations is necessary, it is undertaken in accordance with the requirements of appropriate assessment.

Process

1.13 The step-by-step process of HRA is summarised in Figure 1. Though dated prior to the latest amendments to the Regulations, the same tests still apply and it remains valid.

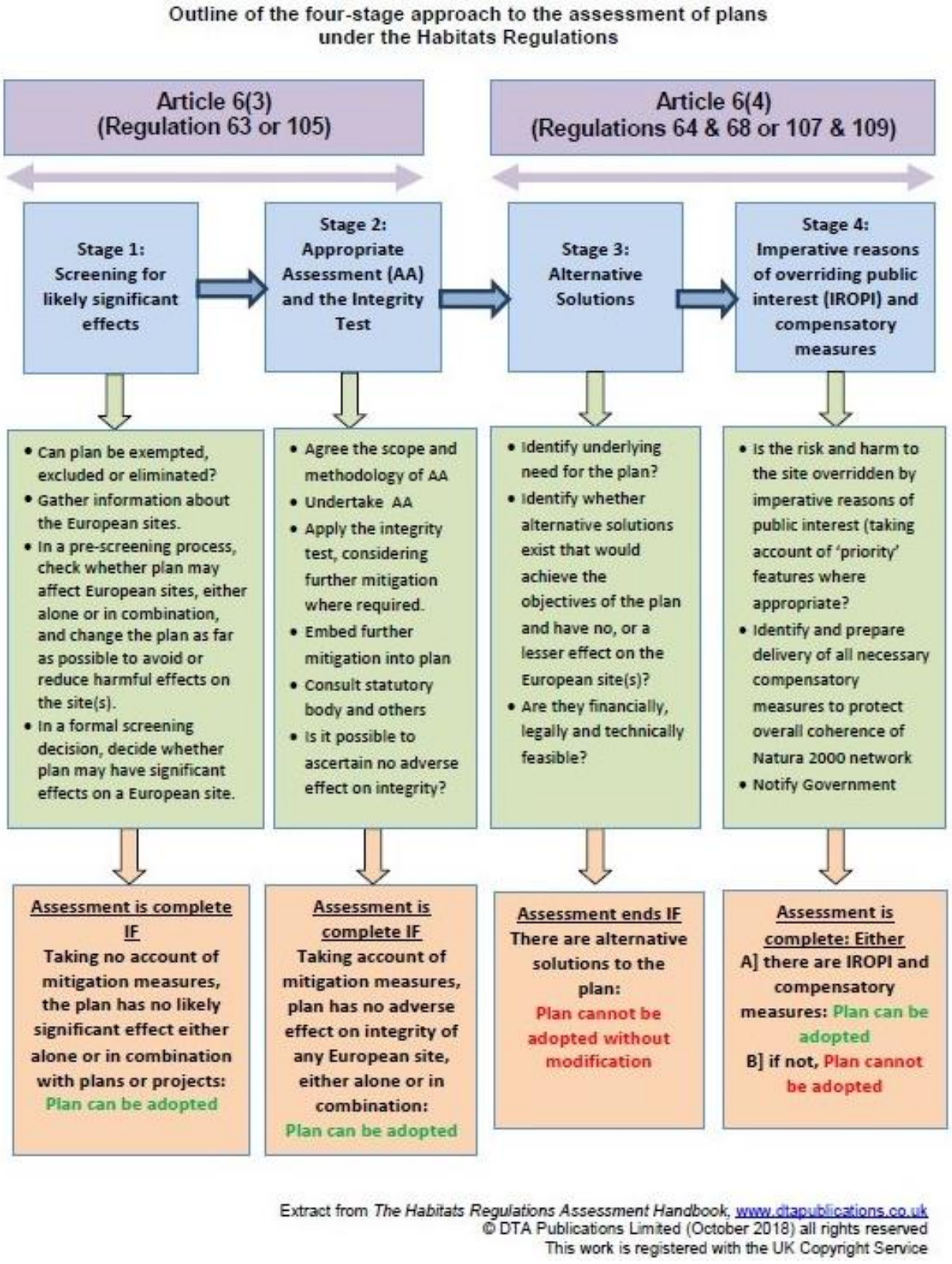

Figure 1: Outline of the assessment of plans under the Habitat Regulations

1.14 Throughout all stages, there is a continual consideration of the options available to avoid and mitigate any identified potential impacts. A competent authority may consider that there is a need to undertake further levels of evidence gathering and evaluation at the appropriate assessment stage in order to provide the necessary certainty. At this point the competent authority may identify the need to add to or modify the plan in order to adequately protect the European site, and these mitigation measures may be added through the imposition of particular restrictions and conditions.

1.15 For plans, the stages of HRA are often quite fluid, with the plan normally being prepared by the competent authority itself. This gives the competent authority the opportunity to repeatedly explore options to prevent impacts, refine the plan and rescreen it to demonstrate that all potential risks to European sites have been successfully dealt with.

1.16 When preparing a plan, a competent authority may therefore go through a continued assessment as the plan develops, enabling the assessment to inform the development of the plan. For example, a competent authority may choose to pursue an amended or different option where impacts can be avoided, rather than continue to assess an option that has the potential to significantly affect European site interest features.

1.17 After completing an assessment, a competent authority should only adopt a plan where it can be ascertained that there will not be an adverse effect on the integrity of the European site(s) in question. In order to reach this conclusion, the competent authority may have made changes to the plan, or modified the project with restrictions or conditions, in light of their Appropriate Assessment findings.

1.18 Where adverse effects cannot be ruled out, further exceptional tests are set out in Regulation 107. In exceptional cases, this allows a plan to be taken forward where there are no 'alternative solutions', where 'imperative reasons of overriding public interest' apply and where compensation can be delivered. It should be noted that meeting these tests is a rare last resort and ordinarily, competent authorities seek to ensure that a plan or project is fully mitigated for, or it does not proceed.

1.19 In such circumstances where a competent authority considers that a plan should proceed under Regulations 107, they must notify the relevant Secretary of State. Normally, planning decisions and competent authority duties are then transferred, becoming the responsibility of the Secretary of State, unless on considering the information, the planning authority is directed by the Secretary of State to make their own decision on the plan or project at the local level. The

decision maker, whether the Secretary of State or the planning authority, should give full consideration to any proposed 'overriding reasons' for which a plan or project should proceed despite being unable to rule out adverse effects on European site interest features, and ensure that those reasons are in the public interest and are such that they override the potential harm. The decision maker will also need to secure any necessary compensatory measures, to ensure the continued overall coherence of the European site network if such a plan or project is allowed to proceed. However, it is understood that the Council would not wish to pursue these derogations.

Definitions, references to case law and guidance

1.20 This HRA follows principles of case law, both UK and EU. It also refers as appropriate to the Habitats Regulations Assessment Handbook (Tyldesley and Chapman, 2021), to which Footprint Ecology subscribes. We also follow relevant government guidance.

1.21 Drawing on the Handbook, other relevant guidance and case law, we clarify the following terms used in the flow chart (Figure 1):

1.22 In Stage 1, A '**likely significant effect'** following Waddenzee[6], is a '*possible significant effect; one whose occurrence cannot be excluded on the basis of objective information*'. It is a low threshold and simply means that there is a risk or doubt regarding such an effect. The screening stage is a preliminary examination, sometimes described as a coarse filter, or following Sweetman, '*a trigger for the obligation to carry out an appropriate assessment*'. There should however be credible evidence to show that there is a real rather than a hypothetical risk of effects that could undermine a site's conservation objectives. This was amplified in the Bagmoor Wind[7] case where '*if the absence of risk… can only be demonstrated after a detailed investigation, or expert opinion,* [then] *the authority must move from preliminary examination to appropriate assessment'.*

1.23 Following the People Over Wind judgement[8], when making screening decisions for the purposes of deciding whether an appropriate assessment is required, competent authorities cannot take into account any mitigation measures.

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[6] Waddenzee: European Courts C-127/02 Waddenzee 7th September 2004, reference for a preliminary ruling from the Raad van State.

[7] Bagmoor Wind: UK courts Bagmoor Wind v The Scottish Ministers, Court of Session [2012] CSIH 93

[8] People Over Wind: European Count Case C-323/17 People Over Wind & Peter Sweetman v Coillte Teoranta 12 April 2018

1.24 Stage 2 involves the **appropriate assessment and integrity test**. Here a plan can only be adopted if the competent authority can demonstrate that it will not adversely affect the integrity of the European site. This is precautionary approach and means it is necessary to show the absence of harm.

1.25 Following Champion[9] **'appropriate'** is not a technical term but simply indicates that the assessment needs to be appropriate to the task in hand.

1.26 The **integrity** of a European site has been described as the '*coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified*[10]. An alternative definition, after Sweetman[11], is 'the lasting preservation of the constitutive characteristics of the site'.

1.27 In terms of the burden of proof, the HRA of development plans was first made a requirement in the UK following a ruling by the European Court of Justice in EC v UK[12]. However, the judgement[13] recognised that any assessment had to reflect the actual stage in the strategic planning process and the level of evidence that might or might not be available. This was given expression in the High Court (Feeney)[14] which stated: "*Each … assessment … cannot do more than the level of detail of the strategy at that stage permits*".

1.28 The need to consider possible **in-combination** effects arises at stage 1 – the screening, and also at stage 2 – the appropriate assessment and integrity test. The effects of the plan in-combination with other plans or projects are the cumulative effects which will or might arise from the addition of the effects of other relevant plans or projects alongside the plan under consideration. If during the stage 1 screening it is found the subject plan would have no likely effect alone but might have such an effect in-combination, then the appropriate assessment at stage 2 will proceed to consider cumulative effects. Where a plan is screened as having a likely significant effect alone, the appropriate assessment should initially concentrate on its effects alone.

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[9] Champion: UK Supreme Court [2015] UKSC 52 22nd July 2015
[10] Para 20 of the ODPM Circ. 06/2005
[11] Sweetman: European Court C – 258/11 Sweetman 11th April 2013, reference for a preliminary ruling from the Supreme Court of Ireland
[12] Commission v UK (C-6/04) [2005] ECR 1-9017
[13] Commission of the European Communities v UK Opinion of Advocate General Kokott
[14] Feeney: Feeney v Oxford City Council [2011] EWHC 2699 (Admin) . 24th October 2011

2. European sites in and around North Norfolk

Initial list of European sites

2.1 North Norfolk District lies in an area of considerable importance for nature conservation with a number of European sites located within and just outside its boundary, some of which are offshore. The range of sites, habitats and designations is complex and includes many sites with more than one designation. The range and extent of European sites reflects the exceptional nature conservation interest of the general area.

2.2 Table 1 lists those European sites potentially relevant to this HRA, based purely on their location in relation to North Norfolk District. These are primarily European sites within or partly within 20km of the district boundary. 20km reflects a typical maximal extent that a Plan could reasonably be considered to generate measurable effects and has become a standard initial area of search for Local Plan HRAs undertaken by Footprint Ecology. This distance is sometimes extended in the case of sites susceptible to impacts arising from dispersed pathways (e.g. allocation-related changes in air quality on road networks extending outside of the 20km buffer). For North Norfolk we do include two European sites beyond 20km: Breckland SPA/SAC and the Wash SPA/Ramsar. These sites are included because zones of influence for recreation impacts for these site have been suggested to extend beyond 20km (Hooton and Mills, 2020), to 26km for the Breckland sites and 61km for the Wash.

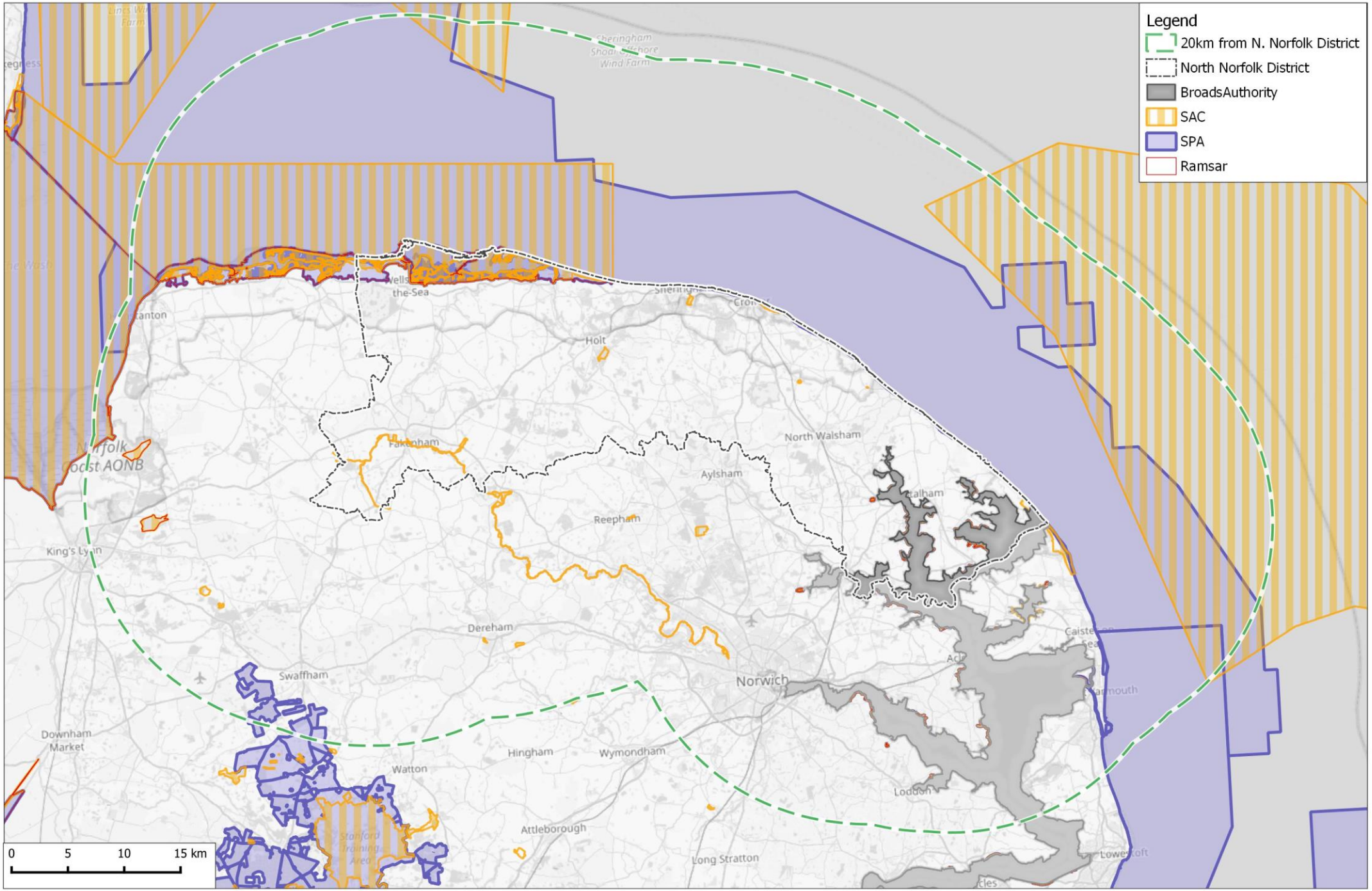
Table 1: European Sites in and around the North Norfolk District, entirely or partly within 20km of the administrative boundary. The top 6 rows reflect designations with overlapping boundaries

SAC	SPA	Ramsar
Breckland SAC	Breckland SPA	
The Broads SAC	Broadland SPA	Broadland Ramsar
North Norfolk Coast SAC	North Norfolk Coast SPA	North Norfolk Coast Ramsar
	Breydon Water SPA	Breydon Water Ramsar
The Wash and North Norfolk Coast SAC	The Wash SPA	The Wash Ramsar
Roydon Common and Dersingham Bog SAC		Roydon Common Ramsar Dersingham Bog Ramsar
Winterton-Horsey Dunes SAC	Great Yarmouth North Denes SPA	
River Wensum SAC	Greater Wash SPA	
Paston Great Barn SAC	Outer Thames Estuary SPA	
Overstrand Cliffs SAC		

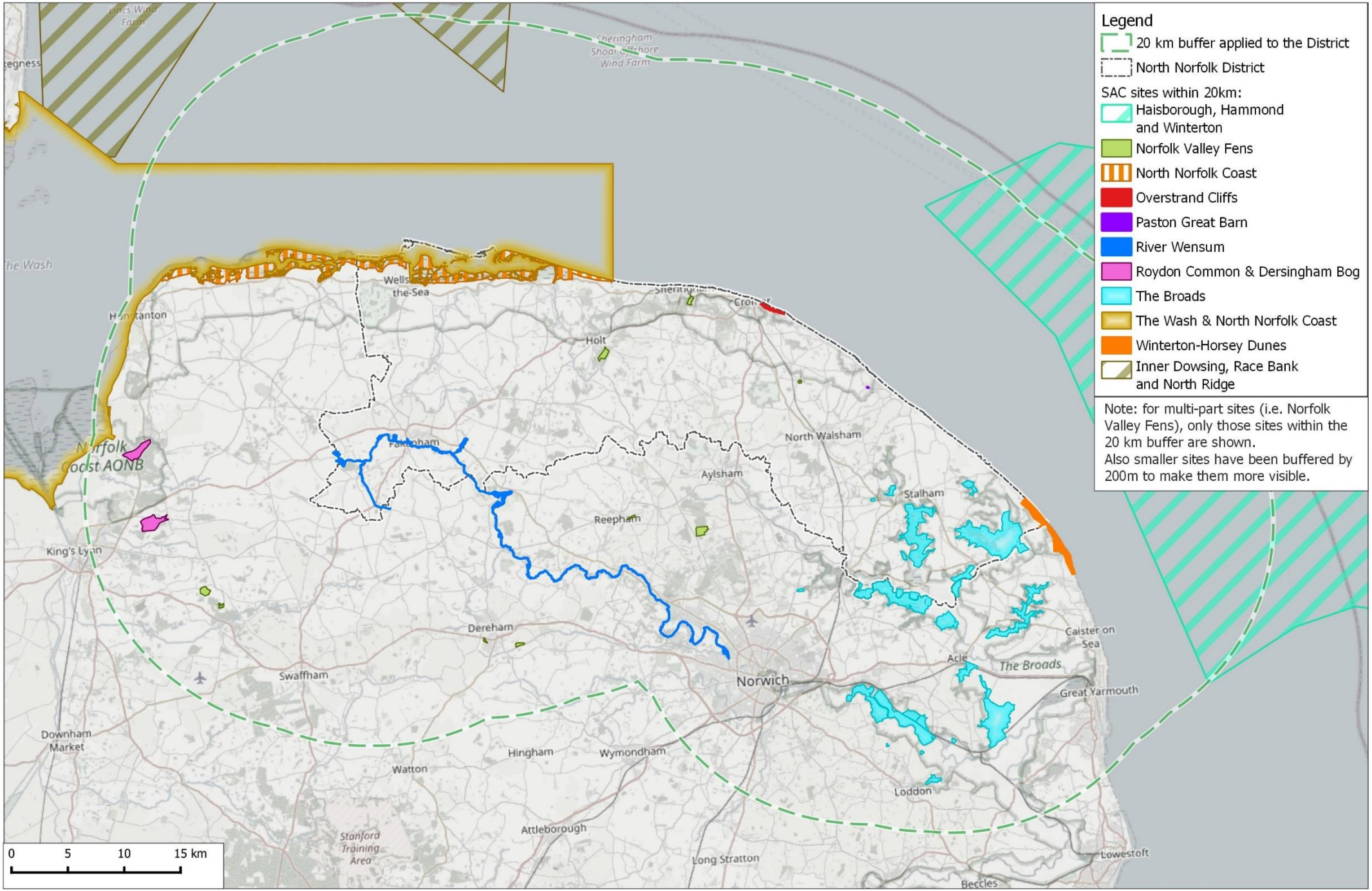
SAC	SPA	Ramsar
Haisborough, Hammond and Winterton SAC		
Inner Dowsing, Race Bank and North Ridge SAC		
Norfolk Valley Fens SAC		

2.3 The European sites are shown on Map 1 (all European sites), and Maps 2-4 (SACs, SPAs and Ramsar respectively). Further information on the European sites is provided in Appendix 2, which summarises the interest of all sites and provides links to the conservation objectives for each site.

