

Habitats Regulation Assessment

East Cambridgeshire Local Plan

June 2018

(Supersedes the November 2017 Screening Report)

Contents

Abbreviations	1
Non-Technical Summary	1
1. Introduction	1
Background to the East Cambridgeshire Local Plan	1
Key Components of the Emerging East Cambridgeshire Local Plan	2
Potential Impacts Arising from the Local Plan	5
Report Purpose and Overview	6
2. Habitats Regulation Assessment - Legislation and Requirements	8
HRA Guidance and Best Practice	8
Main Stages of HRA	9
Consultation with Natural England	10
3. HRA Stage 1 Screening Methodology	12
Stages in HRA Screening Process	12
Screening Methodology	12
Identification of Natura 2000 Sites to be Considered in the HRA	12
Screening Categories	19
Screening Assumptions Applied Regarding Likely Significant Effects	20
Identification of Other Plans or Projects That May Act In-Combination	25
4. HRA Screening Assessment of the Local Plan	26
5. HRA Stage 2 Appropriate Assessment of the Local Plan	31
Introduction	31
Ouse Washes Ramsar / SPA/ SAC	33
Physical Damage or Loss of Habitat (offsite)	33
Disturbance from Increased Recreational Pressure	43
Breckland SAC/SPA	48
Physical Damage or Loss of Habitat (offsite)	48
Disturbance from Increased Recreational Pressure	53
Devil's Dyke SAC	57
Disturbance from Increased Recreational Pressure	57
Reduced Air Quality	60
Fenland SAC (including Wicken Fen and Chippenham Fen Ramsars)	65
Disturbance from Increased Recreational Pressure	65
Disturbance from Urbanisation Effects	70
Ouse Washes SPA/ SAC/Ramsar and Fenland SAC (Wicken Fen and Chippenham Fen) – Changes in Water Quality and Quantity	72
6. Conclusions and Recommendations	84
7. Future Stages	85
Appendix 1: Key Stages of the Habitats Regulation Assessment Process for Plans	86

Appendix 2: Details of the Designated Natura 2000 sites8	7
Devil's Dyke SAC8	7
Wicken Fen Ramsar9	1
Chippenham Fen Ramsar9	3
Ouse Washes SAC, SPA, Ramsar9	7
Breckland SPA, SAC10	1
Appendix 3: Review of Potential In-Combination Effects with Plans or Projects	5
Review of Potential In-Combination Effects with Local Development Plans of Local Authorities surrounding East Cambridgeshire	5
Appendix 4: HRA Stage 1 Screening Assessment11	4
Appendix 5: Core Areas of Sensitive Bird Populations17	1
Appendix 6. Natural England's Response to the HRA Screening Report of the Further Draft East Cambridgeshire Local Plan	3
Appendix 7. Natural England's Response to the HRA Screening Report of the Proposed Submission East Cambridgeshire Local Plan	6
Appendix 8. Correspondence from Environment Agency and Anglian Water Regarding Adverse Water Abstractions from Aquifers Connected to Natura 2000 Sites	<u>9</u>

Table 1: Summary of Strategic and Development Management Policies in the Local Plan	
(Proposed Submission Stage, November 2017)	2
Table 2: Local Plan Development Summary of Potential Effects and Impacts	5
Table 3: HRA Stage 1 Screening Key Stages	.12
Table 4: Natura 2000 Sites	.13
Table 5: Natura 2000 Sites: Vulnerability, Pressures and Threats (Summarised from Natural	
England's Site Improvement Plans and Advice to the Council)	
Table 6: Categories for HRA Screening	
Table 7: Summary of Findings for Natura 2000 Sites Screening, Based on Impact Type	
Table 8: HRA Stage 2 Appropriate Assessment Key Stages	
Table 9: Data on the Presence of Berwick's Swan and Whooper Swan at Ouse Washes	
Table 10: Assessment of the Potential for Site Allocations in the Local Plan to Contain Functional	lly
	.36
Table 11: Newly Arising Population Within 8km of the Ouse Washes SAC / SPA / Ramsar	.44
Table 12: Estimate of Newly Arising Households with Dogs within 8km of Ouse Washes SAC/	
SPA/Ramsar	
Table 13: Site Allocations in the Local Plan that fall within a Breckland SSSI IRZ	
Table 14: Newly Arising Population Within 8km of Breckland SPA / SAC	
Table 15: Estimate of newly Arising Households with Dogs within 8km of Breckland SPA/SAC	
	.58
Table 17: Estimate of Newly Arising Households with Dogs Within 8km of Devil's Dyke SAC	
Table 18: Site Allocations Screened in for Potential Likely Significant Effects on Devil's Dyke SAC	
in Relation to Reduced Air Quality	
Table 19: Newly Arising Population Within 8km of Wicken Fen SAC	
Table 20: Newly Arising Population Within 8km of Chippenham Fen SAC	.67
Table 21: Estimate of Newly Arising Households with Dogs Within 8km of Wicken Fen and	
Table 22: Natura 2000 Sites Screened in for Potential Effects in Relation to Urbanisation Impacts	
Table 23: Water Framework Directive Waterbodies Hydrologically Connected to the Ouse Washer	
Natura 2000 Site	.74

Table 24: Water Framework Directive Waterbodies Hydrologically Connected to the Fenland SAC)
(Wicken Fen) Natura 2000 Site	75
Table 25: Water Framework Directive Waterbodies Hydrologically Connected to Fenland SAC	
(Chippenham Fen) Natura 2000 Site	75
Table 26: Natura 2000 Water Dependent Protected Areas Current Condition and Objectives	79

Figure 1: Source, Pathway and Receptor Model	.13
Figure 2: Location of Natura 2000 Sites	.14
Figure 3: Traffic Contribution to Pollutant Concentration at different Distances from the Road	
Centre (DFT)	.23
Figure 4: Ouse Washes Goose & Swan Functional Land IRZ (source: Natural England – May	
2018)	.40
Figure 5: Stone Curlew Buffer Zones Breckland SPA	

Abbreviations

AA	Appropriate Assessment
AW	Anglian Water
CAMS	Catchment Abstraction Management Strategy
CFMP	Catchment Flood Management Plan
EA	Environment Agency
EC	European Commission
ha	Hectare
HRA	Habitats Regulation Assessment
IRZ	Impact Risk Zone
km	Kilometres
М	Metres
NE	Natural England
NPPF	National Planning Policy Framework
PSA	Public Service Agreement
RBMP	River Basin Management Plan
RSPB	Royal Society for the Protection of Birds
RoC	Review of Consents
SAC	Special Areas of Conservation
SIP	Site Improvement Plan
SPA	Special Protection Areas
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage System
WCS	Water Cycle Study
WFD	Water Framework Directive
WRC	Water Recycling Centre

Non-Technical Summary

Habitats Regulation Assessment is a requirement of the Conservation of Habitats and Species Regulations 2010 (as amended) (the Habitat Regulations).

This report sets out the method, findings and conclusions of the Habitats Regulation Assessment (HRA) (Stage 1 Screening and Stage 2 Appropriate Assessment) of the East Cambridgeshire Local Plan (Post Submission), which has been carried out by East Cambridgeshire District Council, in consultation with Natural England. It supersedes the HRA Report published in January 2017 to accompany the Further Draft Version of the Plan, and the HRA Report published in November 2017 to accompany the Proposed Submission version of the Local Plan. The HRA work in this report takes into account the recent judgement of the Court of Justice for the European Union of 12th April 2018¹, which ruled that mitigation measures incorporated into a project can no longer be taken into account at the screening stage.

The purpose of a HRA is to assess the impacts of a plan or project, alone or in combination with other plans or projects, against the conservation objectives of relevant Natura 2000 sites, to determine whether it would adversely affect the integrity of these sites. The Habitat Regulations do not prescribe a particular methodology for carrying out the HRA of Local Plans. The HRA of the East Cambridgeshire Local Plan has been carried out in accordance with current available guidance and seeks to meet the requirements of the Habitats Regulations

The following Natura 2000 sites were scoped into this HRA for consideration:

- Fenland SAC (including Wicken Fen, Woodwalton Fen and Chippenham Fen Ramsars)
- Ouse Washes SAC/SPA/Ramsar
- Devil's Dyke SAC
- Breckland SAC/SPA

The potential likely significant effects identified as a result of the Local Plan were:

- Habitat damage and/or loss
- Disturbance from urbanisation effects
- Disturbance from increased recreational pressure
- Reduced air quality as a result of increased vehicle journeys
- Water quality changes from water consumption and abstraction
- Reduced water quality from pollution due to increased demand for waste water treatment

The policies in the East Cambridgeshire Local Plan have undergone HRA Stage 1 screening. The HRA screening process considered the potential for likely significant effects on Natura 2000 sites listed above the policies and site allocations in the East Cambridgeshire Local Plan. The screening found that the majority of policies in the Plan were unlikely to have a significant effect on Natura 2000 sites alone. However, the screening identified a small number of policies and a number of site allocations (for housing, employment, mixed-use and leisure development) where there is potential for likely significant adverse effects on the integrity of Natura 2000 sites, and so these were considered in more detail as part of Stage 2 Appropriate Assessment.

Following further consideration, the Appropriate Assessment concludes that the identified impacts of the East Cambridgeshire Local Plan are unlikely to be significant, alone or in combination with other plans or projects.

¹ <u>http://eur-lex.europa.eu/legal-</u>

content/EN/TXT/PDF/?uri=CELEX:62017CJ0323&qid=1527062354829&from=EN

1. Introduction

- 1.1 East Cambridgeshire District Council is currently preparing a new Local Plan for the district to replace the adopted Local Plan (April 2015). The Local Plan will set out a vision, objectives and policies to guide the sustainable growth and development of the district over the plan period 2016-2036. As the 'competent authority' under the Conservation of Habitats and Species Regulations 2010 (as amended), East Cambridgeshire District Council is required to assess its Local Plan through the Habitats Regulations Assessment (HRA) process as policies in the plan can potentially affect Natura 2000 sites. This report sets out the methodology, results and conclusions of the HRA process, to determine whether the Local Plan, either alone or in combination with other plans or projects, is likely to have a significant adverse effect on a Natura 2000 site.
- 1.2 This report incorporates both Stage 1 (Screening) and Stage 2 (Appropriate Assessment) of the HRA for the emerging East Cambridgeshire Local Plan and should be read alongside the Proposed Submission Local Plan (November 2017)². This is the third version of the HRA Report, (the first was published in January 2017 alongside the Further Draft version of the Local Plan and the second in November 2017 to accompany the Proposed Submission Local Plan) and has been updated as the Local Plan continues to progress towards adoption. The Council has also prepared a Sustainability Appraisal (incorporating Strategic Environmental Assessment) and this work has been undertaken alongside the HRA, with the two assessments informing each other where appropriate.
- 1.3 The updated HRA work in this report takes into account the recent judgement of the Court of Justice for the European Union of 12th April 2018³, which ruled that mitigation measures incorporated into a project cannot be taken into account at the screening stage. This update has also provided an opportunity for the HRA to take into account the comments received from Natural England during the Local Plan Proposed Submission consultation stage (Appendix 7), which has resulted in some limited additional work on the HRA in relation to, for example, Impact Risk Zones (IRZs) for Sites of Special Scientific Interest (SSSI).

Background to the East Cambridgeshire Local Plan

- 1.4 A Local Plan was adopted by the Council in April 2015. This set the framework for significant growth across the district, especially at Soham, Littleport and Ely. The Council is now preparing a new Local Plan, which will replace the 2015 Plan on adoption (currently scheduled for late 2018).
- 1.5 The new Local Plan will set out the strategy for sustainable development in the whole of East Cambridgeshire to 2036, and will contain several key elements:
 - An overall **spatial vision** setting out how the district is likely to change up to 2036
 - A set of **spatial objectives** setting out the main policy directions that need to be pursued if the vision is achieved
 - A series of **strategic and development management policies** to guide the assessment of planning applications
 - Individual chapters for each settlement within the district
 - A series of site-specific policies to guide the assessment of planning applications for particular sites

²<u>https://www.eastcambs.gov.uk/sites/default/files/CD05A%20Proposed%20Submission%20Local%20Plan.pdf</u> ³ <u>http://eur-lex.europa.eu/legal-</u>

content/EN/TXT/PDF/?uri=CELEX:62017CJ0323&qid=1527062354829&from=EN

- The accompanying Sustainability Appraisal includes **monitoring indicators and targets** for implementation of the Local Plan.
- 1.6 The Plan broadly follows the approach of the 2015 Local Plan, focussing growth in the district's market towns of Ely, Littleport and Soham. The first stage in the preparation of the new Plan was the Preliminary Draft Plan stage, which was subject to public consultation between 12 February and 24 March 2016. At this stage, the Plan set out draft figures for housing and jobs growth and did not identify any sites to be allocated to meet housing or employment need.
- 1.7 Following the close of the consultation, the Local Plan was revised in light of the comments received, new evidence and any changes to national policy and guidance. This revised draft, the Further Draft Local Plan, was subject to public consultation between 12 January and 22 February 2017. It proposed the delivery of 11,400 new homes as well as 6,900 new jobs, between 2014 and 2036. It identified preferred sites which could be allocated to meet these needs.
- 1.8 Following the consultation on the Further Draft Local Plan, the Plan was again revised in light of the comments received, new evidence and any changes to national policy and guidance. The Proposed Submission Local Plan revises the new homes target to 10,835 new homes, allocates sites for around 10,490 new homes (some with existing planning permission) and assumes 850 new dwellings will come forward as windfall. It sets out a target of 6,000 new jobs between 2014 and 2036. The Plan allocates 150ha of employment land to meet forecast jobs needs.
- 1.9 The Local Plan was submitted to the Secretary of State for examination in February 2018. For further details regarding the Local Plan timetable, please visit the Local Development Scheme live update page of the council's website⁴.