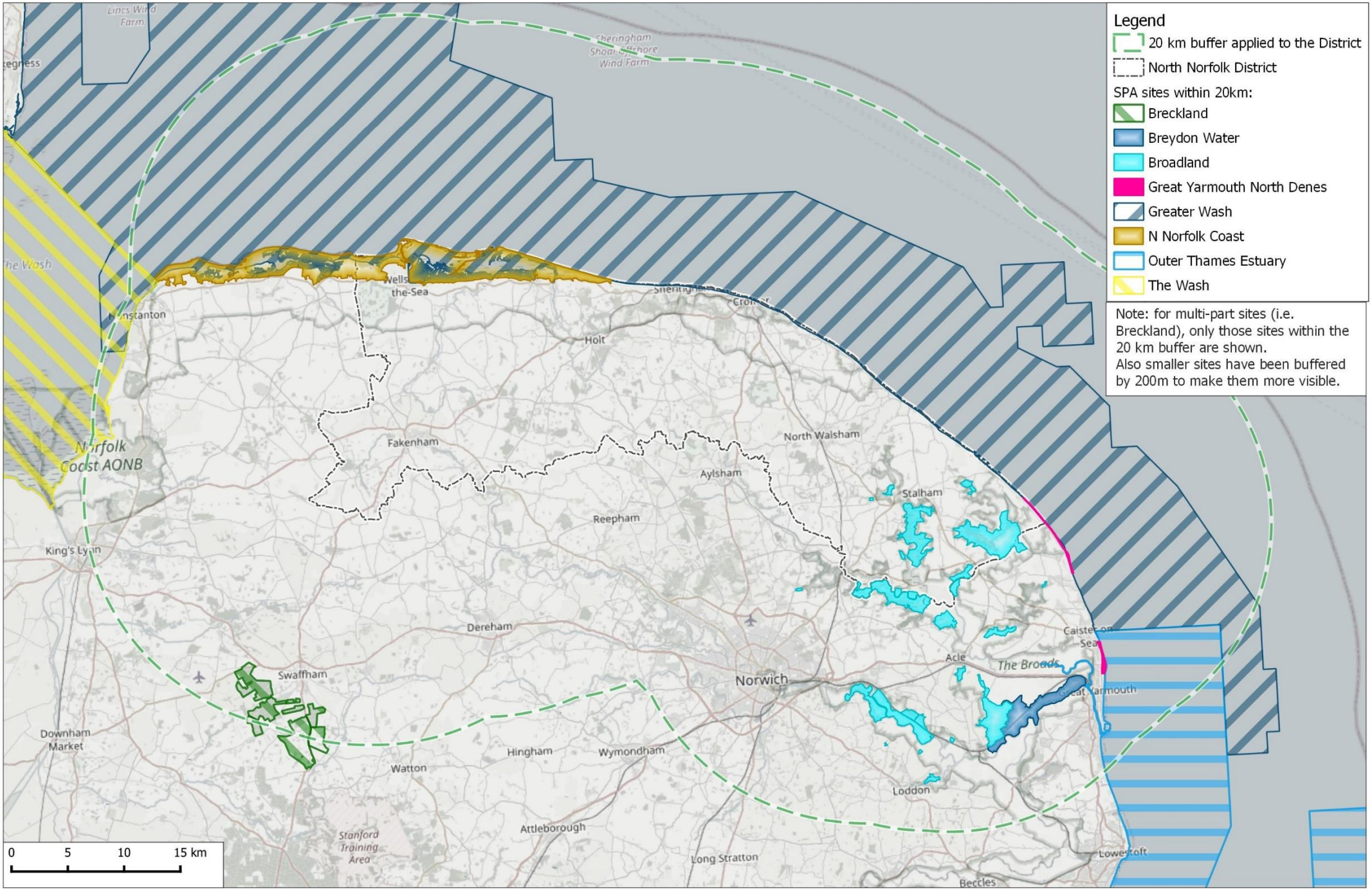
Map 1: Overview of North Norfolk and European sites



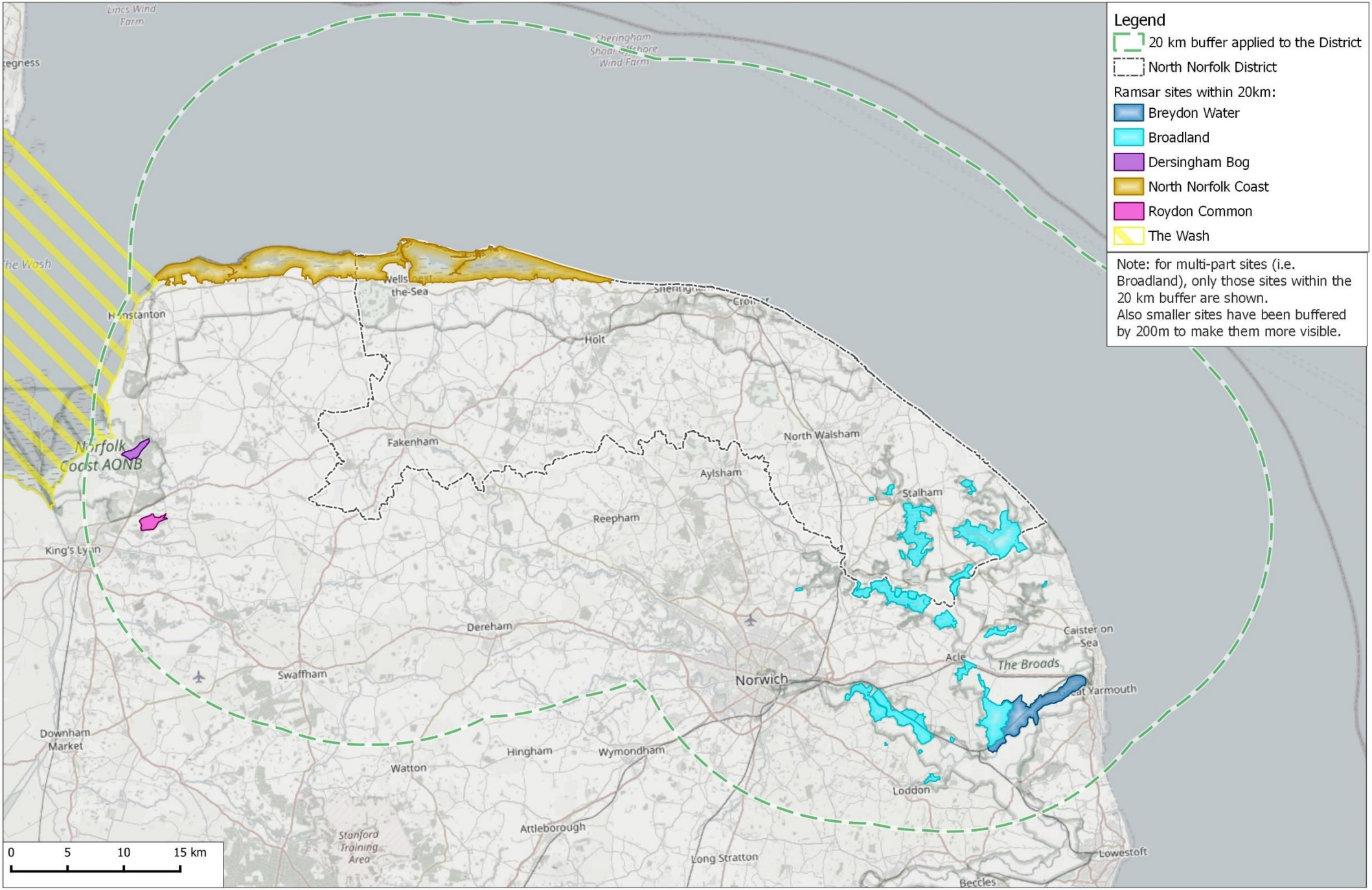
Map 2: SAC sites located entirely or partially within a 20 km buffer of the North Norfolk District.



Map 3: SPA sites located entirely or partially within a 20 km buffer of the North Norfolk District.



Map 4: Ramsar sites located entirely or partially within a 20 km buffer of the North Norfolk District.



Potential impact pathways

2.4 From the list of sites identified and previous iterations of the HRA work on the North Norfolk Local Plan we can identify the following impact pathways which could have the potential to result in likely significant effects.

Loss of supporting habitat

2.5 Supporting habitat is that used by mobile species that are qualifying features of the European sites and that spread from the European site to utilise areas outside the site boundary. Supporting habitat is therefore 'functionally-linked' to the European site. Impacts typically relate to bird species such as geese that can roam over a wide area.

General urban effects

2.6 General urban effects is an umbrella term relating to development in close proximity to European sites and issues such as increased fly-tipping, invasive species, cat predation, lighting etc.

Recreation

2.7 Harmful ecological effects from recreational pressure relate to increased numbers of people living nearby and using sites for recreation. Issues relate to a range of activities including dog walking and mountain biking and impacts include trampling, vegetation wear, erosion, increased fire risk (barbeques etc), dog fouling and litter.

2.8 The most popular destinations can draw in visitors in great numbers from considerable distances. Less popular sites, or those with fewer facilities, have a smaller catchment, fewer visitors and the issue is typically less problematic. Alternatively, some sites managed specifically to encourage large numbers of visitors may be able to tolerate these pressures without experiencing significant harm.

2.9 Importantly, whilst individual allocations, unless large and in close proximity to a fragile European site, rarely result in likely significant effects alone from recreation, a number may have a cumulative effect that can result in likely significant effects in-combination. Recreation issues are subject to strategic mitigation through a Recreational Impact Avoidance and Mitigation Strategy (Hooton and Mills, 2020) produced jointly for authorities across Norfolk. The GIRAMS sets out a series of zones of influence for relevant sites.

Water issues

2.10 Water issues include water quality and water quantity (i.e. water availability) and flood management. Run-off, outflow from sewage treatments and overflow from septic tanks can result in increased nutrient loads and contamination of water courses. Abstraction and land management can influence water flow and quantity, resulting in reduced water availability at certain periods or changes in the flow. Such impacts particularly relate to aquatic and wetland habitats.

Air quality

2.11 Development is typically associated with increased traffic and emissions which can increase the airborne concentration of nitrogen oxides (NOx) and ammonia (NH_3), and the subsequent rate of nitrogen deposition from the atmosphere. This can lead to the nutrient enrichment and acidification of soils, encouraging more tolerant ruderal species at the expense of sensitive plant, lower plant and invertebrate communities. In high concentrations, ammonia can result in direct toxic effects on vegetation, a factor which may also be true of NO_x. Furthermore, it can exacerbate the effects of other factors such as climate change or pathogens, for example. In contrast, larger animals, such as small mammals and birds are considered immune to direct effects but can be vulnerable to change in their supporting habitats.

2.12 However, levels of nitrogen deposition fall quickly in the first few metres from the roadside before gradually levelling out; beyond 200m, they become difficult to distinguish from background levels. In other words, impacts at 10m, 50m or 200m can be very different from those at the roadside.

European sites and pathways scoped out from further assessment

2.13 This section identifies those sites that could potentially be affected by the preferred site allocations detailed within the emerging North Norfolk Local Plan. Every European site has a set of 'interest features' which are the ecological features for which the site is designated or classified, and the features for which Member States should ensure the site is maintained or, where necessary, restored. Each European site also has a set of 'conservation objectives' for the site interest, i.e. what the site should be achieving in terms of restoring or maintaining the special ecological interest of European importance.

2.14 The site conservation objectives are relevant as they identify what should be achieved for the site, allowing a consideration as to whether any of the content

in the Plan may potentially compromise the achievement of those objectives. Site specific supplementary advice for each site has not yet been prepared for these sites by Natural England. Locally relevant information is therefore used within this document to give relevant context to the generic conservation objectives

2.15 In assessing the implications of any plan or project for European sites, it is essential to fully understand the ecology and sensitivity of the sites, in order to identify how they may be affected. This includes consideration of how a project may affect the achievement of the site's conservation objectives.

2.16 In addition to conservation objectives, Natural England produces Site Improvement Plans (SIPS) for each European site in England as part of a wider programme of work under the 'Improvement Programme for England's Natura 2000 sites.' The SIPs can provide an additional useful reference, identifying where there are site sensitivities as each SIP includes a set of actions for alleviating issues that are impeding the delivery of conservation objectives, therefore indicating what key concerns may be for each site. Natural England will seek to work in partnership with other public bodies to implement the identified actions. The SIPs will therefore state the lead delivery bodies and indicative timescales, where these have been agreed.

2.17 From an initial review of sites, it can be concluded that a number of the sites can be scoped out from further assessment with respect to environmental risk arising from the preferred site allocations.

2.18 The following European sites are scoped out, with reasons given below. A lack of pathways between the European site and the preferred site allocations detailed in the plan is often due to distance.

- Haisborough, Hammond and Winterton SAC (marine);
- Inner Dowsing, Race Bank and North Ridge SAC (marine);
- Outer Thames Estuary SPA (marine);
- Roydon Common & Dersingham Bog SAC/Roydon Common Ramsar/Dersingham Bog Ramsar.

Haisborough, Hammond and Winterton SAC

2.19 This marine site is designated for its subtidal sandbanks supporting important infaunal and epifaunal communities. The site occasionally hosts *Sabellaria spinulosa* reefs, which are an important marine habitat feature. The site is predominantly beyond 12 nautical miles and its distance out to sea means that it is considered unlikely to be impacted by the allocations due to a lack of impact pathways.

Inner Dowsing, Race Bank and North Ridge SAC

2.20 This is a further marine site located off the south Lincolnshire coast hosting *Sabellaria spinulosa* reefs and sandbanks that provide nursery grounds for a range of fish species. The site does cross into territorial waters being partly within 12 nautical miles from the coast, and partly in offshore waters. Its distance out to sea means that it is considered unlikely to be impacted by the allocations due to a lack of impact pathways.

Outer Thames Estuary SPA

2.21 The Outer Thames Estuary SPA is a marine European site that extends from the Thames Estuary to the sea area off the Norfolk coast. It is classified for the largest aggregation of Red-throated Diver *Gavia stellata* overwintering in the UK. The site is also designated for breeding Common Tern *Sterna hirundo* and Little Tern *Sternula albifrons*[15]. Both tern species breed on the dynamic Scroby Sands intertidal sandbank, located 6km offshore from Great Yarmouth and the SPA also protects at-sea foraging waters for the two tern species.

2.22 A formal extension to the SPA in October 2017 added Common and Little Tern as species interest features, and geographically extended the site to parts of the Rivers Yare and Bure, along with a further small extension at Minsmere. Common Tern breed at Breydon Water SPA and Foulness SPA, and at Scroby Sands, and the addition of the Yare and Bure enable protection of foraging areas for these breeding colonies.

2.23 In proposing the extension, Natural England considered the current levels of activity and development in these areas and concluded that the relatively low sensitivity of Common Tern meant that it was unlikely that the birds would be vulnerable to disturbance within these foraging areas. This advice was confirmed in a letter from Natural England, dated 19th October 2016 to nearby Great Yarmouth Borough Council, prior to the finalisation of the SPA extension. The advice letter is in the public domain and therefore can be referred to by North Norfolk District Council. It states that *"Natural England does not consider that the current proposals for new housing and commercial and industrial redevelopment of the port area of Great Yarmouth as set out in the adopted Great*

[15] A formal extension to the SPA in October 2017 added the two tern species as species interest features, and geographically extended the site to parts of the Rivers Yare and Bure, along with a further small extension at Minsmere. Common Tern breed at Breydon Water SPA and Foulness SPA, and at Scroby Sands, and the addition of the Yare and Bure enable protection of foraging areas for these breeding colonies.

Yarmouth Local Plan Core Strategy (2015) are likely to have a significant effect on the Outer Thames Estuary SPA." The letter also advises Great Yarmouth Council that additional mitigation in light of the SPA extension and additional species would not be required.

2.24 The Outer Thames Estuary SPA is further from North Norfolk than Great Yarmouth and the boundaries are such that there can be no credible risks to the SPA. For the absence of doubt, Little Tern are particularly sensitive to disturbance at their breeding sites as they nest on sandy beaches, the breeding sites relevant to North Norfolk are within the North Norfolk Coast SPA (which is scoped into this assessment).

Roydon Common & Dersingham Bog SAC/Roydon Common Ramsar/Dersingham Bog Ramsar

2.25 These wetland and heathland sites lie right at the periphery of the 20km from the District boundary and are more than 20km from any of the key settlements. On this basis they are scoped out. The only plausible impact pathway would relate to air quality as Dersingham Bog is dissected by the coast road and the habitats are vulnerable to changes in air quality. The North Norfolk Local Plan is not likely to generate additional traffic along this route however, as traffic heading from the District to King's Lynn and further west will use the A148 which cuts diagonally through the District, linking King's Lynn, Fakenham and Holt.

European sites screened in for further assessment

2.26 The following European sites are therefore considered relevant to this HRA and are the focus for the remainder of this report:

- Breckland SAC/SPA
- Winterton-Horsey Dunes SAC
- Norfolk Valley Fens SAC
- North Norfolk Coast SAC/SPA/Ramsar site
- Overstrand Cliffs SAC
- River Wensum SAC
- The Wash and North Norfolk Coast SAC
- Great Yarmouth North Denes SPA
- Breydon Water SPA/Ramsar site
- Broadland SPA/Ramsar site
- The Broads SAC
- Greater Wash SPA
- Paston Great Barn SAC
- The Wash SPA/Ramsar

3. Screening for likely significant effects

3.1 This section documents the screening stage of HRA (stage 1 of the 4 stage process), where the plan is screened for likely significant effects.

What constitutes a likely significant effect?

3.2 The screening for likely significant effects of a plan involves checking all aspects of the plan and identifying any areas of potential concern, which are then examined in more detail in the appropriate assessment (stage 2) of the HRA. The check for likely significant effects provides an initial test of the plan.

3.3 Where the screening identifies risks a more detailed assessment is undertaken to gather more information about the likely significant effects and give the necessary scrutiny to potential mitigation measures. This is the appropriate assessment stage of HRA.

3.4 A likely significant effect could be concluded on the basis of clear evidence of risk to European site interest, or there could be a scientific and plausible justification for concluding that a risk is present, even in the absence of direct evidence.

3.5 The screening in this HRA looks at policies prior to any avoidance/reduction/mitigation measures in line with People Over Wind[16]; mitigation can only be considered at Appropriate Assessment stage. People Over Wind clarified the need to carefully explain actions taken at each HRA stage, particularly at the screening for likely significant effects stage. The Judgment highlights the need for clear distinction between the stages of HRA, and good practice in recognising the function of each. The screening for likely significant effects stage should function as a screening or checking stage (regardless of avoidance, reduction/mitigation measures), to determine whether further assessment is required. Assessing the nature and extent of potential impacts on European site interest features, and the robustness of mitigation options, should be done at the appropriate assessment stage.

Screening

[16] People Over Wind: European Count Case C-323/17 People Over Wind & Peter Sweetman v Coillte Teoranta 12 April 2018

3.6 The screening for likely significant effects is set out in Table 2 below and provides the screening assessment. The screening covers the whole plan. Allocations are shown in Map 5 which follows the screening table.

3.7 Where risks are highlighted and there is a possibility of significant effects on European sites, further and more detailed appropriate assessment is required. Inevitably there will be precaution in screening elements of the plan, as the purpose of screening for likely significant effects is to identify where there is either no possibility of an effect, or where there are uncertainties.

3.8 Appendix 3 provides a summary of the allocations and distances to European sites. This gives further context and allows each allocation to be checked against each European site.

Table 2: Screening of the North Norfolk Local Plan (submission version) for Likely Significant Effects ('LSE'). Red shading indicates LSE. Grey shading and bold text relate to section headings to make cross-referencing between the table and the plan easier. Blue shading is used to highlight bespoke area, site or case specific policies or proposals intended to avoid or reduce harmful effects on a European site. Following *People Over Wind* these cannot be taken into account in the formal screening and must be considered as part of the appropriate assessment.

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
1. Introduction	Introductory text on role of local plan	No LSE admin text		
2. Spatial Portrait, Vision, Aims & Objectives	Sets out overall vision and 5 strategic objectives	No LSE, general statements too vague to have a significant effect on specific sites.		Vision does identify North Walsham, Fakenham and Cromer as the focus for growth – impacts of growth in these settlements is picked up in more detailed policies below and taken to appropriate assessment where relevant
3. Delivering Climate Resilient Sustainable Growth				
Policy CC1 Delivering Climate Resilient Growth	Strategic Policy setting out the principles of climate resilient growth	No LSE - general plan wide climate change policy		
Policy CC2 Renewable & Low Carbon Energy	Policy gives general in-principle support for renewable or sustainable energy schemes	No LSE – policy listing general criteria for acceptability / sustainability of proposals		Policy is very general and includes in principle support for renewable energy which could pose risks for mobile species outside European sites, however there is wording to ensure any impacts to qualifying features of internationally designated conservation sites are addressed.