Key Components of the Emerging East Cambridgeshire Local Plan

- 1.10 The following section describes the emerging proposals within the East Cambridgeshire Local Plan, which will subsequently be considered against the key vulnerabilities of the Natura 2000 sites identified in **Table 6, Section 3** of this report.
- 1.11 The main policy elements contained in the Local Plan are summarised in **Table 1** below. Following the strategic and development management policies, there are 48 settlement chapters that provide a section for each settlement, setting out policies relevant and specific to that place, as well as site allocations for housing, employment, mixed use development, leisure and Local Green Spaces.

Table 1: Summary of Strategic and Development Management Policies in the Local Plan (Proposed

 Submission Stage, November 2017)

Local Plan Ref	Policy	Summary
Chapters 1 & 2	Vision Strategic objectives	The Plan sets out 22 overall objectives and a vision for how East Cambridgeshire up to 2036.

⁴ <u>https://www.eastcambs.gov.uk/local-development-framework/monitoring-and-local-development-scheme</u>

Local Plan Ref	Policy	Summary
Chapter 3	LP1: A Presumption in Favour of Sustainable Development	A policy which promotes, in principle, sustainable development in the district.
	LP2: Level and Distribution of Growth	A policy which sets out the total quantum of growth in dwellings and jobs, for the period 2014-36. Also states that growth will be main town led, but also broadly distributed across the district.
	LP3: The Settlement Hierarchy and the Countryside	A policy setting out the settlement hierarchy, how this applies to allocations and the application of development boundaries to the settlements in the hierarchy.
	LP4: Green Belt	A policy which seeks to protect those parts of the Cambridge green belt within the district.
	LP5: Community- led development	A policy setting out the criteria to be met for a development proposal to be considered a community–led development.
	LP6: Meeting Local Housing Needs	A policy setting out the requirements for affordable housing, Higher Access Standards, self-build homes, residential care accommodation and Park Homes.
	LP7: Gypsies and Travellers and Travelling Showpeople sites	A policy making provision for allocated and non-allocated sites for Gypsies, Travellers and Travelling Showpeople.
	LP8: Delivering Prosperity and Jobs	A policy making provision for employment allocations. Also sets out criteria against which non-allocated sites will be considered.
	LP9: Equine Development	A policy to ensure that equine development is appropriate in scale and setting for its location.
Chapter 4	LP10: Development Affecting the Horse Racing Industry	A policy ensuring that development does not have an adverse impact upon the horseracing industry.
	LP11: Tourist Facilities and Visitor Attractions	A policy that supports viable tourism development of appropriate scale/ design in appropriate locations.
	LP12: Tourist Accommodation (excluding holiday cottages)	A policy to support appropriate and viable new or extended tourism accommodation.
	LP13: Holiday Cottage Accommodation	A policy supporting accommodation that is well related to existing settlements, or re-uses existing buildings in the open countryside.
	LP14: Retail and Other Main Town Centre Uses	A policy defining town centres and identifying appropriate development for within and outside these areas.
	LP15:Retail Uses in Town Centres	A policy protecting the retail function of town centres. Also setting out the criteria any changes from A1 retail use will be considered against.
	LP16: Infrastructure to Support Growth	A policy setting out the need to provide infrastructure to support growth, either in support of new development or as development in its own right.

Local Plan Ref	Policy	Summary
	LP17: Creating a Sustainable, Efficient and Resilient Transport Network	A policy setting out the requirements for new development in relation to the transport network.
Chapter 5	LP18: Improving Cycle Provision LP19: Maintaining and Improving Community Facilities	A policy to ensure that accessibility to key destinations by bicycle is safe. Also, setting out how this will be achieved. A policy seeking to protect existing facilities, and also encourage appropriate new stand-alone facilities, or facilities as part of wider development proposals.
	LP20: Delivering Green Infrastructure, Trees and Woodland	A policy to secure new green infrastructure, either alongside new development, or in its own right.
	LP21: Open Space, Sport and Recreational Facilities	A policy to ensure that new outdoor open space, sport and recreational provision is provided at an appropriate scale and location. Also to identify/ confirm that new indoor provision will be provided through the CIL process, and also seeking to protect existing areas of provision.
	LP22: Achieving Design Excellence LP23: Water Efficiency LP24: Renewable and Low Carbon Energy Development	A policy setting out the standards for design of new development. A policy which requires new development to achieve the optional Technical Housing standard for water-efficiency. A policy setting out the standards and expectations of development in relation to renewable and low carbon energy development.
Chapter 6	LP25: Managing Water Resources and Flood Risk LP26: Pollution	A policy seeking to ensure that new development does not increase the risk of flooding, and also seeking to protect the water environment. A policy seeking to minimise, and where possible reduce
	and Land Contamination LP27: Conserving and Enhancing Heritage Assets	pollution and land contamination. A policy seeking to conserve and enhance heritage assets and their settings within the district.
	LP28: Landscape, Treescape and Built Environment Character, including Cathedral Views	A policy to ensure that development is sympathetic to the character area in which it is located, and also to ensure that views of Ely Cathedral are protected.
	LP29: Conserving Local Green Spaces LP30: Conserving	A policy making provision for Local Green Space allocations and seeking to protect them from development. A policy seeking to conserve and enhance biodiversity and
	and Enhancing Biodiversity and Geodiversity	geodiversity within the district.

Local Plan Ref	Policy	Summary
	LP31: Development in the Countryside	A policy supporting a range of developments in the countryside only in exceptional cases.
	LP32: Infill Development in Locations Outside of Development Envelopes	A policy with strict criteria supporting infill development in select areas of the district, outside of development boundaries.
	LP33: Residential Annexes	A policy that seeks to ensure that any residential annexe development is solely provided as ancillary to the original dwelling and not as a new dwelling.

Potential Impacts Arising from the Local Plan

- 1.12 The provisions for new growth and development in the Local Plan has the potential to generate a range of environmental impacts that, depending on their nature, magnitude, location and duration, can potentially impact on Natura 2000 sites, depending on the impact, pathway and vulnerabilities of the site.
- 1.13 The following potential effects can arise from growth and development in general, and related activities, identified in **Table 2** below.