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
Policy CC3 Sustainable Construction, Energy Efficiency & Carbon Reduction	Policy sets out construction standards for new builds to reduce carbon emissions & follow energy hierarchy	No LSE – policy listing general criteria for acceptability / sustainability of proposals		
Policy CC4 Water Efficiency	Policy sets out standards for water efficiency	No LSE – policy listing general criteria for acceptability / sustainability of proposals		
Policy CC5 Coastal Change Management	Policy sets out development constraints within coastal change management areas	No LSE – policy listing general criteria for acceptability / sustainability of proposals		Policy will have benefit of ensuring no issues from development in restricting coastal change and conformity to Shoreline Management Plans
Policy CC6 Coastal Change Adaptation	Policy sets out principles for relocation of dwellings from coastal change management areas	No LSE – policy listing general criteria for acceptability / sustainability of proposals		
Policy CC7 Flood Risk & Surface Water Drainage	Policy sets out set requirements for sustainable drainage and mitigation of flood risk	No LSE -general plan-wide environmental protection Policy		
Policy CC8 Electric Vehicle Charging	Policy sets out standards for charging point provision	No LSE - policy listing general criteria for acceptability / sustainability of proposals		
Policy CC9 Sustainable Transport	Policy sets out how sustainable transport will be achieved	No LSE - policy listing general criteria for acceptability / sustainability of proposals		Policy could play a role in reducing air quality impacts to European sites
Policy CC10 Biodiversity Net Gain	Policy sets out minimum legal targets & compliance with following mitigation hierarchy	No LSE – Policy that cannot lead to development or other change		Positive policy with potential cross-over with respect to management of green infrastructure and wider

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
				countryside. Supporting text ensures compliance with mitigation hierarchy. Does not relate to European sites and therefore mitigation as set out in this policy does not need to be considered at appropriate assessment.
Policy CC11 Green Infrastructure	Policy sets out principles of GI creation, enhancement & management & promotes connectivity	LSE – policy listing general criteria for acceptability / sustainability of proposals and also includes proposal intended to avoid or reduce harmful effects on a European site	Recreation impacts at all European sites.	GI has a role to play in mitigation delivery for recreation impacts. Policy includes reference to the Norfolk GIRAMS. Following *People Over Wind* this cannot be taken into account in the screening and must therefore be screened in for further consideration at appropriate assessment.
Policy CC12 Trees, Hedgerows and Woodland	Policy sets out principles of protection & creation	No LSE – general plan-wide environmental protection		
Policy CC13 Protecting Environmental Quality	Policy sets criteria for protection of environmental quality including the natural environment	No LSE – general plan-wide environmental protection		

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
4 Spatial Strategy				
Policy SS1 Spatial Strategy	Policy sets out the distribution of growth across district according to the settlement hierarchy	LSE – Policy which may have a likely significant effect on a site alone	**Recreation** (Likely significant effects triggered alone for Breckland SPA, Breckland SAC, Breydon Water SPA, Breydon Water Ramsar, Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SAC, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar, Winterton-Horsey Dunes SAC); **Urban effects** (Likely significant effects triggered alone for the Norfolk Valley Fens SAC); **Hydrological issues** (Likely significant effects triggered for the Norfolk Valley Fens SAC, Broadland SAC, Broadland Ramsar, The Broads SAC).	Policy sets the broad locations of growth and scale at particular settlements.

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
Policy SS2 Development in the Countryside	Policy sets out the approach to development outside of settlement boundaries	No LSE - policy listing general criteria for acceptability / sustainability of proposals.		General policy listing criteria by which planning permission would be granted in the Countryside Policy Area. While these could include new housing, recreation and tourist facilities, there is no quantum of growth or locations specified. Policy states that permission would only be granted where the proposal complies with the policies in the Plan and therefore protection for European sites is ensured through EN4.
Policy SS3 Community-Led Development	Policy sets out criteria for community led development, primarily affordable housing but could also extend to community shops, pubs, allotments, gardens, play areas, orchards, workspace, and renewable energy.	No LSE – general policy listing general criteria for acceptability / sustainability of proposals.		General policy with no quantum of growth or locations specified. Protection for European sites is ensured through EN4.

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
5. Delivering Well Connected Healthy Communities				
Policy HC1 Health & Wellbeing	Policy setting out the criteria for health impact assessments	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		
Policy HC2 Provision & Retention of Open Spaces	Policy setting out criteria for provision of new open space & protection of existing open space	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		Supporting text cross references to GIRAMS and complementary policies e.g. CC11 recognising role of GI in mitigation.
Policy HC3 Provision & Retention of Local Facilities	Policy sets out criteria for loss of local facilities and new ones meeting the needs of the local community	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		
Policy HC4 Infrastructure Provision, Developer Contributions & Viability	Sets out the strategic approach to provision of social, physical and green infrastructure	LSE – policy listing general criteria for acceptability / sustainability of proposals and also includes proposal intended to avoid or reduce harmful effects on a European site	Recreation impacts at all European sites.	Policy includes reference to the Norfolk GIRAMS and requirement to contribute towards the provision of visitor impact mitigation. Following *People Over Wind* this cannot be taken into account in the screening and must therefore be screened in for further consideration at appropriate assessment.
Policy HC5 Fibre to the Premises (FTTP)	Policy setting requirements for new development and fibre connections	No LSE – general policy listing general criteria for acceptability of proposals		

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
Policy HC6 Telecommunications Infrastructure	Policy with criteria for telecommunications connections	No LSE – general policy listing general criteria for acceptability of proposals		
Policy HC7 Parking Provision	Criteria setting out provision of adequate safe and secure vehicle and cycle parking.	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		
Policy HC8 Safeguarding Land for Sustainable Transport	Policy for safeguarding railway land	No LSE – Policy that cannot lead to development or other change		
6. The Environment				
Policy ENV 1 Norfolk Coast Area of Outstanding Natural Beauty & The Broads	Policy setting out protection of the AONB and the Broads	No LSE - general plan-wide environmental protection/site safeguarding Policy		
Policy ENV2 Protection & Enhancement of Landscape & Settlement Character	Policy setting out protection of landscape character	No LSE - general plan-wide environmental protection/site safeguarding Policy		
Policy ENV3 Heritage & Undeveloped Coast	Policy to protect the appearance and character of the coast.	No LSE - general plan-wide environmental protection/site safeguarding Policy		
Policy ENV4 Biodiversity and Geodiversity	Policy addressing protection of designated sites & mitigation through the GIRAMS	No LSE - general plan-wide environmental protection/site safeguarding Policy		Policy provides strong protection for European sites and ensures compliance with the Habitats Regulations
Policy ENV5 Impacts on Internationally Protected Habitats & Species, Recreational Impact	Sets out requirement that planning permission will only be granted subject to demonstrating no adverse effects on integrity and sets	LSE – policy includes proposal intended to avoid or reduce harmful effects on a European site	Recreation impacts at all European sites.	Policy includes reference to the Norfolk GIRAMS and requirement to contribute towards the provision of visitor impact mitigation. Following *People Over*

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
Avoidance Mitigation Strategy	need to contribute to the GIRAMS.			*Wind* this cannot be taken into account in the screening and must therefore be screened in for further consideration at appropriate assessment.
Policy ENV6 Protection of Amenity	Policy to maintain, protect and promote adequate living and working conditions for the District's communities	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		
Policy ENV7 Protecting & Enhancing the Historic Environment	Policy to protect historic environment & heritage assets	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		
Policy ENV8 High Quality Design	Policy to provide design principles for improved design and ensure the special character & qualities of North Norfolk are maintained and enhanced.	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		
7. Housing				

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
Policy HOU1 Delivering Sufficient Homes	Policy setting out quantum of housing according to the settlement hierarchy with an overall minimum level of 9,600 new homes over the plan period	LSE – Policy which may have a likely significant effect on a site alone	**Recreation** (Likely significant effects triggered alone for Breckland SPA, Breckland SAC, Breydon Water SPA, Breydon Water Ramsar, Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SAC, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar, Winterton-Horsey Dunes SAC); **Urban effects** (Likely significant effects triggered alone for the Norfolk Valley Fens SAC); **Hydrological issues** (Likely significant effects triggered for the Norfolk Valley Fens SAC, Broadland SAC, Broadland Ramsar, The Broads SAC).	
Policy HOU2 Delivering the Right Type of Homes	Policy addressing the type, size and tenure of homes	No LSE - Policy that cannot lead to development or other change		
Policy HOU3 Affordable Homes in the Countryside (Rural Exceptions Housing)	Policy setting out Proposals for affordable housing development within the designated Countryside Policy Area	No LSE - Policy with general criteria that cannot lead to development or other change		

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
Policy HOU4 Essential Rural Worker Accommodation	Policy setting out how the LPA will meet the need for essential accommodation associated with the use of land for agriculture, forestry and other rural based businesses in locations that would otherwise be judged as unsustainable	No LSE - Policy with general criteria that cannot lead to development or other change		
Policy HOU5 Gypsy, Traveller & Travelling Showpeople's Accommodation	Policy to meet the needs for both permanently occupied and transit pitches for the gypsy and traveller communities.	No LSE - Policy with general criteria that cannot lead to development or other change		
Policy HOU6 Replacement Dwellings, Extensions, Domestic Outbuildings & Annexed Accommodation	Policy to manage the visual impacts of proposed replacement dwellings, house extensions and domestic outbuildings on the character of the District	No LSE - Policy with general criteria that cannot lead to development or other change		
Policy HOU7 Accessible & Adaptable Homes	Policy to ensure that new homes are built to accessible and adaptable standards	No LSE - Policy with general criteria that cannot lead to development or other change		
Policy Hou8 Minimum Space Standards	Policy to ensure that new homes offer a reasonable minimum level of residential amenity and quality of life	No LSE - Policy with general criteria that cannot lead to development or other change		
8. Economy Sections				
Policy E1 Employment Land	Policy to ensure that a sufficient quantity of land is	No LSE – general policy listing general criteria for		Policy identifies locations for new allocations for employment in the

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
	reserved for employment generating developments across the District	acceptability / sustainability of proposals		main table, these are general references and the individual sites are listed separately and considered in detail below
Policy E2 Employment Areas, Enterprise Zones & Former Airbases	Policy to ensure that employment land is protected for employment uses and that proposals for Employment Areas are for acceptable uses.	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		
Policy E3 Employment Development Outside of Employment Areas	Policy setting out criteria for employment sites outside of designated employment areas	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		
Policy E4 Retail & Town Centre Development	Policy to maintain and enhance the viability and sustainability of the District's town centres.	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		
Policy E5 Signage & Shopfronts	Policy to seek to avoid the proliferation of advertisements in sensitive locations	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		
Policy E6 New-Build & Extensions to Tourist Attractions and Extensions to Existing Tourist Attractions	To ensure that new-build tourist accommodation, static holiday caravans and holiday lodges are located in appropriate locations & allow flexibility for existing businesses within the countryside the opportunity	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		Tourism proposals will bring risks to European sites from recreation, and the coastal sites in particular will have a particular draw. Tourist proposals are covered by the GIRAMS and Policy ENV5 ensures risks are addressed for all types of development. Policy

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
	to expand where appropriate.			wording or supporting text could be strengthened however with cross-reference to ENV5 or GIRAMS.
Policy E7 Touring Caravan & Camping Sites	Policy to ensure that the use of land for touring caravan and camping sites is located in appropriate locations.	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		Tourism proposals will bring risks to European sites from recreation and the coastal in particular will be a particular draw. Tourist proposals are covered by the GIRAMS and Policy ENV5 ensures risks are addressed for all types of development. Policy wording or supporting text could be strengthened however with cross-reference to ENV5 or GIRAMS.
Policy E8 New-Build & Extensions to Tourist Attractions And Extensions To Existing Tourist Attractions	Policy setting out criteria for allowing new build & extensions to tourist attractions	No LSE – general policy listing general criteria for acceptability / sustainability of proposals		Tourism proposals will bring risks to European sites from recreation and the coastal in particular will be a particular draw. Tourist proposals are covered by the GIRAMS and Policy ENV5 ensures risks are addressed for all types of development. Policy wording or supporting text could be strengthened however with cross-reference to ENV5 or GIRAMS.

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
Policy E9 Retaining An Adequate Supply & Mix Of Tourist Accommodation	Policy to retain a mix and supply of all types of tourist accommodation.	No LSE – Policy that cannot lead to development or other change		
9. Places & Sites				
Policy DS1 Development Site Allocations	Policy listing the allocated sites for which planning permission will be granted subject to compliance with other policies in the Plan	LSE – Policy which may have a likely significant effect on a site alone	**Recreation** (Likely significant effects triggered alone for Breckland SPA, Breydon Water SPA, Breydon Water Ramsar, Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SAC, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar, Winterton-Horsey Dunes SAC); **Urban effects** (Likely significant effects triggered alone for the Norfolk Valley Fens SAC); **Hydrological issues** (Likely significant effects triggered for the Norfolk Valley Fens SAC, Broadland SAC, Broadland Ramsar, The Broads SAC).	Policy sets the overall quantum of growth at allocated sites

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
C07/2, Land at Cromer High Station, Norwich Road	Residential allocation, for around 22 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar).,	
C16, Former Golf Practice Ground, Overstrand Road	Residential allocation, for around 150 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	
C22/2, Land West of Pine Tree Farm	Residential allocation, for around 400 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
F01/B, Land North of Rudham Stile Lane	Residential allocation, for around 560 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Breckland SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, North Norfolk Coast SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar); Hydrological issues (LSE triggered alone for River Wensum SAC)	
F02, Land Rear of Shell Garage, Creake Road	Residential allocation, for around 70 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Breckland SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, North Norfolk Coast SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar); Hydrological issues (LSE triggered alone for River Wensum SAC)	
F03, Land at Junction of A148 & B1146	Residential allocation, for around 65 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Breckland SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, North Norfolk Coast SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar); Hydrological issues (LSE triggered alone for River Wensum SAC)	

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
F10, Land South of Barons Close	Mixed Use allocation, for around 55 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Breckland SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, North Norfolk Coast SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar); Hydrological issues (LSE triggered alone for River Wensum SAC)	
H17, Land North of Valley Lane	Residential allocation, for around 27 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	
H20, Land at Heath Farm	Residential allocation, for around 180 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Urban effects (LSE triggered alone for Norfolk Valley Fens SAC) Recreation (LSE triggered alone for Norfolk Valley Fens SAC; LSE triggered in-combination for: North Norfolk Coast SPA, North Norfolk Coast Ramsar, North Norfolk Coast SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar); Hydrological issues (LSE triggered alone for the Norfolk Valley Fens SAC)	

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
H27/1, Land at Heath Farm	Employment allocation, of around 6ha	LSE – Policy which may have a likely significant effect on a site alone	Urban effects (LSE triggered alone for Norfolk Valley Fens SAC) Recreation (LSE triggered in-combination for: Norfolk Valley Fens SAC); Hydrological issues (LSE triggered alone for the Norfolk Valley Fens SAC)	
HV01/B, Land East of Tunstead Road	Residential allocation, for around 120 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Breydon Water SPA, Breydon Water Ramsar, Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC)	
NW01/B, Land at Norwich Road & Nursery Drive	Mixed Use allocation, for around 350 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Breydon Water SPA, Breydon Water Ramsar, Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
NW62/A, Land West of North Walsham	Mixed Use allocation, for around 1800 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Breydon Water SPA, Breydon Water Ramsar, Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	
SH04, Land Adjoining Seaview Crescent	Residential allocation, for around 45 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Broadland SPA, Broadland Ramsar, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	
SH07, Former Allotments, Weybourne Road, Adjacent to Splash	Residential allocation, for around 40 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	

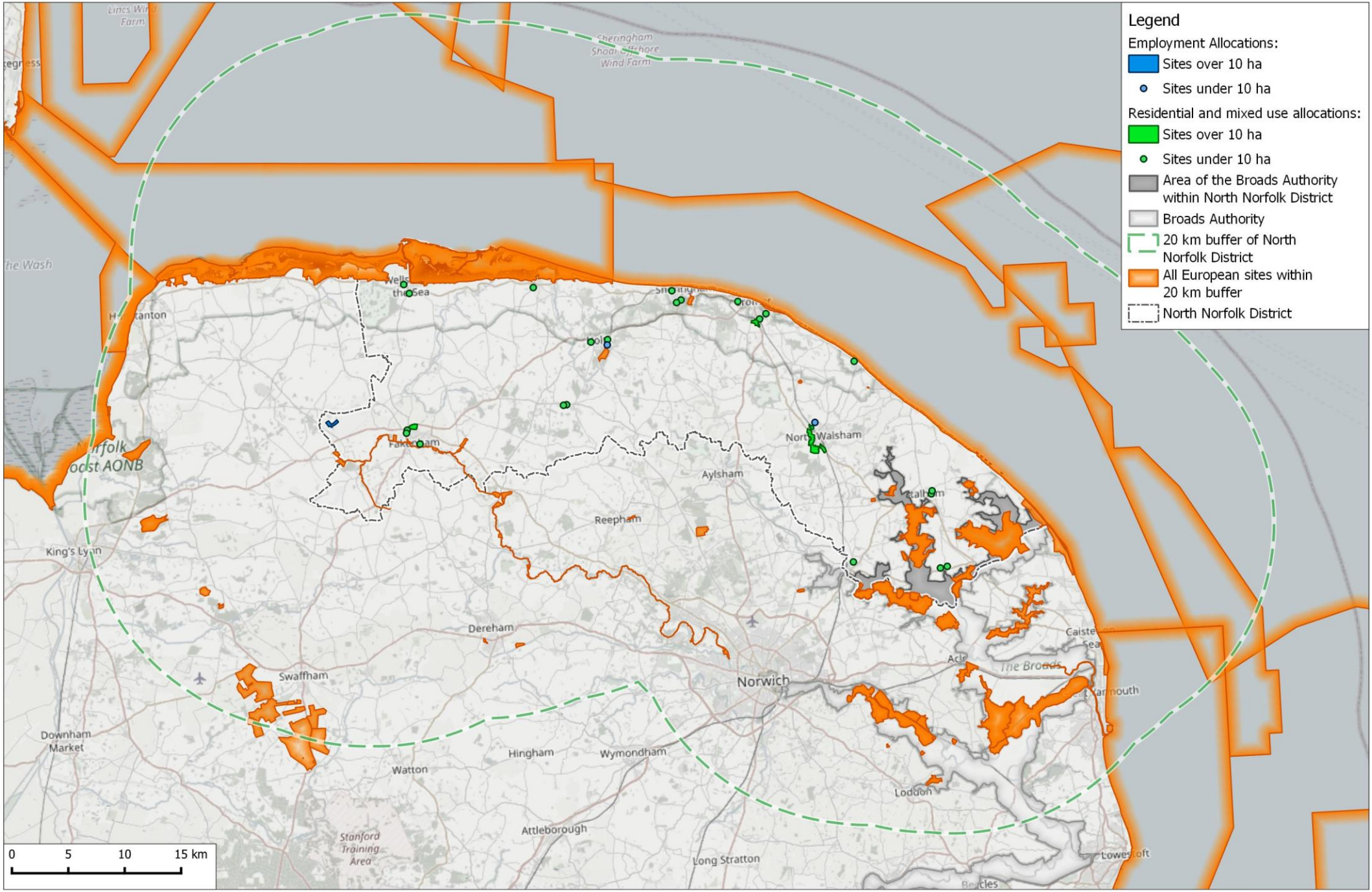
Plan Section/Policy	Description	LSE screening	Potential risks	Comments
SH18/1B, Land South of Butts Lane	Residential allocation, for around 48 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Broadland SPA, Broadland Ramsar, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	
ST19/A, Land Adjacent Ingham Road	Residential allocation, for around 70 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Breydon Water SPA, Breydon Water Ramsar, Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC); Hydrological issues (Broads SAC, Broadland SPA/Ramsar)	
ST23/2, Land North of Yarmouth Road, East of Broadbeach Gardens	Residential allocation, for around 80 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Breydon Water SPA, Breydon Water Ramsar, Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC) Hydrological issues (Broads SAC, Broadland SPA/Ramsar)	

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
W01/1, Land South of Ashburton Close	Residential allocation, for around 20 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: North Norfolk Coast SPA, North Norfolk Coast Ramsar, North Norfolk Coast SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	
W07/1, Land Adjacent Holkham Road	Residential allocation, for around 50 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered alone for: North Norfolk Coast SAC, North Norfolk Coast SPA, North Norfolk Coast Ramsar; LSE triggered in-combination for: The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	
BLA04/A, Land East of Langham Road	Residential allocation, for around 30 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered alone for: North Norfolk Coast SAC, North Norfolk Coast SPA, North Norfolk Coast Ramsar; LSE triggered in-combination for Norfolk Valley Fens SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	
BRI01, Land East of Astley School	Residential allocation, for around 25 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
BRI02, Land West of Astley School	Residential allocation, for around 40 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	
LUD01/A, Land South of School Road	Residential allocation, for around 20 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Breydon Water SPA, Breydon Water Ramsar, Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC) Hydrological issues (Broads SAC, Broadland SPA/Ramsar)	
LUD06/A, Land at Eastern End of Grange Road	Residential allocation, for around 15 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Breydon Water SPA, Breydon Water Ramsar, Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC) Hydrological issues (Broads SAC, Broadland SPA/Ramsar)	

Plan Section/Policy	Description	LSE screening	Potential risks	Comments
MUN03/B, Land off Cromer Road & Church Lane	Mixed Use allocation, for around 30 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC)	
C10/1, Land at Runton Road / Clifton Park	Residential allocation, for around 55 dwellings	LSE – Policy which may have a likely significant effect on a site alone	Recreation (LSE triggered in-combination for: Broadland SPA, Broadland Ramsar, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, North Norfolk Coast SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar)	
E7, Tattersett Business Park	Employment allocation, of around 28.79ha	No LSE – Policy which could not have any conceivable effect on a site		Site is over 2km from River Wensum and no other European site within 10km
NW52, North Walsham Industrial Estate Extension, East of Bradfield Road	Employment allocation, of around 2.43ha	No LSE – Policy which could not have any conceivable effect on a site		Nearest European site is the Norfolk Valley Fens SAC (over 3km away).

Map 5: Location of allocations in relation to the 20 km buffer and European sites.



European sites with no likely significant effects and pathways scoped out from further assessment

3.9 We rule out likely significant effects of **Overstrand Cliffs SAC** as the site is designated for its vegetated sea cliffs, which support a wide diversity of flora with maritime influence. The site improvement plan for this site lists inappropriate coastal management as the key threat to the site. A total of 4 site allocations at Cromer are located within 2.5km of the SAC, however there is only a single allocation (C16, for 150 dwellings) located around 300m at its closest to the SAC boundary. This site is separated from the SAC by a golf club, existing buildings and a road. Given the nature of the site's topography and substrate it is considered unlikely that recreation impact pathways are relevant and the distances also rule out issues from groundwater pollution and from development leading to inappropriate coastal management.

3.10 We also rule out likely significant effects for **Paston Great Barn SAC**, a medieval thatched barn supporting a breeding colony of Barbastelle Bats *Barbastella barbastellus*. The site was selected for classification as an example of a Barbastelle bat maternity colony however the supplementary conservation advice states that studies have shown that Barbastelle bats use Paston Great Barn throughout the year with activity recorded in every month. Any access to the building or disturbance nearby could impact on the bats and therefore any development in close proximity could result in urban effects or disturbance. There are no allocations within 2km and therefore such risks can be ruled out.

3.11 Barbastelles feed on moths and range widely in the landscape, even ranging up to 20km from the roost at night (Zeale et al., 2012). The supplementary conservation objectives set targets relating to the distribution and extent of supporting habitat. The objectives highlight that the bats are expected to typically forage up to 5-7km from the roost. Supporting habitat is identified as woodland canopy and margins, as well as more open areas, i.e. orchards and suburban parks. The supplementary advice highlights coastal habitats in particular, indicating that female Barbastelles forage at the coast whenever weather conditions are suitable. It is therefore critical to maintain the dark cliff face and cliff top and avoid additional illumination from any development in the area.

3.12 In order to reach foraging areas bats will follow linear features such as woodland edges, waterways, hedgerows etc. Flight lines will extend across the landscape and any development that might disrupt these could pose a risk.

3.13 Risks would therefore relate to any disruption of flight lines or effects on foraging habitats and these issues could arise through habitat loss or issues such as lighting that might influence the behaviour of the bats. The closest allocation is some considerable distance (2.3km) to the south-east (Mundelsley, site ref. MUN03/A and MUN04/A), and 3.7km from the next closest (site ref. MUN11), indicating that any impact arising directly from the allocations is unlikely. There are no allocations between the Great Barn and the coast.

3.14 **Air quality** is an issue for many European sites across England and increased traffic on roads could be a concern. To check for likely significant effects, we mapped all road sections that fell within 200m of a European site (in line with relevant guidance, see Natural England, 2018) and all main roads within 200m of European sites are shown in Map 6.

3.15 Key sections of road are:

- A149 near Sheringham (Beeston) where there is around 150m that are adjacent (to the north) of the Norfolk Valley Fens. Here there is some scrub adjacent to the road.
- A149 at Cley, where the road runs adjacent (to the south) to the North Norfolk Coast SAC/SPA/Ramsar between Cley and Salthouse. Here there is scrub and a footpath near the road and then grazing marsh, ditch and reedbed habitat.
- A149 at Holkham, where the road runs to the south of the North Norfolk Coast SAC/SPA/Ramsar. Here there are some trees adjacent to the road and in places the European site is set back from the road.
- A149 at Cromer where a small section of road is within 200m of the Greater Wash SPA,
- A1065 at Fakenham where there are two crossings over the River Wensum SAC (and the road is therefore running at right angles to the European site) and around 200m of road where there is some fen vegetation to the east within the SAC but separated from the A1065 by tree cover and a lane.
- A1067 to the east of Fakenham, here there is around 270m of road section adjacent to the SAC, however there are some buildings and gardens and tall tree cover that mostly separate the SAC from the road.
- A149 at Stalham where a short section of road runs close to the Broadland SPA/Ramsar/Broads SAC. The European site here is over 100m from the road and there is tree cover between the two.

3.16 All of these are very short sections of road and checks of aerial photographs reveal that the proportion of the European site within 200m of the road is very

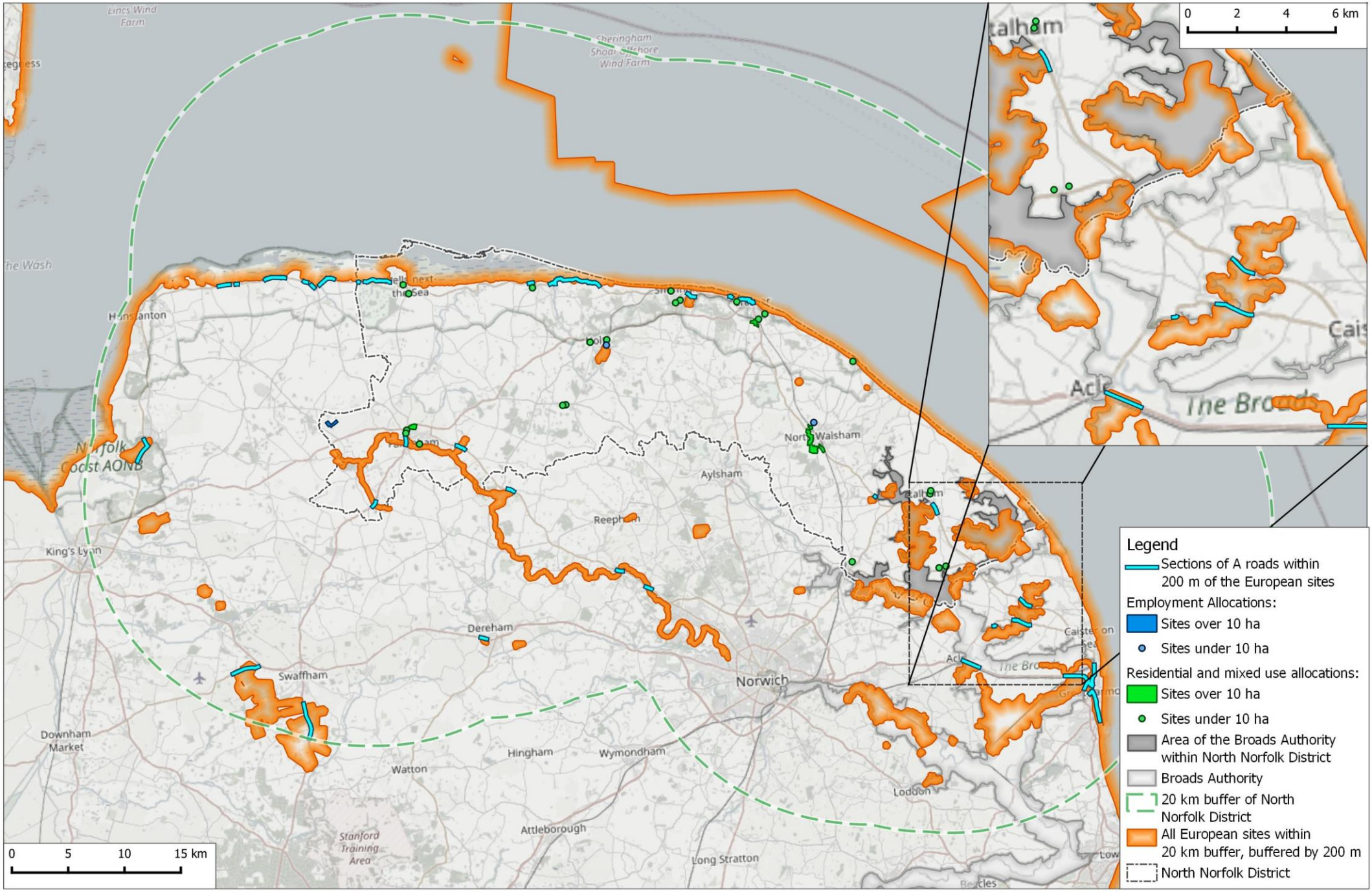
low and the habitats present are not ones particularly vulnerable to air quality. Given the rural nature of these roads, and the dispersed nature of the allocations, likely significant effects can be ruled out, alone or in-combination.

3.17 Loss of supporting habitat is a further impact pathway that was initially considered potentially relevant for certain European sites. For a number of sites and species there can be areas outside the boundary of European sites that are likely to be important and at risk from development. There are therefore risks through the loss, deterioration, or compromise of habitat outside a European site boundary that serves a supporting role for the European site, for example as roosting or foraging sites. In North Norfolk the issues are relevant for the following European sites:

- **North Norfolk Coast SPA**: land outside the SPA may provide foraging localities for wintering Pink-footed and Dark-bellied Brent Geese, and breeding localities for Marsh Harrier.
- **Broadland SPA/Ramsar**: agricultural land outside the SPA boundary may provide foraging habitat for swans.

3.18 All allocations were checked as part of the screening, using aerial imagery and the allocation boundaries within GIS and drawing on our local knowledge of the general area and the ecology of the relevant species. All allocations in the proximity of the above European sites were small and involved sites that were already surrounded on multiple sides by housing, roads, footpaths and trees. As such none of the sites were likely to be functionally-linked to the European sites and likely significant effects could be eliminated from loss of supporting habitat.

Map 6: Location of allocations in relation to the 20 km buffer and European sites shown with road sections within 200m of the European sites.



4. Stage 2 Appropriate assessment: General Urban effects

Relevant policies and sites from the screening

4.1 Screening identified likely significant effects from urban effects for the Norfolk Valley Fens SAC and the following policies alone:

- DS1 Development site allocations;
- HOU1 Delivering sufficient homes;
- SS1 Spatial strategy.

4.2 Screening also identified likely significant effects for the following allocations alone in relation to general urban effects:

- H20, Holt, residential allocation for around 150 dwellings (at its closest around 440m from the Norfolk Valley Fens SAC);
- H27/1, Holt, employment allocation (at its closest around 160m from the Norfolk Valley Fens SAC).

4.3 It should also be noted that F04 at Fakenham is directly adjacent to the River Wensum and the issues relating to the direct proximity of this site to the SAC relate primarily to hydrology and this is therefore considered in the water impacts appropriate assessment section.

Urban effects

4.4 Urban effects relate to issues where development is close to the European site boundary and is an umbrella term relating to impacts such as light, noise, cat predation, fly tipping, increased fire risk, spread of invasive species (e.g. from gardens and garden waste) and vandalism.

4.5 Studies of fire incidence have shown that heathland sites with high levels of housing within 500m of the site boundary have a higher fire incidence (Kirby & Tantram, 1999). Fires can start in a range of ways, including deliberate arson, children playing, campfires, barbeques, sparks from vehicles, discarded cigarettes etc.

4.6 Where housing is directly adjacent to sites, access can occur directly from gardens and informal access points. While we treat recreation use in a separate section, where development is adjacent to the European site, use will spill over from adjacent gardens and is different to other recreation use. Adjacent green space next to urban areas is

often subject to a range of activities that are not necessarily compatible with nature conservation.

4.7 Fly-tipping and dumping of garden waste can be more common close to urban areas and invasive plant species can spread from gardens and edge habitats. As such, managing and looking after semi-natural habitats in close proximity to urban areas can be more challenging.

4.8 The issues therefore relate to where urban development is in close proximity to the European site and in particular are likely to relate to marked shifts in growth such that land around the periphery of European sites become 'urbanised'. A development exclusion zone has been established around many other European sites to reflect the particular risks with development directly adjacent to the boundary. Local plans and strategic mitigation schemes include a presumption against development within these areas and such zones have become an established Policy approach.

4.9 Examples of areas where a zone is established in planning Policy include:

- Across the Thames Basin Heaths (11 local planning authorities)
- Around the Dorset Heaths (two local planning authorities)
- In the Brecks (e.g. Breckland District)
- Around the East Devon Pebblebed Heaths (East Devon District Council)
- Around Cannock Chase SAC (e.g. Cannock Chase Council Local Plan)
- At Ashdown Forest SPA/SAC (e.g. Wealden District's Core Strategy Local Plan)
- Burnham Beeches (e.g. Chilterns and South Bucks).

4.10 Most of the above examples are heathland sites and a 400m zone is used, however Burnham Beeches is a woodland site and the zone is 500m. The approach is widely accepted and reduces the risks from increasing urbanisation. It provides greater certainty that mitigation measures (such as access management) for cumulative levels of urban growth will be successful as such measures can be targeted to those travelling some distance.

4.11 The choice of 400m is based on the literature (summarised in Underhill-Day, 2005) and to some extent is a pragmatic choice. For example, 400m reflects distances at which sites will be 'local' and easily accessible from nearby housing and fits with the fire research outlined above. For those sites with interest features vulnerable to cat predation, the ranging behaviour of cats is also relevant as studies of cat roaming behaviour have shown 400m to be an appropriate buffer width to limit cats in very urban environments (Thomas, Baker, & Fellowes, 2014).

4.12 We have used 400m to screen allocations and check European sites for allocations and the scale of growth around all European sites within 400m, i.e. very close to the site

boundary. We identified 2 allocations, both in Holt, that are within 400m of Holt Lowes SSSI, part of the Norfolk Valley Fens SAC.

Allocations at Holt

4.13 H27/1 is an employment site that lies just to the north of the SAC and is separated from the European site by a road and belt of pine woodland. There is a public car park (Mackey's Hill) in the woodland accessed from opposite the employment allocation. From the car park there is access to Holt Lowes Country Park (managed by Norfolk County Council) and from the Country Park there is access onto the SAC (which is managed by Norfolk Wildlife Trust). The housing allocation (H20, Land at Heath Farm) lies to the north of the employment site and there is a public footpath that runs alongside the H27/1 allocation to the road and then provides access to the SAC through the Country Park. The two allocations and the relationship to the SAC are shown in Map 7. It can be seen that there is also an additional allocation in Holt (H17) but this is set much further back, is small and screened from the SAC by the Country Park, the Norwich Road/Holt by-pass and housing.

4.14 Holt Lowes SSSI holds the following SAC qualifying features (as summarised in the supplementary conservation advice):

- H7230 Alkaline Fens;
- H4030 European Dry Heaths;
- H6410 Molinia Meadows;
- H4010 Northern Atlantic Wet Heaths.

4.15 The supplementary conservation advice identifies a range of targets that could be undermined by development in very close proximity. These include the need to control undesirable species such as *Rhododendron ponticum* and *Gaultheria shallon* (relevant to all qualifying features), adaption and resilience (relevant to all qualifying features) and the functional connectivity with the wider landscape (relevant to all qualifying features).

4.16 Urban effects here would relate to fly-tipping, spread of alien species (e.g. from dumping of garden waste), fire incidence, vandalism and there may also be issues in achieving the necessary management at the site (such as grazing). Urban effects could include fragmentation and isolation of the SAC, however both allocations are on arable land and do not appear (from aerial images) to lie between the SAC and any other blocks of semi-natural habitat.

4.17 These issues will relate very specifically to the Mackey's Hill car park area and the northern edge of the SAC. Given the very specific location and limited geographic focus, these issues can be addressed at project level HRA. Detailed site design

considerations would relate to how people can move from the allocations onto the SAC and should further risks remain, mitigation could potentially be secured through working with the Norfolk Wildlife Trust and the County Council with respect to boundary treatments, resources to address fly-tipping etc. and support to ensure necessary management measures are not compromised. Risks also relate to recreation (see 5.17) and project level HRA should identify necessary mitigation for both.

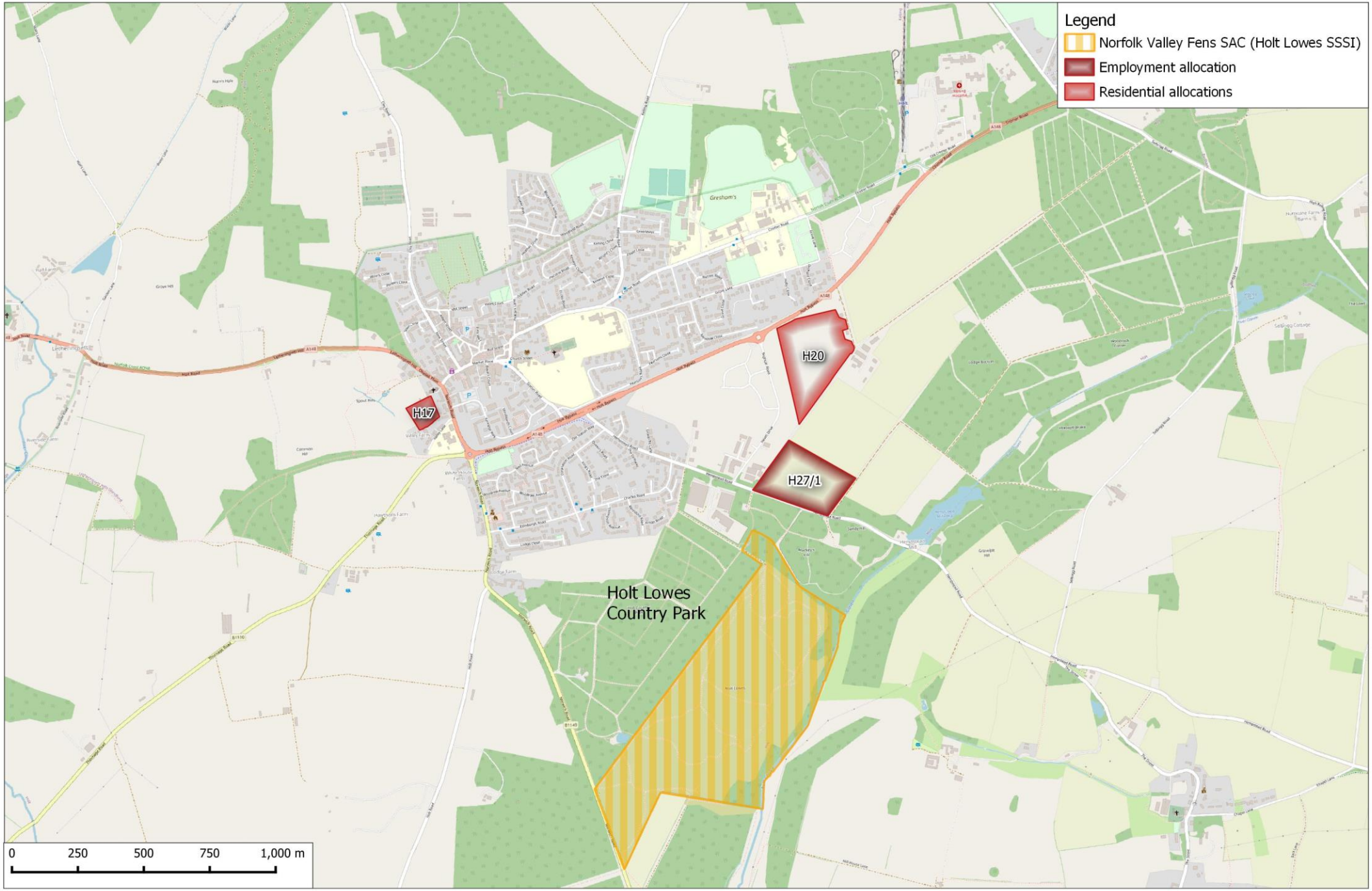
4.18 The allocation policy wording ensures these sites are dependent on the project level HRA (H20, requirements 9 and 10; H27/1 points 7, 9 and 10) and adequate mitigation is secured, if required, and this protective wording means adverse impacts on the North Norfolk Valley Fens SAC can be ruled out alone for these two sites. Given the very specific local issues and geography, there is no credible evidence of a real risk that other sites will have a meaningful in-combination urban effect of the qualifying features of the Norfolk Valley Fens SAC. Further assessment considering in-combination effects with other plans and projects would not change the outcome of the assessment and adverse effects on integrity to the Norfolk Valley Fens from urban effects can therefore be ruled out alone or in-combination.