Potential Effects	Description of Impacts
Physical loss and/or damage of habitats and species	 Direct land take, removal and loss of supporting and foraging habitat, green corridors and species Changes to sediment patterns (rivers and coastal locations) Trampling Severance/barrier effect Fire Erosion Prevention of natural processes Fragmentation
Water supply levels	 Potential for drying and reduced water levels arising from increase in water abstraction levels (volume) to provide supply (e.g. new housing). This may lead to reduced water resources at Natura 2000 sites: changes to water levels can impact on river flow and water quality. Potential impact on groundwater in water cycle by foundations and buildings altering groundwater flow. Flooding/stormwater Barrier effect (migratory species)
Water quality changes	 Potential for reduced water quality and water pollution from potential increase in surface water run off levels (volume) as a result of new development, which can lead to contamination of watercourse links and reduced water quality at Natura 2000 sites. Potential increase in accelerated run off arising from new hard standing/non-permeable surfaces of new development. Hydrological cycle impacts from additional take up of land, loss of permeable surfaces and topography alteration may impact

Table 2: Local Plan Development Summary of Potential Effects and Impacts

Potential Effects	Description of Impacts
	 on water cycle, potentially resulting in flood risk impacts and water quality impacts on Natura 2000 sites. Potential increase in volume of waste water discharges (consented) which can lead to reduced water quality at Natura 2000 sites. Potential increase in pressure in sewage infrastructure network and capacity.
Disturbance	 Increased recreation activity and/or visitor pressure as a result of new development and population increase. Potential for increased disturbance to habitats and species as a result of development if it significantly increases the number of people travelling and visiting a Natura 2000 site. Potential for increased noise potential from larger footfall of people. Potential for noise and light pollution (from artificial lighting of development and increased traffic) Potential for noise and vibration from construction. Biological disturbance (direct mortality, competition from nonnative species, introduction of disease, natural succession, rapid population fluctuations) from development, predation by domestic pets, introduction of nonnative species from gardens etc.
Changes in air quality	 Potential for increased atmospheric pollution from dust Increased traffic movements arising from construction and occupation of new development potentially leading to increased air pollution arising from increased vehicular movements and trips Potential for increased emissions from new buildings Potential for noise and light pollution (from development and increased traffic) Changes in the composition of air quality as a result of development or a significant increase in trips near the vicinity of a Natura 2000 site could potentially cause air pollution that may damage vegetation and harm species living in these habitats.

Report Purpose and Overview

- 1.14 This report sets out the methodology, results and conclusions of the updated HRA work for the East Cambridgeshire Local Plan, Post Submission. The report is structured into the following sections:
 - Section 1: Introduction has provided an overview of the East Cambridgeshire Local Plan and summarises the potential effects on Natura 2000 sites that can arise as a result of growth and development set out in the plan;
 - Section 2: Habitats Regulation Assessment Legislation and Requirements provides an overview of HRA, relevant guidance, key stages in the assessment process and consultation with Natural England;
 - Section 3: HRA Stage 1 Screening Methodology sets out the approach taken for the Stage 1 screening process, including the main assumptions taken in relation to potential effects, those Natura 2000 sites that are included in the assessment and their key pressures, threats and vulnerabilities;

- Section 4: HRA Screening Assessment of the Local Plan summarises the results of the HRA screening;
- Section 5: HRA Stage 2 Appropriate Assessment of the Local Plan describes the approach taken to the Appropriate Assessment and assesses whether those policies and proposals that could not be screened out at Stage 1 Screening will have a significant adverse effect on the integrity of a Natura 2000 site;
- Section 6: Conclusions and Recommendations presents the conclusions and recommendations of the HRA;
- Section 7: Future Stages sets out the next steps in the HRA process.

2. Habitats Regulation Assessment - Legislation and Requirements

- 2.1 The Conservation of Habitats and Species Regulations 2010 (as amended) (the Habitat Regulations) require HRA to be applied to all statutory land use plans in England and Wales. Therefore, in accordance with these Regulations, Local Planning Authorities must demonstrate that the implementation of a Local Plan would not adversely affect the integrity of Natura 2000 sites within or outside of the plan area, either alone or in combination with other plans or projects. This is known as a 'Habitats Regulation Assessment' (HRA).
- 2.2 The Habitats Regulations transpose the requirements of the European Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna (the Habitats Directive). European Sites or Natura 2000 sites is a Europe-wide network of sites of international importance for nature conservation established under the Habitats Directive. The network comprises Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). SPAs are designated under the European Directive 79/409/EEC 'on the Conservation of Wild Birds' (the Birds Directive) for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex 1 of the Birds Directive, and migratory species). SACs are designated under the Habitats Directive and target particular habitats (Annex 1) and/or species (Annex II) identified as being of European importance.
- 2.3 The Government also expects candidate SACs (cSACs), potential SPAs (pSPAs), and Ramsar sites to be included within the HRA⁵. Ramsar sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).
- 2.4 This report treats all sites named above as being of equal status for the purpose of this HRA report.

HRA Guidance and Best Practice

- 2.5 The Habitat Regulations do not prescribe a particular methodology for carrying out the HRA of Local Plans. The HRA of the East Cambridgeshire Local Plan has been carried out in accordance with current available guidance and seeks to meet the requirements of the Habitats Regulations. The main guidance which had been referred to includes:
 - Assessment of plans and projects significantly affecting Natura 2000 sites (European Commission, 2001)⁶;
 - Draft HRA guidance published by the Government: 'Planning for the Protection of European Sites: Appropriate Assessment' (DCLG, 2006)⁷; and
 - Scottish Natural Heritage guidance on HRA of Plans: 'Habitats Regulation Appraisal of Plans Guidance for Plan Making Bodies in Scotland'⁸ (David Tyldesley and Associates for Scottish Natural Heritage, August 2010 and updated January 2015).
- 2.6 Although the later guidance is for Scottish plan making bodies, the Council considers that the general principles and approaches set out in this guidance are transferable and can be applied to HRA in England, subject to minor revisions.