Strategic policies

4.19 Likely significant effects were also identified alone for strategic policies DS1, HOU1 and SS1. Here the risks relate to the three allocations considered above and the risk associated with windfall growth. Likely significant effects were only identified for the Norfolk Valley Fens SAC, as significant urban growth around the periphery of other European sites is not a credible risk given the scale of growth proposed and the constraints such as flood risk or landscape. For the Norfolk Valley Fens SAC, the specific issues relate to development in close proximity to Holt Lowes SSSI (Holt) and around Beeston Regis Common SSSI (Sheringham). At these locations there is existing development in close proximity and windfall development is possible.

4.20 For these policies, adverse effects on integrity can be ruled out alone due to the very localised area involved and the protective policy ENV4 which ensures the need to rule out adverse effects on integrity before permission is granted. The scale of growth proposed in the plan is such that urban effects will be very localised and there is no need for development exclusion zones or similar around the respective sites. The settlement boundary for Holt and presence of the Country Park provides an additional buffer and ensures that other significant development (besides the two allocations considered above) within close proximity of Holt Lowes SSSI is unlikely.

Map 7: Holt sites and Norfolk Valley Fens SAC



5. Stage 2 Appropriate assessment: Recreation

Relevant policies and sites from the screening

5.1 Screening identified likely significant effects for all residential allocations, with in-combination risks to various European sites. The impacts relate to the overall quantum of growth. Visitor survey work (Panter et al., 2017) indicates visitors originate from a wide area across the county to visit different European sites and mitigation is secured in policies on a strategic basis for multiple sites.

5.2 The following sites were identified as triggering likely significant effects alone, due to their immediate proximity and direct footpath links to European sites:

- BLA04/A, Blakeney, residential allocation for around 30 dwellings (at its closest around 525m from the North Norfolk Coast SAC/SPA/Ramsar)
- W07/1, Wells-next-the-sea, residential allocation for around 50 dwellings at its closest around 460m from the North Norfolk Coast SAC/SPA/Ramsar)
- H20, Holt, residential allocation for around 150 dwellings (at its closest around 440m from the Norfolk Valley Fens SAC);
- H27/1, Holt, employment allocation (at its closest around 160m from the Norfolk Valley Fens SAC).

5.3 Screening also identified likely significant effects from the overall quantum of growth, relating to Breckland SPA, Breckland SAC, Breydon Water SPA, Breydon Water Ramsar, Broadland SPA, Broadland Ramsar, Great Yarmouth North Denes SPA, North Norfolk Coast SAC, North Norfolk Coast SPA, North Norfolk Coast Ramsar, Norfolk Valley Fens SAC, The Broads SAC, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar, Winterton-Horsey Dunes SAC and the following policies alone:

- DS1 Development site allocations;
- HOU1 Delivering sufficient homes;
- SS1 Spatial strategy.

5.4 In addition, a number of allocations were identified as having likely significant effects in-combination, as they fall within the relevant zones of influence established in the Norfolk-wide Green Infrastructure and Recreation Avoidance and Mitigation Strategy (Hooton and Mills, 2020), the 'GIRAMs'. The relevant allocations and European sites are summarised in Table 3. It can be seen from Table 3 that the increase in housing within the relevant zones ranges from 750 (Breckland SPA) to 4,367 (North Norfolk Coast SAC/SPA/Ramsar) and the Wash & North Norfolk Coast SAC.

Table 3: Approximate number of houses within relevant zones of influence, as set out in the GIRAMs. Cells give approximate number of houses for each allocation or are left blank if the allocation is outside the zone of influence. Top row, shaded grey, gives the relevant distance applied for the zone, from the GIRAMS.

Allocation	Breckland SPA	Breydon Water SPA/Ramsar	Broadland SPA/Ramsar	Great Yarmouth North Denes SPA	N Norfolk Coast SAC/SPA/Ramsar	Norfolk Valley Fens SAC	The Broads SAC	The Wash & North Norfolk Coast SAC	The Wash SPA/Ramsar	Winterton-Horsey Dunes SAC
ZONE (km)	**26**	**30**	**25**	**30**	**42**	**15**	**25**	**61**	**61**	**30**
BLA04/A					30	30		30	30	
BRI01					25	25		25	25	
BRI02					40	40		40	40	
C07/2			22	22	22	22	22	22	22	22
C10/1			55		55	55	55	55	55	
C16			150	150	150	150	150	150	150	150
C22/2			400	400	400	400	400	400	400	400
F01/B	560				560			560	560	
F02	70				70			70	70	
F03	65				65			65	65	
F10	55				55			55	55	
H17					27	27		27	27	
H20					180	180		180	180	
HV01/B		120	120	120	120	120	120	120		120
LUD01/A		20	20	20	20		20	20		20
LUD06/A		15	15	15	15		15	15		15
MUN03/B			30	30	30	30	30	30		30
NW01/B		350	350	350	350	350	350	350	350	350
NW62/A		1800	1800	1800	1800	1800	1800	1800	1800	1800
SH04			45		45	45	45	45	45	
SH07					40	40		40	40	
SH18/1B			48		48	48	48	48	48	
ST19/A		70	70	70	70	70	70	70		70
ST23/2		80	80	80	80		80	80		80
W01/1					20			20	20	
W07/1					50			50	50	
TOTAL DWELLINGS	**750**	**2455**	**3205**	**3057**	**4367**	**3432**	**3205**	**4367**	**4032**	**3057**

Introduction

5.5 In the UK there is considerable overlap between nature conservation and recreation. Many of our most important nature conservation sites have legal rights of access, for example through Public Rights of Way or Open Access through the Countryside and Rights of Way Act (CRoW) 2000. People are often drawn to sites that are important for nature conservation as they are large, scenic and often few other alternatives exist. Recreation use can include a variety of activities, ranging from the daily dog walk to competitive adventure and endurance sports. There can be a difficult balancing act between providing for an increasing demand for access without compromising the integrity of protected wildlife sites.

5.6 There is a strong body of evidence showing how increasing levels of access can have negative impacts on wildlife. Visits to the natural environment have shown a significant increase in England as a result of the increase in population and a trend to visit more (O'Neill, 2019). Issues are varied and include disturbance, increased fire risk, contamination and damage (for general reviews see: Liley et al., 2010; Lowen et al., 2008; Ross et al., 2014; Saunders et al., 2000; Underhill-Day, 2005).

5.7 The issues are not however straightforward. It is now increasingly recognised that access to the countryside is crucial to the long term success of nature conservation projects, for example through enforcing pro-environmental behaviours and a greater respect for the world around us (Richardson et al., 2016). Access also brings wider benefits to society that include benefits to mental/physical health (Keniger et al., 2013; Lee and Maheswaran, 2011; Pretty et al., 2005) and economic benefits (ICF GHK, 2013; ICRT, 2011; Keniger et al., 2013; The Land Trust, 2018). Nature conservation bodies are trying to encourage people to spend more time outside and government Policy is also promoting countryside access in general (e.g. through enhancing coastal access). The covid pandemic has further resulted in increased use of local greenspaces, as a result of travel restrictions and the awareness of open space as 'safe' places to meet (Burnett et al., 2021; Natural England and Kantar Public, 2021). Dog ownership has increased during the pandemic (Morgan et al., 2020).

Sites and vulnerable features

5.8 Sites and vulnerable qualifying features are summarised in Table 4. The table is primarily drawn from the site improvement plans and supplementary conservation advice for the relevant sites (see also Hooton and Mills, 2020; Liley, 2008; Panter et al., 2017). Note that the River Wensum SAC is not included as public access/disturbance is not identified in the site improvement plan as a current threat or future pressure, and there is no reference to public access in the supplementary conservation advice apart

from fish stocking (which occurs under licence). As such the risks are very low for the Wensum but note that the GIRAMs allows for monitoring as a further check.

5.9 It can be seen that there are a wide range of potentially vulnerable interest features across multiple sites.

Table 4: European site qualifying features potentially vulnerable to recreation impacts. Table drawn from site improvement plan and supplementary conservation advice (i.e. SPA and SAC sites only). Qualifying features underlined are SPA features that qualify as breeding species.

Broad area (from GIRAMS)	European site	Relevant qualifying features vulnerable to recreation	Additional information
Norfolk Valley Fens	**Norfolk Valley Fens**	H4010. Northern Atlantic Wet Heaths with *Erica tetralix*; H4030 European Dry Heaths H6410 *Molinia* Meadows On Calcareous, Peaty Or Clayey-Silt-Laden Soils (*Molinia* Meadows)	Public access/disturbance not mentioned specifically in the site improvement plan. Wet heath and dry heath identified in the supplementary conservation advice as vulnerable to trampling and visitor management stated as important for *Molinia* meadow; these habitats are present at Holt Lowes.
The Brecks	**Breckland SAC**	H4030 European dry heaths H2330 Inland dunes with open C*orynephorus* and *Agrostis* grasslands H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)	Site improvement Plan highlights that recreational and other activities have the potential to impact both SAC and SPA features. Disturbance does not currently appear to be significantly impacting the bird populations, but the impact of increased recreational activity is uncertain. Recreational growth in Thetford Forest may impact on woodlark and nightjar. The forest is a major recreational attraction in the region. Similarly, military training activities have the potential to impact ground nesting birds, especially stone curlew, but the extent of this impact is unclear. SAC features may be affected through eutrophication (dog fouling, unauthorised fires) and disturbance of soils, in particular on commons and heaths.
	Breckland SPA	A224 European Nightjar A246 Woodlark A133 Stone-Curlew	Supplementary conservation advice sets target that frequency, duration and/or intensity of disturbance affecting nesting and/or foraging birds should not reach levels that significantly affect the population of any of these species.
Broads sites	**Broadland SPA**	A021 Great bittern A037 Bewick swan A050 Eurasian wigeon A056 Northern shoveler A038 Whooper swan A051 Gadwall A081 Eurasian marsh harrier	Supplementary conservation objectives set target for all species to reduce the frequency, duration and/or intensity of disturbance affecting nesting, roosting, foraging, feeding, moulting and/or loafing birds so that the feature is not significantly disturbed.

Broad area (from GIRAMS)	European site	Relevant qualifying features vulnerable to recreation	Additional information
		A082 Circus cyaneus: Hen harrier A151 Ruff	
	Breydon Water SPA	A037 Bewick's swan, A132 Avocet, A140 Golden plover, A142 Northern lapwing, A151 Ruff, A193 Common tern, Waterbird assemblage	The site improvement plan states that there is potential for adverse impacts on birds from recreational disturbance at Breydon Water.
	The Broads SAC	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, S1355 Otter	The site improvement plan identifies that recreational impacts on SAC habitats, and disturbance to wintering waterfowl in particular, are an issue on a number of Broads' sites. This is largely a result of boat-based use of the water bodies.
East Coast sites	**Winterton – Horsey Dunes SAC**	H2110 Shifting dunes, H2120 Shifting dunes with marram, H2150 Coastal dune heathland	The site improvement plan identifies that the site is at carrying capacity in terms of recreational disturbance. Breeding Little terns, as well as the lichen dune grassland and dune heath are particularly sensitive to disturbance. There is a need to better understand the levels, patterns, impacts and solutions of recreational disturbance on the site.
	Great Yarmouth North Denes SPA	A195 Little Tern	
The Wash	**The Wash SPA**	A156 Black-Tailed Godwit A143 Red Knot A157 Bar-Tailed Godwit A144 Sanderling A149 Dunlin A160 Curlew A162 Common Redshank A169 Turnstone A193 Common Tern A195 Little Tern Waterbird Assemblage A141 Grey Plover	The site improvement plan identifies that The Wash, and North Norfolk coast is a very popular area for recreational activity and visitor numbers are likely to grow, for example as a result of the English Coastal Path and housing development. The range of recreational activities may have adverse impacts on the sites (Boating; motor boating; water skiing; jet skis; commercial and non-commercial wildlife tours; commercial shipping; kiters (including surfers, boarders and buggy boarders); moorings; access to moorings; motorised vehicles; bikes, hovercraft; bird/wildlife watching; (dog) walking; Samphire collection, shellfish

Broad area (from GIRAMS)	European site	Relevant qualifying features vulnerable to recreation	Additional information
		A037 Bewick's Swan A040 Pink-Footed Goose A046a Dark-Bellied Brent Goose A048 Common Shelduck A050 Wigeon A051 Gadwall A054 Pintail A065 Common Scoter A067 Goldeneye A130 Eurasian Oystercatcher,	collection, bait digging, reed cutting, beachcombing, sea lavender gathering; beach barbecues; littering; wildfowling). Conflicts with the management of fragile habitats and species which can be easily disturbed by recreational activity will need to be carefully managed. To overcome these challenges further collaboration between stakeholders and local people may be needed with the aim of more holistic management of the area.
	The Wash & North Norfolk Coast SAC	H1110 Subtidal Sandbanks H1140 Intertidal Mudflats And Sandflats H1160 Shallow Inlets And Bays H1310 Glasswort And Other Annuals Colonising Mud And Sand H1330 Atlantic Salt Meadows H1420 Mediterranean Saltmarsh Scrub S1365 Common Seal	
North Coast sites	**North Norfolk Coast SPA**	A143 Red Knot A191 Sandwich Tern A193 Common Tern A195 Little Tern A040 Pink-Footed Goose A046a Dark-Bellied Brent Goose A050 Wigeon A021 Bittern A081 Marsh Harrier A084 Montagu's Harrier A132 Avocet	
	North Norfolk Coast SAC	H1420 Mediterranean Saltmarsh Scrub H2110 Shifting Dunes H2120 Shifting Dunes With Marram H2130 Dune Grassland H2190 Humid Dune Slacks.	

Recreational use of sites: visitor survey data

5.10 All the sites identified in Table 4 have a right of public access. Visitor survey data from relevant European sites within Norfolk were collected by Footprint Ecology in 2015-16 (Panter et al., 2017) in a strategic piece of work commissioned by Norfolk County Council. As part of the work, predictions were made of the potential increase in recreation use at different sites as a result of the indicative levels of growth anticipated at a county-wide scale at the time. These predictions suggested a potential 14% increase in access by Norfolk residents to the sites surveyed (in the absence of any mitigation), as a result of new housing anticipated during the current plan period. Increases were predicted to be most marked in the Brecks, where an increase of around 30% was predicted. Other relevant predictions at a European site scale were 9% for North Norfolk; 14% for the roads, 11% for the East Coast sites (i.e. Winterton – Horsey Dunes SAC and Great Yarmouth North Denes SPA) and 28% for the Valley Fens.

5.11 The visitor work showed clear impacts of local housing growth on recreation use of the European sites. For parts of the North Coast however it was notable that high proportions of visitor use were tourists, and the links between an increase in local housing and recreation impacts are less clear as these sites attract a high number of visitors coming from a wide geographical area, both inside and outside Norfolk.

Allocations where LSE identified alone

5.12 Screening identified a small number of sites that were in direct proximity to European sites or had foot access such that there may be particular issues that cannot be addressed through the more strategic approach set out in the GIRAMs. The concern for these locations would relate to very frequent use from the allocations due to their proximity to the European site, for example in the case of daily dog walks. Where there is potential for these to avoid main entry points (e.g. foot access along local cut-throughs or similar) there is a risk that wardening, signage etc is likely to be less effective.

5.13 BLA04/A is at the south side of Blakeney village and access to the coast on foot would involve crossing the main coast road. It is around 800m on the pavements to Blakeney Harbour (edge of the European site) or alternatively it is possible to walk along the coast road and access the European site via a footpath towards the western edge of Blakeney village (around 890m walk). There is also a public footpath that leads via Kettlehill Plantation and Blakeney Downs to the European site near Morston (around 1800m). The shorter route, to the Harbour, means accessing the European site at a busy location with boat moorings,

slipway and parking. There are a range of footpaths that lead inland across farmland and to Wiveton Downs that provide some alternative routes, away from the coast. Given the scale of the development and the distances involved to access the coast on foot, there are no specific issues for this site that means the approach set out in the GIRAMs will not be sufficient. As such, assuming mitigation is secured through the GIRAMs, adverse effects on integrity can be ruled out, alone or in-combination.

5.14 W07/1 is on the west side of Wells-next-the-sea and access to the North Norfolk Coast SAC/SPA/Ramsar involves crossing the road. The shortest route on foot would be via the town car-park and would involve around a 520m walk. Access to the European site here is at the harbour side and the main part of town, with a range of shops, pubs and a car park. Creeks and deep water prevent access out onto the saltmarsh. Given the specific location of this allocation, the scale of the development and the distances involved to access the coast on foot, there are no specific issues for this site that means the approach set out in the GIRAMs will not be sufficient. As such, assuming mitigation is secured through the GIRAMs, adverse effects on integrity can be ruled out, alone or in-combination.

5.15 The two Holt allocations, H20 and H27/1 that have been identified are in close proximity and are also discussed in the previous section – urban effects. Their close proximity to the Holt Lowes SSSI (component of the Norfolk Valley Fens SAC) brings particular risks. Increased fire incidence and spread of non-native species (fly-tipping and garden waste) are covered in the appropriate assessment section for urbanisation. Risks from recreation would relate to dog fouling, trampling, litter and disruption to site management (e.g. through dogs worrying livestock).

5.16 H20 is for around 150 dwellings and assuming around 1 in 5 households might own a dog, there could be around 30 households with dogs in the allocation. There is direct footpath access from the corner of the H20 residential allocation site to the road and from there is a path network through the Country Park and onto the SAC. The employment allocation H27/1 is around 160m from the SAC and there is easy access through the Country Park. While an employment allocation is likely to have reduced risks compared to a residential site, there may be additional recreational use during lunch breaks or from people taking a longer walk/run/cycle to work for exercise and incorporating the European site into their route. Taking these two allocations together, there are risks for the Norfolk Valley Fens SAC at Holt Lowes that need to be checked at project level HRA and may need to be addressed through specific design elements and

tailored mitigation; allocation policy wording ensures these two allocations should be dependent on this being checked and secured.

5.17 Risks have also been identified for these two allocations in relation to urban effects (see paras 4.13 - 4.18) and therefore project-level HRA should address the two together. Potential mitigation measures (additional to the GIRAMS) for recreation would relate to specific, local issues that could be missed given the more strategic scale and scope of the GIRAMs (noting that the GIRAMS does identify Holt Country Park as a strategic opportunity area for enhanced green infrastructure). Specific measures targeted towards the allocations at Holt could include promotion of footpaths and circular footpath routes from H20 heading east/north-east, directing foot access away from the SAC and potentially the provision of additional green infrastructure in that direction to draw access away from Holt Lowes. In addition, site specific measures around the Mackey's Hill car park and the entry point to the Country Park could ensure access is deflected away from the SAC area, ensuring dog walkers in particular use the Country Park rather than the SAC, and the provision of dog bins. Such measures would fit well with a more strategic improvement to the Country Park through the GIRAMs funding.

Norfolk-wide Green Infrastructure and Recreational Avoidance and Mitigation Strategy (GIRAMS)

5.18 Using the results of the visitor survey work, a County-wide mitigation strategy has been developed to address the in-combination, cumulative effects of housing growth and recreation impacts to European sites (Hooton and Mills, 2020). This strategy involves a green infrastructure strategy and mitigation measures which provides for access management measures on-site and associated measures.