⁵ NPPF (March 2012, para 118

⁶ http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf ⁷http://webarchive.nationalarchives.gov.uk/20120920055842/http://www.communities.gov.uk/documents/planni ngandbuilding/pdf/160442.pdf

⁸ https://www.nature.scot/sites/default/files/2017-06/A1500925%20-

^{% 20} Habitats % 20 Regulations % 20 Appraisal % 20 of % 20 Plans % 20 - % 20 Guidance % 20 for % 20 plan-100 plans % 20 - % 20 Guidance % 20 for % 20 plans % 20 - % 20 Guidance % 20 for % 20 plans % 20 - % 20 Guidance % 20 for % 20 plans % 20 - % 20 Guidance % 20 for % 20 plans % 20 - % 20 Guidance % 20 for % 20 plans % 20 - % 20 Guidance % 20 for % 20 plans % 20 - % 20 Guidance % 20 for % 20 plans % 20 - % 20 Guidance % 20 for % 20 plans % 20 - % 20 Guidance % 20 for % 20 plans % 20 - % 20 Guidance % 20 for % 20 plans % 20 - % 20 for % 20 plans % 20 - % 20 for % 20 plans % 20 - % 20 for % 20 plans % 20 - % 20 for % 20 plans % 20 plans % 20 for % 20 plans % 20 for % 20 plans % 20 plans

making%20bodies%20in%20Scotland%20-%20Jan%202015.pdf

2.7 Additionally, the Council has taken into account case law to ensure the HRA work complies with the HRA requirements. In particular, this updated HRA takes into account the recent decision of the Court of Justice for the European Union in *People Over Wind v Coillte Teoranta (Case C-323/17)* on 12th April 2018, which ruled that mitigation measures incorporated into a project cannot be taken into account at the screening stage. This means that a full and precise analysis of the measures capable of avoiding or reducing any significant effects on the site concerned must be carried out specifically at the stage of the Appropriate Assessment and not as part of the screening stage.

Main Stages of HRA

2.8 The first step, under Reg. 102(1)(b) of the Habitat Regulations, is to decide whether a Plan should be subject to HRA. This will depend on the type of plan or project and on its potential effects on a Natura 2000 site. The first question in making the decision is; 'is the whole of the plan directly connected with or necessary to the management of a Natura 2000 site for nature conservation purposes?'. If the answer is no, which is the case for the East Cambridgeshire Local Plan, the following sequence of stages should be undertaken:

Stage 1 – Screening

- 2.9 The process identifies whether a plan, either alone or in combination with other plans or projects, is likely to have a significant effect on a Natura 2000 site. EC (2001) guidance recommends that the screening stage should comprise the following elements:
 - Determining whether the plan is directly connected with or necessary to the management of the site if it is then no further assessment is necessary
 - Describing the plan and other plans and projects that, 'in combination', have the potential to have significant effects on a Natura 2000 site
 - Identifying the potential effects on the site
 - Assessing the likely significance of any effects
- 2.10 The screening stage satisfies Reg.102(1)(b) and 102(1)(a) of the Habitats Regulations. If the screening stage concludes that there are likely to be no significant impacts on European sites then there will be no need to progress to Stage 2.

Stage 2 - Appropriate Assessment (AA)

2.11 This stage satisfies Reg. 102(1)(2)(3) of the Habitats Regulations. This is only required when the screening process determines that the plan is likely to have a significant effect on a Natura 2000 site. An AA assesses the impacts of the proposed plan/policies against the conservation objectives of the qualifying features of the relevant Natura 2000 sites. Should the AA identify significant negative effects, alternatives should be examined to avoid any potential damaging effects. If no alternative exists, define and evaluate mitigation measures where necessary. If effects remain after all alternatives and mitigation measures have been considered, proceed to Stage 3.

Stage 3 – Assessment of Alternative Solutions

- 2.12 A Habitat Regulation Assessment only moves to this stage when significant effects on the integrity of a Natura 2000 site remain following the consideration of alternatives and development of mitigation measures in Stage 2. Stage 3 involves the process of identifying 'imperative reasons of overriding public interest'. It must demonstrate that no alternatives exist and identify potential compensatory measures. This stage is a last resort and should be avoided if at all possible.
- 2.13 If significant negative effects remain, a plan or project may only be adopted under such circumstances if there are imperative reasons of overriding public interest, where it is deemed that the plan or project should proceed.

2.14 The key stages and specific tasks undertaken for the HRA of the East Cambridgeshire Local Plan are set out in **Table 3**, **Section 3** of this report and also summarised in **Appendix 1** (though please note that this HRA report does not follow stages 6 and 7 as set out in Appendix 1 as these no longer meet HRA requirements following the decision made in *People Over Wind v Coillte Teoranta*).

Precautionary Principle

2.15 The stages described above must be undertaken with the rigorous application of the precautionary principle. This requires those undertaking the exercise to be confident that the plan will not have a significant impact on relevant conservation objectives. Where uncertainty or doubt remains, an adverse impact should be assumed.

The Precautionary Principle

Prudent action that avoids the possibility of irreversible environmental damage in situations where the scientific evidence is inconclusive but the potential damage could be significant.

Key Definitions

- 2.16 A "significant" effect is one that could adversely impact on a Natura 2000 site's integrity. The likelihood of it occurring should adopt the precautionary principle, taking into account the ecological circumstances of the site. A "likely" effect is one that cannot be ruled out on the basis of objective information.⁹ Significance will vary from site to site according to conservation sensitivities and magnitude of the potential impact. Assessment is triggered by likelihood not certainty in line with the precautionary principle. Therefore, the HRA (Stage 1 Screening) considers whether effects are 'likely' and 'significant'. Those effects which are not obvious in view of the site's conservation objectives may be disregarded. Significant effects are also determined in-combination with other plans or projects and tack account of cumulative effects.
- 2.17 "Integrity" is defined in ODPM Circular 6/2005¹⁰ as "...*the site's coherence, 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 species for which it was classified*" (ODPM Circular 06/2005, para.20). The 'integrity test' is undertaken during Stage 2 (AA).

Consultation with Natural England

- 2.18 Natural England is the statutory nature conservation body for HRA, who will assist in obtaining the necessary information, help agree the process, and work with the competent authority on agreeing the outcomes and mitigation proposals. Plan-making authorities are required to consult the appropriate nature conservation body regarding the assessment '*within such reasonable time as the plan-making authority may specify*'.
- 2.19 The Council has worked closely with Natural England for many years, in relation to HRA Screening Reports associated with previous Local Plans, including the most recent Local Plan adopted in April 2015. That Local Plan, it was agreed by Natural England, did not need to progress to Stage 2 Appropriate Assessment. However, the new emerging Local Plan covers a different time period, and is proposing differing growth patterns and some new site allocations. As such, a new HRA Report needs to be prepared.
- 2.20 The HRA screening reports that accompanied the Further Draft and Proposed Submission versions of the Local Plan were sent to Natural England for its comments in January 2017 and November 2017 respectively, and were made available on the Council's website during the consultation periods on the Local Plan. As such, views on the HRA reports were welcomed from anybody. Following the submission of the Local Plan for examination, the Inspector

⁹ http://www.snh.gov.uk/docs/A1500925.pdf

¹⁰ https://www.gov.uk/government/publications/biodiversity-and-geological-conservation-circular-06-2005

appointed to examine the Local Plan identified some initial questions and observations in relation to the published HRA work¹¹ and subsequently further questions in the "Inspector's Matters, Issues and Questions for Discussion at the Examination Hearings".¹² The Council has worked closely with Natural England to ensure any outstanding concerns on the HRA of been addressed in this updated report. The consultation responses from Natural England can be viewed in **Appendix 6** and **Appendix 7**. Natural England will be consulted on this updated (June 2018) HRA report.

¹¹ Document ED002 in examination library:

http://www.eastcambs.gov.uk/sites/default/files/ED002%20-

^{%20}Initial%20Letter%20from%20the%20Inspector%20to%20the%20Council_0.pdf

¹² Document ED005 in examination library:

http://www.eastcambs.gov.uk/sites/default/files/ED005%20Matters%2C%20Issues%20and%20Questions.pdf

3. HRA Stage 1 Screening Methodology

Stages in HRA Screening Process

3.1 The HRA screening process is summarised in **Table 3** below and summarised in **Appendix 1** (though note paragraph 2.14 above). The HRA process is iterative and has been revisited as the Local Plan has developed.

Stages	Habitats Regulation Assessment
Stage 1. Screening for likely significant	Task 1 - Identify Natura 2000 sites in and around the Local Plan area that should be considered in the assessment.
effects	Task 2 – Gather information on the Natura 2000 sites, including the vulnerabilities of their qualifying features, pressures/threats, conservation objectives and condition of site. Identify the changes to environmental conditions that may occur as a result of implementing the Local Plan.
	Task 3 - Identify key components of the emerging East Cambridgeshire LocalPlan, including the Local Plan objectives and policies.
	Task 4 – Determine, through a screening exercise, all aspects of the Plan which would not result in adverse effects on a Natura 2000 site and those aspects where it is not possible to rule out the risk of significant effects, either alone or in combination with other plans or projects.
	Task 5 - Consider whether other plans or projects, in conjunction with the Local Plan, would have the potential for adverse effects on the qualifying features of identified sites.
	Task 6 - Conclude whether there are likely significant effects. Where effects are unlikely, consult Natural England on the screening recommendation that the further AA stages of the HRA are not necessary;
	Task 7 – If, after Task 6 , significant effects are judged likely or uncertainty exists, or Natural England disagrees with the screening recommendation that an AA is not necessary proceed to Stage 2 AA .

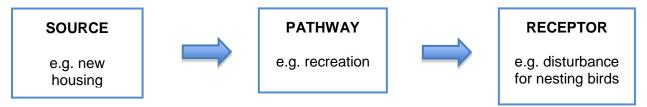
Screening Methodology

Identification of Natura 2000 Sites to be Considered in the HRA

- 3.2 The East Cambridgeshire Local Plan has the potential to impact on areas that are beyond the administrative boundaries of the district. It is commonly recognised in HRA guidance that, when considering the potential for effects on Natura 2000 sites that distance itself is not a definitive guide to the likelihood or severity of an impact. There are other factors that will influence the relative distance at which an impact can occur, such as the prevailing wind or river flow direction. This means that development proposed in a Local Plan that is some distance away from a Natura 2000 site could potentially effect the site, and therefore should be considered as part of HRA screening.
- 3.3 Rather than rely on distance alone, best practice is to use a 'source-pathway-receptor' model (as shown in **Figure 1**) which focuses on whether there is a pathway by which impacts from the Plan can affect the vulnerabilities/sensitivities of a Natura 2000 sites' environmental conditions.
- 3.4 The potential pathways include:

- **Wind** whether potential impacts can reach the Natura 2000 site/s via the prevailing wind;
- **River network** whether impacts are connected by the river network to the Natura 2000 site/s;
- Water supply the connectivity of the water supply;
- Roads Natura 2000 site/s in relation to the road network and the feasibility of air, noise and light pollution from increased traffic on the roads, due to a greater population or greater accessibility;
- **Species movement** distance between Natura 2000 site/s and the location of other important habitats within the boundary of the plan area, such as SSSIs, Country Parks and Nature Reserves.

Figure 1: Source, Pathway and Receptor Model

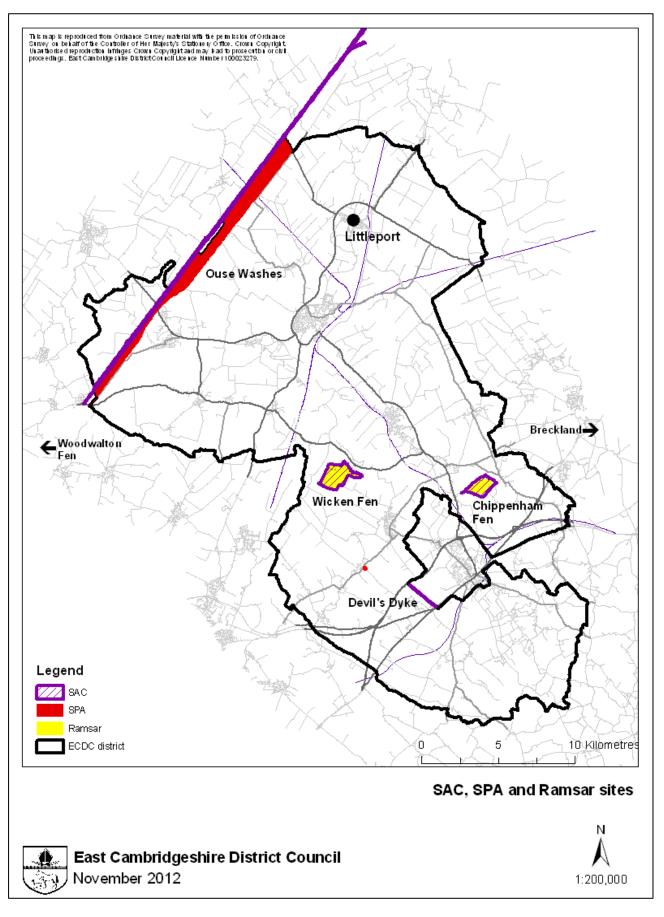


3.5 Using this approach, the Natura 2000 sites within or adjacent to East Cambridgeshire with the potential to be affected by the Local Plan, and therefore scoped into this HRA, are identified in **Table 4** below. A map showing the location of these Natura 2000 Sites is provided overleaf in **Figure 2**.