5.19 The green infrastructure strategy highlights the need for local planning authorities to secure the provision of green infrastructure at both a development site and plan-making level. Strategic opportunities for green space are identified and the strategy sets out criteria for Enhanced Green Infrastructure provision to ensure developers are aware of their responsibilities and to allow local planning authorities to audit their green infrastructure against the criteria.

5.20 The Recreation Avoidance and Mitigation component includes a package of measures:

- The provision of a 'Delivery Officer' with the role of managing the delivery of the mitigation;
- The provision of a team of 'Rangers' to provide a presence at the Habitats Sites particularly of the Broads, all three parts of the Coast and, when monitoring shows that this is a priority, in the Norfolk Brecks which could be extended to West Suffolk in the future. The role of Rangers includes informing visitors of the importance of the Habitats Sites, and directing them to appropriate areas, giving walks, talks & attending partner events; providing promotional materials designed in conjunction with existing partners to make best use of their knowledge and experience;
- Undertaking an Audit of Signage proposed regarding appropriate access points to each Habitats Site; car park rationalisation may then be considered necessary in the future to manage the carrying capacity of these sensitive sites.
- Monitoring commencement of residential developments especially locations e.g. within which LPA and individual Habitat site ZOI;
- Recording the implementation of mitigation and track locations and costs;
- Collating and mapping key roosts and feeding areas outside the Habitats Sites;
- Sharing a new website dedicated to the Norfolk GIRAMS, providing information on the Habitats Sites, the need for mitigation and measures to alleviate disturbance;
- Setting up a county-wide 'dog project' to engage with dog walkers, promoting sites for dog walking, providing information on dog walking and highlighting issues at Habitats Sites; build on existing use of dog bans & dogs on lead areas plus dog friendly beaches;
- Filling in gaps in data for Habitats Sites to calculate individual ZOIs and continuous updating of 'Visitor Surveys' at selected locations to monitor effects and update the need for Rangers and any additional measures;
- The provision of literature regarding codes of conduct and pilots for zonation for those undertaking water sports at Habitats Sites, including bait digging, power hang gliders, kayakers and kite surfers and the use of drones;
- Work identifying and providing strategic mitigation projects which are based on evidence and supported by data gathering undertaken in the Strategy and where there is a deliverable and identified need. Working with landowners and partners to support existing or identify new sites for fencing to protect breeding sites for Little Tern & Ringed Plover populations;
- Working with landowners and partners to collate bird monitoring surveys to identify land outside SPAs which support qualifying features;

- Monitoring of sensitive habitats & species;
- Working with the Public Rights of Way team on projects regarding route diversions.

5.21 The cost of the GIRAMS is estimated at £7.9 million and this is intended to be spread across all new planned residential developments that provide a net increase in housing in Local Plan periods. The cost per dwelling is £205.02. These calculations have been made assuming just over 7,159 new dwellings coming forward in North Norfolk District.

5.22 The strategy has been the focus of a number of years of work and has involved dialogue with a range of stakeholders and partners, including Natural England who have welcomed the approach and are supportive. The strategy addresses both residential and tourist accommodation growth. The measures are broadly in line with those in other parts of the country, such as Poole Harbour, the Essex Coast, the Solent, North Kent, the Exe Estuary and the Suffolk Coast.

5.23 The strategic mitigation scheme is embedded within the North Norfolk Plan and clearly cross-referenced (policies CC11 and ENV5). All site allocations are required in the plan to provide appropriate contributions towards mitigation measures identified in the Norfolk Green Infrastructure and Recreational Impact Avoidance & Mitigation Strategy (GIRAMS). All allocations above 50 units are also required to provide enhanced green infrastructure in accordance with the strategy.

5.24 The Norfolk Green Infrastructure and Recreational Impact Avoidance & Mitigation Strategy (GIRAMS) therefore provides the means to address cumulative effects from recreation and ensures adequate mitigation is secured to address recreation concerns. Wording is included for all relevant allocations to ensure that planning permission will be dependent on the necessary green infrastructure – in accordance with the strategy – being secured. With the strategy in place the Council can therefore rule out adverse effects in-combination for all allocations in the Plan.

6. Stage 2 Appropriate assessment: Hydrological impacts

Relevant policies and sites from the screening

6.1 Screening identified likely significant effects from urban effects for the Norfolk Valley Fens SAC, the Broads SAC/Broadland SPA/Ramsar and the River Wensum SAC from the following policies alone:

- DS1 Development site allocations;
- HOU1 Delivering sufficient homes;
- SS1 Spatial strategy.

6.2 Likely significant effects for hydrological impacts were identified alone for the following sites:

- HV01/B, Hoveton, residential site, likely significant effects in relation to the Broads SAC/Broadland SPA/Ramsar;
- LUD01/A, Ludham, residential site, likely significant effects in relation to the Broads SAC/Broadland SPA/Ramsar;
- LUD06/A, Ludham, residential site, likely significant effects in relation to the Broads SAC/Broadland SPA/Ramsar;
- H27/1, Holt, employment site, likely significant effects in relation to the Norfolk Valley Fens SAC;
- H20, Holt, residential site, likely significant effects in relation to the Norfolk Valley Fens SAC;
- F10, Fakenham, residential site, likely significant effects in relation to the River Wensum SAC;
- F02, Fakenham, residential site likely significant effects in relation to the River Wensum SAC;
- F03, Fakenham, residential site likely significant effects in relation to the River Wensum SAC;
- F01/B, Fakenham, residential site likely significant effects in relation to the River Wensum SAC.

Water supply

6.3 It is the role of the Environment Agency to make sure that abstraction is sustainable and does not damage the environment. Water abstraction is managed through a licensing system originally introduced by the Water Resources Act 1963.

6.4 The Environment Agency is the competent authority for the Water Framework Directive and it oversees the publication of River Basin Management Plans which are a requirement of the Directive. These plans set out how the management of water bodies will be undertaken, the roles of relevant bodies and the steps undertaken to ensure environmental targets are met. In the more recent, second cycle river basin management plans the Environment Agency has committed to ensure abstraction licensing strategies and actions fully incorporate all environmental objectives and align with river basin management plans. The Agency will assess all licence applications and only issue licences that adequately protect and improve the environment. They will only grant replacement licences where the abstraction is environmentally sustainable and abstractors can demonstrate they have a continued need for the water and that they will use it efficiently. In addition, for existing licences, the Agency will prioritise actions to protect and improve Natura 2000 sites and address the most seriously damaging abstractions during this plan period. All abstractors in surface water and groundwater bodies where serious damage is occurring or could occur without action should expect that their licences will be constrained over the next 6 years.

6.5 The 2019 Water Resources Management Plan produced by Anglian Water[17] predicts demand for water and issues around supply. The Water Resources Management Plan shows the regional water supply is under significant pressure from population growth, climate change, sustainability reductions and the need to increase resilience against drought. The Plan suggests in 2020 a total regional surplus of 150 Ml/d in 2020 with shift to a total regional deficit of-144 Ml/d by 2045.

6.6 In order to address the issues around water supply, the plan includes a 25-year demand management strategy which will more than offset projected growth in household demand. The Water Resources Management Plan also includes moving water resources from areas of surplus, maximising use of existing resources through a strategic grid. The Water Resources Management Plan has been subject to Habitats Regulations Assessment[18], which was able to rule out adverse effects on integrity, alone or in-combination. As such adverse effects in integrity from water supply issues can be ruled out, for all European sites, alone or in-combination.

[17] https://www.anglianwater.co.uk/siteassets/household/about-us/wrmp-report-2019.pdf
[18] https://www.anglianwater.co.uk/siteassets/household/about-us/wrmp-2019-hra-task-ii.pdf

Waste-water treatment

6.7 There are three Water Recycling Centres (WRCs) where capacity issues have previously been identified[19] at Horning, Hoveton and Fakenham. In addition, the Ludham WRC is close to capacity and Natural England in the Site Improvement Plan for the Broads, have identified concerns relating to the treatment works at Stalham with respect to phosphate levels in the Broads.

6.8 At Horning, the WRC discharges to the River Bure. In doing so, this contributes nutrient loads to the downstream watercourses as well as the Bure Broads and Marshes Site of Special Scientific Interest (SSSI), a component of the Broads SAC/Broadland SPA/Ramsar. Anglian Water have confirmed[20] that this WRC is exceeding capacity, with permitted flows greatly exceeding the current licence (by 154% in 2019 and by 205% in 2020). As such no new development requiring connection to the public foul drainage system within the Horning Catchment should take place until it is confirmed capacity is available within the foul sewerage network at the WRC. There are no allocations that feed into this WRC but the village is identified as a Small Growth Village in SS 1. Policy ENV4 provides blanket protection for European sites, such that where likely significant effects are triggered on European sites, development can only proceed where adverse effects on integrity are ruled out.

6.9 At Hoveton, the WRC also feeds into the Bure. Anglian Water has previously identified issues with surface water ingress into the sewage network from private sewers. As a result, Anglian Water is seeking to remove surface water from the foul network and seeking to invest further to enhance capacity, however issues remain, and Anglian Water have advised that it may be necessary to ensure new connections do not feed into the low-level foul network. Anglian Water have advised that all opportunities to prevent and reduce surface water ingress to the foul network should also be taken. In order to be able to rule out adverse effects on integrity, alone or in-combination, for the Broads SAC/Broadland SPA/Ramsar it is therefore necessary to be able to ensure any future development in the Hoveton WRC catchment is dependent on sufficient capacity at the WRC. Allocations that connect to this WRC (HV01/B) have protective wording in place to ensure these issues are addressed prior to development. Hoveton is identified as a Small Growth Town in SS1. Policy ENV4 provides blanket protection for European sites, such that where likely significant

[19] See Infrastructure position statement from 2019: https://www.north-norfolk.gov.uk/media/5023/4-infrastructure-position-statement.pdf
[20] Meeting between N. Norfolk Council and Anglian Water on 25th August 2021.

effects are triggered on European sites, development can only proceed where adverse effects on integrity are ruled out.

6.10 The Environment Agency have advised that there are constraints at Ludham WRC as this is either over or very near to current permitted capacities. Notwithstanding this a schedule to provide investment is set out in the Anglian Waters' Long-term Planning Framework and Anglian Water have raised no concerns to the overall level of growth for Ludham. The site allocation policies for LUD01/A and LUD06/1 includes the requirement that no development should commence until clear plans are agreed for any necessary sewerage infrastructure improvements and this will need to be confirmed at project-level HRA. With the allocations dependent on this requirement being met and Policy ENV4 ensuring adequate safe-guards are in place with respect to windfall, adverse effects on integrity can be ruled out, alone or in-combination for the allocations at Ludham and the Broads SAC/Broadland SPA/Ramsar.

6.11 At Stalham, allocations ST23/2 and ST19/A total around 150 potential dwellings and the treatment works again feeds into the River Ant and thereby the Broads SAC/Broadland SPA/Ramsar. The site allocation policies for these 2 allocations include the requirement that no development should commence until clear plans are agreed for any necessary sewerage infrastructure improvements and this will need to be confirmed at project-level HRA. With the allocations dependent on this requirement being met and Policy ENV4 ensuring adequate safe-guards are in place with respect to windfall, adverse effects on integrity can be ruled out, alone or in-combination for the allocations at Stalham and the Broads SAC/Broadland SPA/Ramsar.

6.12 Anglian Water have confirmed that based on the trajectory of the local plan they consider there is sufficient headroom at Fakenham WRC based upon the existing permit to accept foul flows until circa 2032 (AMP9). Allocation policies for the Fakenham sites ensures that any growth beyond 2032 is dependent on headroom being available.

Surface water and other hydrological issues

6.13 Issues from surface water entering the foul drainage network are considered in the wastewater section above. In this section we consider risks from direct contamination of sites from run-off and other issues relating to hydrology.

Fakenham

6.14 Likely significant effects were triggered for site F10 at Fakenham which is proposed for residential development of 55 dwellings. The site is in close proximity the River Wensum SAC (around 190m at its closest).

6.15 The site improvement plan for the River Wensum SAC identifies issues with physical modification of the river channel and siltation. The River Wensum Restoration Strategy (Coombes et al., 2007) provides further details. The strategy highlights that dredging, channel straightening and embankments have all influenced the hydrology. The site improvement plan highlights that major sediment ingress points have been identified on the upper and lower reaches of the river. Sediment often has nutrients attached, which has detrimental effects on water quality. It also directly affects the habitats of species. Sediment sources in the Wensum are derived from catchment runoff and are linked to field drainage systems/ ditch maintenance, erosion, tributary inputs and road drainage.

6.16 The allocation boundary for F10 is shown in Map 8 and it can be seen that close to the edge of the boundary are ditches that feed directly into the SAC. Development here could modify the flow from the ditches/flood-plain and bring risks with contamination from run-off (e.g. from roads). Checks of aerial photographs appear to indicate that wetland habitats may be present directly to the south and east of the allocation site and these may support SAC interest, for example Desmoulin's Whorl Snail and so site-specific survey work should check for the presence of this species on adjoining land and ensure adequate mitigation is secured.

6.17 Project-level HRA will be necessary to check the site design and will need to ensure that natural processes are not compromised. The project HRA will also need to consider the site drainage and flows through the ditch network. Allocation policy wording ensures that the allocation is dependent on the necessary survey work and site design, allowing a conclusion of no adverse effects on-integrity alone or in-combination at plan level.

Holt

6.18 We have also identified risks from sites at Holt, with sites H20 (180 dwellings on Land at Heath Farm) and H27/1 which is a 6ha employment allocation. These sites are upslope of the Norfolk Valley Fens SAC at Holt Lowes. The supplementary conservation advice identifies there are issues from sediment erosion for the Alkaline Fen habitat at Holt Lowes, with sediment entering the mire from adjoining heathland. Targets for hydrology for the SAC as a whole

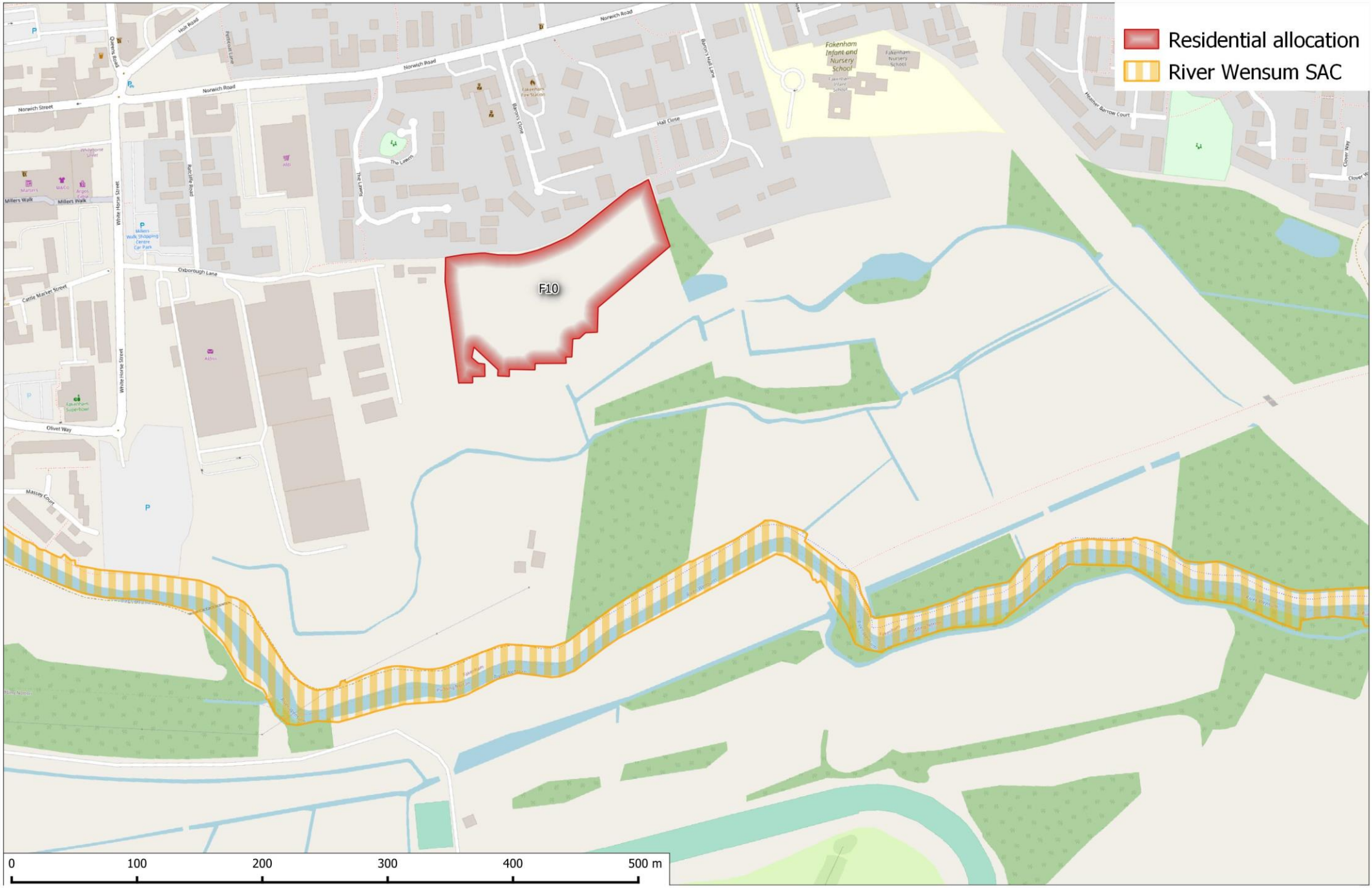
also highlight the need for restoration of natural hydrological processes to provide the conditions necessary to sustain the wetland interest. These include the need for a permanently high water table.

6.19 The allocation sites identified are all up-slope from the SAC and in-close proximity, and therefore development may influence water flow, run-off and the hydrology of the SAC. Project-level HRA will be necessary to show that sustainable drainage is sufficient to mitigate impacts to the SAC and evidence will need to demonstrate that the long-term maintenance of the appropriate drainage is secured as a planning condition at the site design stage. Allocation policy wording ensures this is required.

Strategic policies

6.20 Likely significant effects were also identified alone for strategic policies DS1, HOU1 and SS1. Here the risks relate windfall growth (above and beyond the allocations considered above). For these policies, adverse effects on integrity can be ruled out alone for all European sites due to the protective policy ENV4 which ensures the need to rule out adverse effects on integrity before permission is granted. This will ensure that any specific risks associated with particular locations and relating to WRC capacity, surface drainage or other hydrological issues are addressed at the point where such details can be set out and identified in the necessary detail.

Map 8: Fakenham site F10, Land south of Barons Close



7. Formal integrity test

7.1 The North Norfolk Local Plan proposed submission version (Publication Stage, Regulation 19 version, October 2021) has been subjected to an appropriate assessment and integrity test according to the statutory provisions laid out in the Habitats Regulations 2017 as amended. It is concluded that the North Norfolk Local Plan is in conformity with the Habitats Regulations, and at a plan level a conclusion of no adverse effects, alone or in-combination, on European site integrity can be drawn.

7.2 The screening of the Plan for likely significant effects identified a number of risks in terms of urban effects, additional recreation pressure, and hydrological issues for various European sites. These were taken to appropriate assessment.

7.3 For urban effects, likely significant effects were identified alone for the Norfolk Valley Fens SAC with respect to two allocations at Holt and three strategic policies (SS1, HOU1 and DS1). Adverse effects on integrity are ruled out alone for the allocations through the protective wording in the allocation policies that ensures project level HRA checks for urban effects and suitable mitigation is secured as necessary, once further details for the sites are available. Mitigation options are set out in the appropriate assessment section and the allocations will be dependent on necessary mitigation being secured. The very specific location for the allocations and very localised nature of urban effects means that there is no need for in-combination assessment as there is no potential for in-combination effects. Away from Holt urban effects from windfall growth would only be relevant to the Norfolk Valley Fens SAC if in close proximity to Beeston Common, in Sheringham. Adverse effects can be ruled out alone due to the very localised area involved and the protective policy ENV4 which ensures the need to rule out adverse effects on integrity before planning permission is granted. The scale of growth proposed in the plan is such that urban effects will be very localised and there is no need for a development exclusion zone or similar.

7.4 For recreation, a strategic mitigation approach (the GIRAMs) is established and referenced in the Plan in Policy ENV5. Screening identified likely significant effects alone for 4 allocations (2 at Holt, and 1 at Blakeney and 1 at Wells-next-the-sea), where close proximity and footpath links to European sites could pose risks that would not be addressed through the GIRAMs. For the 2 allocations at Holt, protective wording in the allocation policy ensures that the development can only come forward with necessary mitigation in place and secured in-perpetuity prior to occupation. Suggestions for mitigation are set out in the HRA.