Table 4: Natura 2000 Sites

Site	Location	SAC	SPA	Ramsar
Fenland (Wicken Fen, Woodwalton Fen, Chippenham Fen)	Within (or partially within) the district (apart from the Woodwalton element, which is in Huntingdonshire district, and around 15km from the East Cambs district border)	√		\checkmark
Ouse Washes	Within (or partially within) the district	\checkmark	~	\checkmark
Devil's Dyke	Within (or partially within) the district	\checkmark		
Breckland	Outside the district, but within 15km (Forest Heath)	~	\checkmark	

Figure 2: Location of Natura 2000 Sites



Information on Natura 2000 sites

3.6 To enable HRA work to be undertaken, details of each Natura 2000 site have been collated and described in **Appendix 2**. This includes the qualifying features for which the sites are designated and specific sensitives of each site which contribute to and define their integrity. In compiling this information, reference was made to the Conservation Objectives for each site, Standard Data Forms for SACs and SPAs and Natural England's Site Improvement Plans (SIPs).¹³ **Table 5** sets summarises the specific vulnerabilities of the Natura 2000 sites.

¹³ These were obtained from the JNCC and Natural England websites (<u>www.jncc.gov.uk</u> and <u>www.naturalengland.org.uk</u>)

Table 5: Natura 2000 Sites: Vulnerability, Pressures and Threats (Summarised from Natural England's Site Improvement Plans and Advice to the Council)

Site			Vulne	rability			Summary of Pressures/Threats
	Physical Habitat Loss	Physical Damage	Disturbance Recreational Pressure	Water Quantity	Water Pollution	Atmospheric Pollution	
Devil's Dyke	V	✓	J	×	×	J.	This species rich calcareous grassland is vulnerable to vegetation succession by rank grasses and requires active management by grazing. It is also vulnerable to increased recreational pressure. Habitat degradation is occurring, particularly through trampling of vegetation and soil enrichment from dog excrement. Antisocial behaviour such as littering, fires and other activities is damaging vegetation. Dogs off leads also pose a risk to the continuance of the essential long term management of the site through livestock grazing. The site is also potentially at risk from atmospheric nitrogen deposition, although the site improvement plan states this requires further investigation.
Wicken Fen	1	1	\$	5	1	1	This site is vulnerable to vegetation succession and requires management to retain fen characteristics. Hydrological changes associated with off-site agricultural drainage and land reclaim threatens the sites designated features. In addition nutrification from agricultural run-off and abstraction from the underlying aquifer. Nitrogen deposition exceeds site relevant critical loads. This has the potential to affect the Molinia meadow and calcareous fen features although there is no information known on any current impacts.
Chippenham Fen	1	1	1	~	1	1	Key threats include water pollution and hydrological changes. There is considerable pressure in the region from the water abstraction that may affect

Site			Vulne	rability			Summary of Pressures/Threats
	Physical Habitat Loss	Physical Damage	Disturbance Recreational Pressure	Water Quantity	Water Pollution	Atmospheric Pollution	
							the local springs and aquifer. The habitats within the site are highly sensitive to inorganic fertilisers and pesticides, applications of which should be avoided both within the site itself and in adjacent surrounding areas. There is also inappropriate scrub control and cutting/mowing in some areas. Nitrogen deposition exceeds site relevant critical loads. This has the potential to affect the Molinia meadow and calcareous fen features although there is no information known on any current impacts.
Woodwalton Fen	~	1	×	~	1	1	Key threats include water pollution and hydrological changes. Historical poor water quality and more persistent flooding has resulted in a decline in biodiversity and site features. The quality of the water from the agricultural run-off needs to be monitored. Nitrogen deposition exceeds site relevant critical loads. This has the potential to affect the Molinia meadow and calcareous fen features although there is no information known on any current impacts.
Ouse Washes	✓	✓	✓	✓	✓	×	The Ouse Washes are extremely vulnerable to changes in hydrology and the site is currently suffering from nutrification and changes in water quality as a result of agricultural run-off and the input of water with high nutrient levels from sewage treatment works. Off-site changes in hydrology have the potential to affect the site's integrity. Over the past 25yrs it has also been noted that there has been an increase in summer flooding as well as high water levels in winter. This has adversely affected both the breeding birds and the traditional

Site			Vulne	rability			Summary of Pressures/Threats
	Physical Habitat Loss	Physical Damage	Disturbance Recreational Pressure	Water Quantity	Water Pollution	Atmospheric Pollution	
							washland management regime. It also results in Glyceria grass (sweet rush) competing with the other grasses and herbs, which may affect food availability for wintering waterfowl. High winter water levels also reduce grazing area for wigeon.
Breckland	✓	✓	✓	✓	✓	✓	Grazing by sheep/cattle is essential to the maintenance of habitats. Undergrazing, both by domestic livestock and wild rabbits affects the majority of grassland & heathland sites throughout the SPA/SAC, which puts at risk the quality of SAC habitats and their characteristic species, including SPA bird species. Development, especially for housing, roads and solar farms, can impact on SPA species through disturbance (Stone Curlew, Woodlark, Nightjar). Recreational and other activities have the potential to impact both SAC and SPA features. SAC features may be affected through eutrophication (dog fouling, unauthorised fires) and disturbance of soils, in particular on commons and heaths. Habitat fragmentation is a key threat, with connectivity between heaths poor and the landscape between them hostile to species dispersal. Local groundwater abstraction can negatively impact on the Breckland meres (restricted to the Norfolk Breckland). A further key threat is air pollution from atmospheric nitrogen deposition.

Screening Categories

- 3.7 The screening of the Local Plan involved a series of steps to remove or 'screen out' those elements of the Plan that are not likely to have a significant effect on a Natura 2000, and to ensure other aspects of the Plan are 'screened in' where further appraisal is required. The screening methodology was slightly amended for the Proposed Submission version of the Local Plan to use screening categories for the classification of potential effects of the Plan (see **Table 6**). These are broadly based on the screening categories set out within the HRA guidance for Scotland¹⁴. A 'traffic light' colour code has been applied to the categories used to record the potential effects of the Local Plan policies and site allocations on Natura 2000 sites. Green categories record that here are unlikely to be significant effects (and therefore AA is not required). Amber categories record that there are likely to be significant effects (and therefore AA is required).
- 3.8 When considering significant effects, the European Court of Justice (2004, para 4.2.1 of 2010 Guidance) indicated that effects which would not undermine the conservation objectives of a Natura 2000 site should <u>not</u> be regarded as significant: thus, where a policy/aspect of the Plan may potentially have a *positive* significant effect on a Natura 2000 site, this policy/part can be 'screened out' because the impact would not be negative.