The details will need to be finalised at project-level, as part of the detailed design. For the other two allocations further checks on the location ruled out adverse effects on integrity alone.

7.5 Adverse effects on integrity are ruled out for all allocations and for the overall quantum of growth (as set out int the strategic policies) through the GIRAMS and with the GIRAMs in place, there is no need for further assessment.

7.6 Likely significant effects alone were identified for hydrological issues with respect 3 strategic policies and 6 allocations and related to the Norfolk Valley Fens SAC, the Broads SAC/Broadland SPA/Ramsar and the River Wensum SAC. Adverse effects on integrity, alone or in-combination for specific allocations are eliminated with respect to water quality and the Broads SAC/Broadland SPA/Ramsar through the wording for HV01/B, LUD01/A, LUD06/1, ST23/2 and ST19A. The allocation policies include the requirement that development can only take place once any necessary sewer infrastructure improvements and capacity at the WRCs are in place.

7.7 Anglian Water have confirmed that based on the trajectory of the local plan they consider there is sufficient headroom at Fakenham WRC based upon the existing permit to accept foul flows until circa 2032. For all the Fakenham allocations, specific allocation policy wording ensures that any growth beyond 2032 is dependent on headroom being available at the WRC, ensuring adverse effects on integrity can be ruled out alone or in-combination. At Fakenham, allocation F10 poses particular risks to the River Wensum SAC due to the proximity of the allocation boundary to the SAC. Allocation policy wording ensures that the allocation is dependent on the necessary survey work and site design, allowing a conclusion of no adverse effects on-integrity alone or in-combination at plan level.

7.8 Similarly, for two allocations at Holt, project-level HRA will be necessary to show that sustainable drainage is sufficient to mitigate impacts to the SAC and evidence will need to demonstrate that the long-term maintenance of the appropriate drainage is secured as a planning condition at the site design stage. Allocation policy wording ensures this is in place.

7.9 For any growth outside the allocations, adverse effects on integrity from hydrological issues can be ruled out alone for all European sites due to the protective policy ENV4 which ensures the need to rule out adverse effects on integrity before permission is granted. This will ensure that any specific risks associated with particular locations and relating to WRC capacity, surface drainage or other hydrological issues are addressed at the point where such details can be set out and identified in the necessary detail.

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Appendix 1: European Site Conservation Objectives

As required by the Directives, 'Conservation Objectives' have been established by Natural England, which should define the required ecologically robust state for each European site interest feature. All sites should be meeting their conservation objectives. When being fully met, each site will be adequately contributing to the overall favourable conservation status of the species or habitat interest feature across its natural range. Where conservation objectives are not being met at a site level, and the interest feature is therefore not contributing to overall favourable conservation status of the species or habitat, plans should be in place for adequate restoration.

Conservation objectives inform any HRA of a plan or project, by identifying what the interest features for the site should be achieving, and what impacts may be significant for the site in terms of undermining the site's ability to meet its conservation objectives

In 2012, Natural England issued a set of generic European site Conservation Objectives, which should be applied to each interest feature of each European site. The list of generic Conservation Objectives for each European site includes an overarching objective, followed by a list of attributes that are essential for the achievement of the overarching objective. Whilst the generic objectives are standardised, they are to be applied to each interest feature of each European site, and the application and achievement of those objectives will therefore be site specific and dependant on the nature and characteristics of the site.

In addition to the generic objectives, there is more detailed, supplementary site-specific information to underpin these generic objectives. This provides much more site-specific information, and this detail plays a fundamental role in informing HRA, and gives greater clarity to what might constitute an adverse effect on a site interest feature. Links in Appendix 2 provide access to both generic conservation objectives and the supplementary advice for each European site.

For SPAs the overarching objective is to:

> *'Avoid the deterioration of the habitats of qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.'*

This is achieved by, subject to natural change, maintaining and 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 populations of the qualifying features.
- The distribution of the qualifying features within the site.

For SACs the overarching objective is to:

> *'Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.'*

This is achieved by, subject to natural change, maintaining and restoring:

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

Appendix 2: Conservation Interest of European Sites

Links in the table cross-reference to the Natural England website and the relevant page with the site's conservation objectives. In the qualifying features column, for SPAs, "nb" denotes non-breeding and "b" breeding features. For SACs, # denotes features for which the UK has a special responsibility. The descriptive text is adapted from Natural England's site improvement plan or citation. For Ramsar sites, the qualifying features and description are drawn from the Ramsar spreadsheet on the JNCC website[21], and the link cross-references to the Ramsar site information page.

European site	Designated features	Description
Breckland SAC	H2330 Inland dunes with open *Corynephorus* and *Agrostis* grasslands H3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* H4030 European dry heaths H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), (note that this includes the priority feature "important orchid rich sites") H91E0# Alluvial woods with *A. glutinosa, F. excelsior* S1166 Great crested newt, *Triturus cristatus*	Breckland in the heart of East Anglia is a gently undulating plateau underlain by bedrock of Cretaceous Chalk, covered by thin deposits of sand and flint. The conditions during the last glaciation have given rise to the patterned ground features and ice depressions (pingos) that we see today and that are of high geological and biological importance. The continental climate, with low rainfall and free-draining soils, has led to the development of dry heath and grassland communities. Relatively lush river valleys provide a gentle contrast to the drier harsher surroundings.
Breckland SPA	Nightjar, *Caprimulgus europaeus* - A224, b Stone-curlew, *Burhinus oedicnemus* - A133, b Woodlark, *Lullula arborea* - A246, b	The Breckland of Norfolk and Suffolk lies in the heart of East Anglia on largely sandy soils of glacial origin. In the 19th century the area was termed a sandy waste, with small patches of arable cultivation that were soon abandoned. The continental climate, with low rainfall and free-draining soils, has led to the development of dry heath and grassland communities. Much of Breckland was planted with conifers through the 20th century, and elsewhere arable farming is the predominant land use. The remnants of dry heath and

[21] https://hub.jncc.gov.uk/assets/bc9b0905-fb63-4786-8e90-5f7851bb417d

European site	Designated features	Description
		grassland that have survived these changes support heathland-breeding birds, where grazing by sheep and rabbits is sufficiently intensive to create short turf and open ground. These species have also adapted to live in forestry and arable habitats. Woodlark *Lullula arborea* and Nightjar *Caprimulgus europaeus* breed in recently felled areas and open heath areas within the conifer plantations, while Stone Curlew *Burhinus oedicnemus* establishes nests on open ground provided by arable cultivation in the spring.
Breydon Water SPA	Pied Avocet *Recurvirostra avosetta* - A132 nb European Golden Plover - A140 *Pluvialis apricaria* nb Northern Lapwing *Vanellus vanellus* -A142 nb Waterbird assemblage Common Tern *Sterna hirundo* - A193 b Ruff *Philomachus pugnax* - A151 nb Bewick's Swan *Cygnus columbianus bewickii* - A037 nb	Breydon Water SPA consists of an inland tidal estuary with extensive areas of mud flats that are exposed during low tide forming the only intertidal flats occuring on the east coast of Norfolk. Large numbers of wildfowl and waders that overwinter at the site are attracted to the abundant food supply, with some species numbers being nationally and internationally important during appropriate seasons. The mosaic of small areas of saltmarsh, reedbeds and brackish water communities in the surounding borrow dykes has considerable botanical and invertebrate rich interest.
Breydon Water Ramsar	Greater White-Fronted Goose *Anser albifrons* - Wintering Common Tern *Sterna hirundo* - Breeding Pink-Footed Goose *Anser brachyrhynchus* - Wintering Eurasian Wigeon *Anas penelope* - Wintering Eurasian Teal *Anas crecca* - Wintering Black-Tailed Godwit *Limosa limosa* - Wintering Waterfowl Assemblage - Wintering Common Greenshank *Tringa nebularia* - Passage Tundra Swan *Cygnus columbianus bewickii* - Wintering Whimbrel *Numenius* phaeopus - Passage Northern Pintail *Anas acuta* - Wintering Ruff *Philomachus pugnax* - Wintering Northern Lapwing *Vanellus vanellus* - Wintering European Golden Plover *Pluvialis apricaria* - Wintering Pied Avocet *Recurvirostra avosetta* - Passage Northern Shoveler *Anas clypeata* - Wintering	An inland tidal estuary with extensive areas of mudflats exposed at low tide. The site is internationally important for wintering waterbirds, notably Bewick's Swan, Cygnus columbianus bewickii, and it supports important numbers of passage birds. Human activities include recreation, hunting, and agriculture. Extended in March 2000 from 515 to 1203 ha. R

European site	Designated features	Description
Broadland Ramsar	Calcium-rich fens dominated by Great Fen Sedge (Saw Sedge) Alkaline Fens Alder woodland on flooplains, Wetland invertebrate assemblage Desmoulin's Whorl Snail *Vertigo moulinsiana* Otter *Lutra lutra* Fen Orchid *Liparis loeselii* Greylag Goose *Anser anser* - Wintering Eurasian Wigeon *Anas penelope* - Wintering Gadwall *Anas strepera* - Wintering Northern Shoveler *Anas clypeata* - Wintering Pink-Footed Goose *Anser brachyrhynchus* - Wintering Water Rail *Rallus aquaticus* - Wintering Tundra Swan *Cygnus columbianus bewickii* - Wintering	A low-lying wetland complex composed of the Bure, Yare, Thurne, and Waveney river systems of the Norfolk Broads. The mosaic of wetland habitats includes open water, reedbeds, carr woodland, grazing marsh, and fen meadow, with an extensive complex of flooded medieval peat diggings. Outstanding assemblages of rare plants and invertebrates occur at the site -- amongst a rich insect fauna are nationally rare dragonflies, spiders, moths, and butterflies, and the area is a stronghold for the butterfly Papilio machaon brittanica as well as a number of nationally rare breeding birds, including Botaurus stellaris and Circus aeruginosus.Several species of waterbirds winter there and include internationally important numbers of Bewick's swan, Cygnus columbianus bewickii. The region is important for recreation, tourism, agriculture, and wildlife, and there is a large conservation education centre. Extended on 21/09/94 from the former Ramsar Sites known as Bure Marshes and Hickling Broad & Horsey Mere.
Broadland SPA	Great bittern *Botaurus stellaris* A021 - b Bewick swan *Cygnus columbianus bewickii* A037 - nb Eurasian wigeon *Anas penelope* A050 - nb Northern shoveler *Anas clypeata* A056 - nb Whooper swan *Cygnus cygnus* A038 - nb Gadwall *Anas strepera* A051 - nb Eurasian marsh harrier *Circus aeruginosus* A081 – b Hen harrier *Circus cyaneus* A082 - nb Ruff *Philomachus pugnax* A151 - nb	The fens of the Broads are one of the most extensive remaining areas of fen habitat in Europe. The fens and drained marshes are dissected by networks of dykes. The Broads also represent the largest area of floating forest and wet woodland in Britain and possibly Western Europe. Fen habitats offer foraging and nesting sites for populations of three internationally important bird species; marsh harrier, bittern and crane. Nationally important populations of pochard and shoveler breed on unreclaimed fens and drained marshes adjacent to open water. Cetti's warbler, Savi's warbler and the bearded reedling are further species present in nationally important breeding numbers. Internationally important populations of shoveler overwinter in unreclaimed fens and marshes. The Broads is a complex site and there are a range of issues impacting across the catchment or in specific parts of the catchment. In many cases there are interactions between issues. This SIP links with actions in key documents, such as the Broads Plan and the Broadland Rivers Catchment Plan. Twenty-eight Sites of Special Scientific Interest (SSSI) have been notified in the Broads, with most of these sites being of international importance for their habitats and/or bird populations or species and have been included within the European

European site	Designated features	Description
		Directives as the Broads Special Area of Conservation and the Broadland Special Protection Area
Dersingham Bog Ramsar	Wetland invertebrate assemblage	Dersingham Bog is East Anglia's largest remaining example of a pure acid valley mire, and supports extensive bog, wet heath and transition communities over peat. These are sustained by groundwater, fed via springs and seepage, from the underlying greensand, which in places has caused the development of iron pans. The mire grades into dry heathland along the greensand scarp slope. The scarp slope is a former sea cliff, and the bog habitats are a remnant of the transition mires that formerly existed between this former shoreline and the now mostly land-claimed saltmarshes around The Wash. In addition to its internationally important plant communities, the site also supports important assemblages of birds and British Red Data Book invertebrates.
Great Yarmouth and North Denes SPA	Little tern *Sterna albifrons* - A195, b	Great Yarmouth North Denes SPA (which includes part of Winterton-Horsey Dunes SSSI) contains one of the UK's most important breeding colonies of little tern.
Greater Wash SPA	Common Scoter, *Melanitta nigra* - A065, nb Common Tern, *Sterna hirundo* - A193, b Little Gull, *Hydrocoloeus (Larus) minutus* - A177, nb Little Tern, *Sternula albifrons* - A195, b Red-throated Diver, *Gavia stellata* - A001-A, nb Sandwich Tern, *Thalasseus sandvicensis* - A191, b	The Greater Wash SPA is located in the mid-southern North Sea between Bridlington Bay in the north and the Outer Thames Estuary SPA in the south. To the north, off the Holderness coast in Yorkshire, seabed habitats primarily comprise coarse sediments, with occasional areas of sand, mud and mixed sediments. Subtidal sandbanks occur at the mouth of the Humber Estuary, primarily comprising sand and coarse sediments. Offshore, soft sediments dominate, with extensive areas of subtidal sandbanks off The Wash as well as north and east Norfolk coasts. Closer inshore at The Wash and north Norfolk coast, sediments comprise a mosaic of sand, muddy sand, mixed sediments and coarse sediments, as well as occasional Annex I reefs. The area off the Suffolk coast continues the mosaic habitats mostly dominated by soft sediment.
Haisborough, Hammond and Winterton SAC	H1110 Sandbanks which are slightly covered by sea water all the time H1170 Reefs	The Haisborough, Hammond and Winterton Special Area of Conservation lies off the north east coast of Norfolk. The site crosses the 12 nautical mile boundary and therefore lies partly in territorial and partly in offshore waters. Natural England and JNCC have jointly prepared this advice. The site contains sandbanks and Sabellaria spinulosa reefs which meet the Annex I habitat description of "Sandbanks slightly covered by sea water all the

European site	Designated features	Description
		time" and "Reefs" respectively. These offshore head-land associated sandbanks are curved and orientated parallel to the coast.
Inner Dowsing, Race Bank and North Ridge SAC	H1110 Sandbanks which are slightly covered by sea water all the time H1170 Reefs	Inner Dowsing Race Bank and North Ridge Special Area of Conservation is located off the south Lincolnshire coast, to the east of Skegness and extends eastwards and north from Burnham Flats on the North Norfolk coast. The site occurs in the approaches to The Wash, and crosses the 12 nautical mile boundary; therefore, lies partly in territorial and partly in offshore waters. The site contains sandbanks and *Sabellaria spinulosa* reefs which meet the Annex I habitat descriptions of "Sandbanks slightly covered by sea water all the time" and "Reefs" respectively. The sandbanks are important headland-associated offshore systems. Water depths are generally shallow and mostly less than 30m deep.
Norfolk Valley Fens SAC	H4010 Northern Atlantic wet heaths with *Erica tetralix* H4030 European dry heaths H6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), (note that this includes the priority feature "important orchid rich sites") H6410 *Molinia* meadows on calcareous, peat or clay-silt soil H7210# Calcareous fens with *C. mariscus* and species of *C. davallianae* H7230 Alkaline fens H91E0# Alluvial woods with *A. glutinosa, F. excelsior* S1014 Snail, *Vertigo angustior* S1016 Desmoulin's Whorl Snail, *Vertigo moulinsiana*	This site comprises a series of valley-head spring-fed fens. Such spring-fed flush fens are very rare in the lowlands. The spring-heads are dominated by the small sedge fen type, mainly referable to Black Bog-rush–Blunt-flowered Rush (*Schoenus nigricans–Juncus subnodulosus*) mire, but there are transitions to reedswamp and other fen and wet grassland types. The individual fens vary in their structure according to intensity of management and provide a wide range of variation. There is a rich flora associated with these fens, including species such as Grass-of-Parnassus *Parnassia palustris*, Common Butterwort *Pinguicula vulgaris*, Marsh Helleborine *Epipactis palustris* and Narrow-leaved Marsh-orchid *Dactylorhiza traunsteineri*.
North Norfolk Coast Ramsar	Marsh and coastal habitats, Red-data book/RDB plants, invertebrates and a lichen Dark-bellied Brent Goose, *Branta bernicla* - Wintering Knot, *Calidris canutus* - Wintering Pink-footed Goose, *Anser brachyrhynchus* - Wintering Waterbird assemblage - Wintering Wetland plant assemblage	This low-lying barrier coast site extends for 40 km from Holme to Weybourne and encompasses a variety of habitats including intertidal sands and muds, saltmarshes, shingle and sand dunes, together with areas of land-claimed freshwater grazing marsh and reedbed, which is developed in front of rising land. Both freshwater and marine habitats support internationally important numbers of wildfowl in winter and several nationally rare breeding birds. The sandflats, sand dune, saltmarsh, shingle and saline

European site	Designated features	Description
	Wigeon, *Mareca penelope* - Wintering	lagoons habitats are of international importance for their fauna, flora and geomorphology.
North Norfolk Coast SAC	H1150# Coastal lagoons H1220 Perennial vegetation of stony banks H1420 Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*) H2110 Embryonic shifting dunes H2120 Shifting dunes along the shoreline with *Ammophila arenaria* ('White dunes') H2130# Fixed dunes with herbaceous vegetation ('Grey dunes') H2190 Humid dune slacks S1355 Otter, *Lutra lutra* S1395 Petalwort, *Petalophyllum ralfsii*	North Norfolk Coast contains a large, active series of dunes on shingle barrier islands and spits. The exceptional length and variety of the dune/beach interface is reflected in the high total area of embryonic dune. Sand Couch *Elytrigia junceais* the most prominent sand-binding grass. The site supports a large area of shifting dune vegetation, which is also varied but dominated by Marram *Ammophila arenaria*. The fixed dunes are rich in lichens and drought-avoiding winter annuals such as Common Whitlowgrass *Erophila verna*, Early Forget-me-not *Myosotis ramosissima* and Common Cornsalad *Valerianella locusta*. The main communities represented are Marram with Red Fescue *Festuca rubra* and Sand Sedge *Carex arenaria*, with lichens such as *Cetraria aculeata*. The dune slacks within this site are comparatively small and the Yorkshire-fog *Holcus lanatus* community predominates. They are calcareous and the communities occur in association with swamp communities. Some of the slacks support the liverwort Petalwort *Petalophyllum ralfsii*.
North Norfolk Coast SPA	Avocet, *Recurvirostra avosetta* - A132-A, b Bittern, *Botaurus stellaris* - A021, b Common Tern, *Sterna hirundo* - A193, b Dark-bellied Brent Goose, *Branta bernicla bernicla* - A675, nb Knot, *Calidris canutus* - A143, nb Little Tern, *Sternula albifrons* - A195, b Marsh Harrier, *Circus aeruginosus* - A081, b Montagu's Harrier, *Circus pygargus* - A084, b Pink-footed Goose, *Anser brachyrhynchus* - A040, nb Sandwich Tern, *Thalasseus sandvicensis* - A191, b Waterbird assemblage Wigeon, *Mareca penelope* - A050, nb	The North Norfolk Coast SPA encompasses much of the northern coastline of Norfolk in eastern England. It is a low-lying barrier coast that extends for 40 km from Holme to Weybourne and includes a great variety of coastal habitats. The main habitats – found along the whole coastline – include extensive intertidal sand- and mud-flats, saltmarshes, shingle and sand dunes, together with areas of freshwater grazing marsh and reedbed, which has developed in front of rising land. The site contains some of the best examples of saltmarsh in Europe. There are extensive deposits of shingle at Blakeney Point, and major sand dunes at Scolt Head. Extensive reedbeds are found at Brancaster, Cley and Titchwell. Maritime pasture is present at Cley and extensive areas of grazing marsh are present all along the coast. The grazing marsh at Holkham has a network of clear water dykes holding a rich diversity of aquatic plant species. The great diversity of high-quality freshwater, intertidal and marine habitats results in very large numbers of waterbirds occurring throughout the year. In summer, the site holds large breeding populations of waders, four species of terns, Bittern *Botaurus stellaris* and wetland raptors such as Marsh Harrier *Circus aeruginosus*. In winter, the coast is used by very large numbers of geese, sea-ducks, other ducks and waders. The coast is also of major importance for staging waterbirds in the spring and autumn migration periods. Breeding terns, particularly

European site	Designated features	Description
		Sandwich Tern *Thalasseus sandvicensis*, and wintering sea-ducks regularly feed outside the SPA in adjacent coastal waters.
Outer Thames Estuary SPA	Common Tern *Sterna hirundo* - A193, b Little Tern *Sternula albifrons* – A195, b Red-throated Diver *Gavia stellate* - nb	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 and therefore lies partly in territorial and partly in offshore waters. The SPA consists of areas of shallow and deeper water, high tidal current streams and a range of mobile sediments. Large areas of mud, silt and gravelly sediments form the deeper water channels, including the port approaches to London. The seabed in the area of the Norfolk and Suffolk coast is of a similar composition to that in the main estuary with large shallow areas of mud, sand, silt and gravelly sediments but, less disturbance through shipping or dredging because the area is north of Harwich and Felixstowe. Sand and silt dominates the offshore areas, as is typical of the southern North Sea.
Overstrand Cliffs SAC	H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts	Overstrand cliffs are one of the best examples of unprotected vegetated soft cliffs on the North Sea coast in the most easterly part of the UK. The cliffs are up to 70m high and are composed of Pleistocene sands and clays with freshwater seepages in places and are subject to moderately frequent cliff falls and landslips. Much of the length is unprotected by sea defences and is therefore natural in character. The vegetation exhibits cycles of succession with ruderal communities developing on the newly-exposed sands and mud followed by partially-stabilised grasslands and scrub. Seepage areas support wet fen communities and in places perched reedbeds occur. The diverse range of habitats supports an outstanding range of invertebrates.
Paston Great Barn SAC	S1308: Barbastelle bat *Barbastella barbastellus*	Paston Great Barn is a large medieval thatched barn constructed of flint and limestone. The Great Barn is a Scheduled Ancient Monument and its adjoining outbuildings are listed as Grade II* by English Heritage. It supports one of the only known breeding colony of barbastelle bats in East Anglia and remains the only confirmed maternity roost known in a building in the UK. The colony has been known since 1996 and the barn is regularly used as a summer maternity roost, as well as supporting the species through the winter.

European site	Designated features	Description
River Wensum SAC	H3260 Water courses of plain to montane levels with *R. fluitantis* S1016 Desmoulin's Whorl Snail, *Vertigo moulinsiana* S1092 Freshwater Crayfish, *Austropotamobius pallipes* S1096 Brook Lamprey, *Lampetra planeri* S1163 Bullhead, *Cottus gobio*	The Wensum is a naturally enriched, calcareous lowland river. The upper reaches are fed by springs that rise from the chalk and by run-off from calcareous soils rich in plant nutrients. This gives rise to beds of submerged and emergent vegetation characteristic of a chalk stream. Lower down, the chalk is overlain with boulder clay and river gravels, resulting in aquatic plant communities more typical of a slow-flowing river on mixed substrate. Much of the adjacent land is managed for hay crops and by grazing, and the resulting mosaic of meadow and marsh habitats, provides niches for a wide variety of specialised plants and animals.
Roydon Common & Dersingham Bog SAC	H4010 Northern Atlantic wet heaths with *Erica tetralix* H4030 European dry heaths H7150 Depressions on peat substrates of the *Rhynchosporion*	Roydon Common and Dersingham Bog represent the largest and best examples of Cross-leaved Heath – Bog-moss (*Erica tetralix–Sphagnum compactum*) wet heath in East Anglia. This vegetation community is part of a lowland mixed valley mire, a complex series of plant communities grading from wet acid heath through valley mire to calcareous fen. This gradation is of outstanding interest. The mire is extremely diverse and supports many rare plants, birds and insects, including the Black Darter dragonfly *Sympetrum scoticum*, a northern species with a very local distribution in south-east England. The site also contains an area of dry heathland, which is dominated by Heather *Calluna vulgaris*, Gorse *Ulex europaeus* and young Silver Birch *Betula pendula*, and has areas of Bracken around the margins.
Roydon Common Ramsar	Mixed lowland valley mire Wetland invertebrate assemblage	Roydon Common is an area of lowland mixed valley mire surrounded by heathland. It sits on the Cretaceous greensand of west Norfolk, within a broad south-west-facing valley basin. It has a classic sequence of vegetation types associated with valley mires of this type. The dry heath of the upper slopes is hydrologically linked with wetter lower slopes, which experience seasonal waterlogging and are colonised by wet heath. This grades into the valley bottom, which is permanently waterlogged, and comprises acid bog and nutrient-poor fen communities, blending into more base-rich fen and carr woodland in the valley bottom.
The Broads SAC	H3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp H3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation S1016 *Vertigo moulinsiana*: Desmoulin`s whorl snail	The fens of the Broads contain a diverse mix of species making it one of the most extensive remaining areas of fen habitat in Europe, being internationally recognised for eight fen communities. The fens and drained marshes are dissected by networks of dykes that support internationally important aquatic plant communities that have been lost from many broads: the fen habitats are also used by the internationally important otter. The

European site	Designated features	Description
	H91E0# Alluvial forests with *Alnus glutinosa* and Fraxinus excelsior (*Alno-Padion, Alnion incanae, Salicion albae*) H6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) S1355 Otter *Lutra lutra* S1903 Fen Orchid *Liparis loeselii* S4056 *Anisus vorticulus*: Little ramshorn whirlpool snail H7140 Transition mires and quaking bogs H7210# Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* H7230 Alkaline fens	Broads also represent the largest area of floating forest and wet woodland in Britain and possibly Western Europe. Carr woodland supports four nationally important plant species and the limited area of mature alder carr is considered of priority international importance. In addition, parts of the Broads support a nationally rare scrub type that is almost entirely confined to East Anglia. The Broads is a complex site and there are a range of issues impacting across the catchment or in specific parts of the catchment. In many cases there are interactions between issues. This SIP links with actions in key documents, such as the Broads Plan and the Broadland Rivers Catchment Plan. Twenty-eight Sites of Special Scientific Interest (SSSI) have been notified in the Broads, with most of these sites being of international importance for their habitats and/or bird populations or species and have been included within the European Directives as the Broads Special Area of Conservation and the Broadland Special Protection Area.
The Wash & North Norfolk Coast SAC	H1110 Sandbanks which are slightly covered by sea water all the time H1140 Mudflats and sandflats not covered by seawater at low tide H1150# Coastal lagoons H1160 Large shallow inlets and bays H1170 Reefs H1310 Salicornia and other annuals colonising mud and sand H1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) H1420 Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*) S1355 Otter, *Lutra lutra* S1365 Harbour (Common) Seal, *Phoca vitulina*	The Wash is the largest embayment in the UK. It is connected via sediment transfer systems to the north Norfolk coast. Together, the Wash and North Norfolk Coast form one of the most important marine areas in the UK and European North Sea coast, and include extensive areas of varying, but predominantly sandy, sediments subject to a range of conditions. Communities in the intertidal include those characterised by large numbers of polychaetes, bivalve and crustaceans. Subtidal communities cover a diverse range from the shallow to the deeper parts of the embayments and include dense brittlestar beds and areas of an abundant reef-building worm ('ross worm') *Sabellaria spinulosa*. The embayment supports a variety of mobile species, including a range of fish, Otter *Lutra lutra* and Common Seal *Phoca vitulina*. The extensive intertidal flats provide ideal conditions for Common Seal breeding and hauling-out.
The Wash Ramsar	Bar-tailed Godwit, *Limosa lapponica* - Wintering Curlew, *Numenius arquata* - Wintering Dark-bellied Brent Goose, *Branta bernicla* - Wintering	The Wash is the largest estuarine system in Britain. It is fed by the rivers Witham, Welland, Nene and Great Ouse. There are extensive saltmarshes, intertidal banks of sand and mud, shallow waters and deep channels. It is the most important staging post and over-

European site	Designated features	Description
	Dunlin, *Calidris alpina* - Wintering Estuary Grey Plover, *Pluvialis squatarola* - Wintering Harbour (Common) Seal, *Phoca vitulina* Knot, *Calidris canutus* - Wintering Oystercatcher, *Haematopus ostralegus* - Wintering Pink-footed Goose, *Anser brachyrhynchus* - Wintering Pintail, *Anas acuta* - Wintering Redshank, *Tringa totanus* - Wintering Sanderling, *Calidris alba* - Wintering Shelduck, *Tadorna tadorna* - Wintering Turnstone, *Arenaria interpres* - Wintering Waterbird assemblage - Wintering Wetland invertebrate assemblage	wintering site for migrant wildfowl and wading birds in eastern England. It supports a valuable commercial fishery for shellfish and also an important nursery area for flatfish. It holds one of the North Sea's largest breeding populations of Common Seal *Phoca vitulina* and some Grey Seals *Halichoerus grypus*. The sublittoral area supports a number of different marine communities including colonies of the reef-building polychaete worm *Sabellaria spinulosa*.
The Wash SPA	Bar-tailed Godwit, *Limosa lapponica* - A157, nb Bewick's Swan, *Cygnus columbianus bewickii* - A037, nb Black-tailed Godwit, *Limosa limosa islandica* - A616, nb Common Scoter, *Melanitta nigra* - A065, nb Common Tern, *Sterna hirundo* - A193, b Curlew, *Numenius arquata* - A160, nb Dark-bellied Brent Goose, *Branta bernicla bernicla* - A675, nb Dunlin, *Calidris alpina alpina* - A672, nb Gadwall, *Mareca strepera* - A051, nb Goldeneye, *Bucephala clangula* - A067, nb Grey Plover, *Pluvialis squatarola* - A141, nb Knot, *Calidris canutus* - A143, nb Little Tern, *Sternula albifrons* - A195, b Oystercatcher, *Haematopus ostralegus* - A130, nb Pink-footed Goose, *Anser brachyrhynchus* - A040, nb Pintail, *Anas acuta* - A054, nb	The Wash is located on the east coast of England and is the largest estuarine system in the UK. It is fed by the rivers Witham, Welland, Nene and Great Ouse that drain much of the east Midlands of England. The Wash comprises very extensive saltmarshes, major intertidal banks of sand and mud, shallow waters and deep channels. The eastern end of the site includes low chalk cliffs at Hunstanton. In addition, on the eastern side, the gravel pits at Snettisham are an important high-tide roost for waders. The intertidal flats have a rich invertebrate fauna and colonising beds of Glasswort *Salicornia* spp. which are important food sources for the large numbers of waterbirds dependent on the site. The sheltered nature of The Wash creates suitable breeding conditions for shellfish, principally Mussel *Mytilus edulis*, Cockle *Cardium edule* and shrimps. These are important food sources for some waterbirds such as Oystercatchers *Haematopus ostralegus*. The Wash is of outstanding importance for a large number of geese, ducks and waders, both in spring and autumn migration periods, as well as through the winter. The SPA is especially notable for supporting a very large proportion (over half) of the total population of Canada/Greenland breeding Knot *Calidris canutus islandica*. In summer, the Wash is an important breeding area for terns and as a feeding area for Marsh Harrier *Circus aeruginosus* that breed just outside the SPA. To the north, the coastal habitats of The

European site	Designated features	Description
	Redshank, *Tringa totanus* - A162, nb Sanderling, *Calidris alba* - A144, nb Shelduck, *Tadorna tadorna* - A048, nb Turnstone, *Arenaria interpres* - A169, nb Waterbird assemblage Wigeon, *Mareca penelope* - A050, nb	Wash are continuous with Gibraltar Point SPA, whilst to the east The Wash adjoins the North Norfolk Coast SPA.
Winterton-Horsey Dunes SAC	H2150# Atlantic decalcified fixed dunes (*Calluno-Ulicetea*) H2190 Humid dune slacks H2110 Embryonic shifting dunes H2120 Shifting dunes along the shoreline with *Ammophila arenar*ia ("white dunes")	Winterton-Horsey Dunes SAC is a large acidic dune system with associated areas of grazing marsh, dune slacks, dune heath, dune grassland and downy birch dominated woodland with oaks. Actively accreting 'ness' features, support a full successional sequence of vegetation through foredune, mobile dune, semi fixed dune and dry acid dune grassland/ dune heath.

Appendix 3: Allocations and distances to European sites

The table below gives all the allocation sites included in the Plan and the distance (in km) to the relevant European sites. Only SAC and SPA sites are included to allow the table to fit on one page and in most cases the Ramsar boundary is equivalent to the relevant SPA/SAC. The first row (shaded in grey) gives the relevant zone of influence for recreation as set out in the GIRAMS (Hooton and Mills, 2020), and grey shading in subsequent rows reflects distances within the given zone. Bold, red text reflects allocations within 500m of the given European site, highlighting those that are particularly close.

Site Ref	Approx dwellings	Settlement	Type	Breckland SAC	Breckland SPA	Breydon Water SPA	Broadland SPA	Great Yarmouth North Denes SPA	Greater Wash SPA	N Norfolk Coast SPA	Norfolk Valley Fens SAC	North Norfolk Coast SAC	Overstrand Cliffs SAC	Paston Great Barn SAC	River Wensum SAC	The Broads SAC	The Wash & North Norfolk Coast SAC	The Wash SPA	Winterton-Horsey Dunes SAC
Zone from GIRAMS (km)				26	26	30	25	30		42	15	42				25	61	61	30
BLA04/A	30	Blakeney	Residential / Mixed	46.2	41.5	55.5	35.2	47.2	0.6	**0.5**	8.1	**0.5**	20.1	30.7	14.6	35.2	0.6	33.0	47.1
BRI01	25	Briston	Residential / Mixed	38.6	34.3	46.8	26.1	41.3	10.8	10.8	4.7	10.8	19.3	26.6	9.0	26.1	10.8	37.6	41.1
BRI02	40	Briston	Residential / Mixed	38.4	34.1	47.0	26.3	41.6	10.8	10.8	4.9	10.8	19.5	26.9	8.8	26.3	10.8	37.3	41.3
C07/2	22	Cromer	Residential / Mixed	54.1	51.6	40.2	18.7	28.3	1.2	13.3	6.0	13.3	1.0	11.2	24.7	18.7	13.3	53.1	28.3
C10/1	55	Cromer	Residential / Mixed	54.1	51.1	42.4	20.8	30.5	**0.2**	10.8	3.5	10.8	1.8	13.5	25.3	20.8	10.8	50.8	30.5

Site Ref	Approx dwellings	Settlement	Type	Breckland SAC	Breckland SPA	Breydon Water SPA	Broadland SPA	Great Yarmouth North Denes SPA	Greater Wash SPA	N Norfolk Coast SPA	Norfolk Valley Fens SAC	North Norfolk Coast SAC	Overstrand Cliffs SAC	Paston Great Barn SAC	River Wensum SAC	The Broads SAC	The Wash & North Norfolk Coast SAC	The Wash SPA	Winterton-Horsey Dunes SAC
C16	150	Cromer	Residential / Mixed	54.7	52.3	40.2	18.7	27.9	**0.5**	13.6	6.3	13.6	**0.3**	10.8	25.4	18.7	13.6	53.6	27.9
C22/2	400	Cromer	Residential / Mixed	53.4	50.9	39.7	18.2	28.0	1.5	12.7	5.5	12.8	1.3	10.9	24.1	18.2	12.8	52.5	27.9
F01/B	560	Fakenham	Residential / Mixed	30.5	25.1	57.4	36.6	54.1	12.3	12.3	17.0	12.3	32.2	39.9	0.9	36.6	12.3	25.5	53.8
F02	70	Fakenham	Residential / Mixed	29.9	24.5	57.9	37.2	54.9	13.1	13.0	18.1	13.0	33.3	40.9	0.4	37.2	13.1	25.6	54.6
F03	65	Fakenham	Residential / Mixed	30.2	24.8	58.0	37.2	54.9	12.7	12.7	17.9	12.7	33.1	40.8	0.7	37.2	12.7	25.5	54.6
F10	55	Fakenham	Residential / Mixed	29.4	24.4	56.5	35.7	53.6	14.0	13.9	17.4	13.9	32.5	39.8	**0.2**	35.7	14.0	26.9	53.3
H17	27	Holt	Residential / Mixed	44.5	40.1	48.6	28.4	40.8	5.7	5.2	1.3	5.4	15.3	24.7	13.8	28.4	5.7	38.5	40.6
H20	180	Holt	Residential / Mixed	45.2	41.0	47.5	27.1	39.4	5.0	4.8	**0.4**	4.9	13.8	23.2	15.0	27.1	5.1	39.8	39.2
HV01/B	120	Hoveton	Residential / Mixed	45.5	43.8	18.2	1.7	16.0	13.8	32.4	12.9	32.5	22.6	15.3	13.5	1.7	32.6	66.0	15.5
LUD01/A	20	Ludham	Residential / Mixed	52.1	50.1	13.2	1.3	9.6	9.5	38.3	20.4	38.4	26.3	17.0	20.1	1.3	38.5	73.5	9.1
LUD06/A	15	Ludham	Residential / Mixed	52.7	50.7	13.1	1.1	9.0	9.0	38.7	20.7	38.8	26.5	17.2	20.8	1.1	38.9	74.1	8.5
MUN03/B	30	Mundesley	Residential / Mixed	56.8	55.4	32.9	11.4	19.3	**0.2**	22.3	4.9	22.4	7.3	2.5	26.6	11.4	22.4	61.7	19.3
NW01/B	350	North Walsham	Residential / Mixed	49.3	48.1	27.3	5.8	18.1	7.6	23.2	5.6	23.3	11.9	6.5	18.6	5.8	23.3	60.2	17.9
NW62/A	1800	North Walsham	Residential / Mixed	48.5	47.3	27.6	6.2	18.7	6.9	21.4	3.7	21.5	10.0	5.9	18.0	6.2	21.5	58.8	18.5

Site Ref	Approx dwellings	Settlement	Type	Breckland SAC	Breckland SPA	Breydon Water SPA	Broadland SPA	Great Yarmouth North Denes SPA	Greater Wash SPA	N Norfolk Coast SPA	Norfolk Valley Fens SAC	North Norfolk Coast SAC	Overstrand Cliffs SAC	Paston Great Barn SAC	River Wensum SAC	The Broads SAC	The Wash & North Norfolk Coast SAC	The Wash SPA	Winterton-Horsey Dunes SAC
SH04	45	Sheringham	Residential / Mixed	51.5	47.9	45.7	24.3	35.0	1.2	6.1	0.5	6.2	7.0	18.1	22.4	24.3	6.1	46.1	35.0
SH07	40	Sheringham	Residential / Mixed	51.8	48.0	46.8	25.4	36.2	**0.4**	5.2	1.5	5.2	7.9	19.2	22.2	25.4	5.2	45.3	36.1
SH18/1B	48	Sheringham	Residential / Mixed	51.1	47.5	45.8	24.4	35.3	1.4	5.8	0.8	5.8	7.3	18.4	22.0	24.4	5.8	45.7	35.2
ST19/A	70	Stalham	Residential / Mixed	54.8	53.2	19.7	1.4	8.1	4.8	33.6	14.9	33.7	20.3	10.6	22.8	1.4	33.7	70.7	7.9
ST23/2	80	Stalham	Residential / Mixed	54.5	52.9	19.5	1.0	8.1	4.9	33.6	15.0	33.8	20.4	10.8	22.4	1.0	33.8	70.7	7.8
W01/1	20	Wells-next-the-Sea	Residential / Mixed	42.0	35.7	63.9	43.1	57.3	0.9	1.0	17.6	1.0	31.0	41.2	12.6	43.1	0.9	22.0	57.1
W07/1	50	Wells-next-the-Sea	Residential / Mixed	42.5	36.1	64.7	44.0	58.0	**0.5**	**0.5**	18.3	0.6	31.5	41.9	13.3	44.0	0.5	21.5	57.9
E7		Tattersett	Employment	29.1	22.1	63.9	43.2	61.1	12.3	12.1	17.9	12.3	38.8	46.9	2.2	43.2	12.3	18.7	60.8
H27/1		Holt	Employment	44.9	40.7	47.2	26.9	39.2	5.5	5.3	**0.1**	5.4	13.9	23.1	14.7	26.9	5.6	39.8	39.0
NW52	x	North Walsham	Employment	50.5	49.2	29.9	8.3	19.7	6.4	21.6	3.6	21.7	9.9	5.4	20.3	8.3	21.7	59.2	19.5