Screening Ca	tegory Type of Policy
'N' categories	s: screened out or eliminated elements of the Plan (Appropriate Assessment
not required)	
Plan elements	assessed as not likely to have a significant effect on a Natura 2000 site if
implemented,	either alone or in combination with effects from other plans or projects
N1	General strategy statement or general criteria based policy not likely to have a significant effect as the policy will not lead to development itself.
N2	Policy refers to proposals that are not generated by the Plan and therefore excluded from the assessment. For example, a policy that refers to a transport project, which is identified in another Plan and possibly by another authority (and this will have been subject to HRA for the other Plan).
N3	Policies intend to protect, conserve or enhance the natural (including biodiversity), built or historic environment, or that positively steers development away from Natura 2000 sites.
N4	Policies that will not lead to development itself, because they are qualitative or design criteria based policies, which guide development. For example, a policy may encourage certain types of housing, but does not provide for the specifically lead to the development of such housing.
N5	Policy makes provision for change or promotes development but would have no likely significant effect on a Natura 2000 site, because there is no physical, ecological, hydrological, chemical or biological link or pathway between the changes the policy may cause and the site's qualifying interests of any Natura 2000 site. This category also covers policies that may have a positive effect; or would not otherwise undermine the conservation objectives for the site.
N6	Policies that make provision for change/promotes development, but where the effects on a Natura 2000 site are trivial or 'de minimis', or so restricted in scale or remote from a site, even if combined with other effects, that they would not undermine the conservation objectives for the Natura 2000 site. For example, a policy that focuses development in existing urban areas whereby the likelihood of the policy affecting an isolated, relatively inaccessible Natura 2000 site is remote.

Table 6: Categories for HRA Screening

¹⁴ David Tyldesley and Associates for Scottish Natural Heritage (2010) Habitats Regulation Appraisal of Plans and Guidance for Plan-Making Bodies in Scotland

N7	Policies that promote development or change but where it is so general it is not known where, when or how the aspect of the Plan may be implemented or where the potential effects may occur, or which Natura 2000 sites, if any, may be affected.			
	screened in elements of the Plan (Appropriate Assessment required)			
Plan elements	considered likely to have a significant effect on a Natura 2000 site			
Ρ	 Policy/proposal/element of the Plan with potential to have a likely significant effect and therefore subject to further assessment, including consideration of potential mitigation measures. This category will cover: Policies which have been identified as having likely significant effects, either alone or in combination, and directly or indirectly, and are therefore subject to further appraisal; and Policies where it is not possible to conclude likely significant effects as this is currently uncertain. 			

3.9 The Stage 1 screening assessment is recorded in detail in screening matrices which can be found in **Appendix 4**, and the results summarised in **Section 4**. Note the Stage 2 Appropriate Assessment (in **Section 5**) supersedes the previous screening conclusions.

Screening Assumptions Applied Regarding Likely Significant Effects

3.10 During the screening assessment, the following assumptions were taken into account and applied when reaching a conclusion about the likely significant effects of a policy or site allocation.

Physical Loss and/or Damage of Habitat

3.11 In relation to *onsite* damage and/or loss of habitat, any development resulting from the policies and site allocations in the Local Plan would only take place within the administrative boundary of East Cambridgeshire; therefore only Natura 2000 sites within the district boundary could potentially be affected as a result of physical loss or damage of habitat. Therefore, loss and/or damage of habitat within the site boundary of a Natura 2000 site can be ruled out for Woodwalton Fen Ramsar, which is in the district of Huntingdonshire, around 15km from the East Cambridgeshire border.

3.12 Likely significant effects as a result of physical loss and/or damage of habitat (within the Natura 2000 site boundary) need to be considered for:

- Fenland SAC (Wicken Fen and Chippenham Fen Ramsars)
- Devil's Dyke SAC
- Ouse Washes Ramsar / SPA / SAC
- 3.13 In relation to *offsite* loss and/or damage of habitat, where this takes place outside the boundaries of a Natura 2000 site, this could have an impact on the integrity of a Natura 2000 site, if the habitat supports qualifying interest features for which the site is designated, such as habitat used for foraging or roosting by birds or bats. This is known as 'functional land'. Therefore, development some distance from a Natura 2000 site could have an effect on the site.
- 3.14 With regard to Natura 2000 sites within the study area, on the advice of Natural England, this is primarily considered a potential issue for the Ouse Washes Ramsar/ SPA and Breckland SPA/SAC. For the Ouse Washes, surrounding agricultural land could be used by migratory, wintering birds (specifically in relation to swans and geese) as areas for rest and grazing outside of the Ouse Washes during the winter season. For Breckland, surrounding land outside

the SPA boundary is known to be used by Stone Curlew for nesting and has been considered in detail in HRA work by neighbouring Local Authorities. Devil's Dyke SAC and Fenland SAC do not include birds amongst their qualifying features and so likely significant effects relating to offsite habitat loss can be ruled out for those sites.

3.15 Therefore, likely significant effects relating to offsite habitat loss/damage are most relevant for:

- Ouse Washes Ramsar
- Breckland SPA / SAC

Disturbance

Urbanisation

- 3.16 Urbanisation is a term used to cover a range of impacts that occur due to increases in human populations in close proximity to protected sites. This impact is closely related to recreational pressure, in that they both result from increased populations within close proximity to sensitive sites. The impacts of urbanisation can be extensive, but the main impacts include: fly tipping of garden waste, vandalism, litter, increased risk of fire and cat predation. (Impacts from trampling, eutrophication (dog fouling) and habitat damage are covered under increased recreational pressure). Proximity to urban centres and high population pressure means these impacts are all exacerbated and as a result, particular management measures are often required. Urbanisation effects tend to occur over short distances.
- 3.17 Development buffers of 400m are typically used to minimise the effects of urbanisation. For example, the HRA for the Breckland Local Plan¹⁵ summarised the key issues for the Breckland SPA as predation from cats and increased risk of fire. The key issues for the SAC included fly tipping, introduction and spread of alien plants and increased fire risk. A buffer zone of 400m from the boundary of the relevant Natura 2000 site was used and any sites within 400m were removed from the plan. This distance has been used in other areas, for example the Thames Basin, with under 400m being a distance at which the urbanisation impacts of built development cannot be mitigated for. Development beyond 400m may still have urban effects, but may be able to proceed with mitigation. This distance has therefore been applied in the screening of the East Cambridgeshire Local Plan.
- 3.18 Within the study area, only the SIP for Breckland SPA / SAC identified urbanisation as a priority issue (under the heading planning permission: general). However, Natural England have advised Chippenham Fen Ramsar should also be screened in for consideration, as development is proposed in the Local Plan less than 400m from Chippenham Fen site boundary. Therefore, likely significant effects relating to urbanisation need to be considered in relation to:
 - Breckland SAC / SPA
 - Fenland SAC Chippenham Fen Ramsar

Increased recreational pressure

- 3.19 Many Natura 2000 sites will be vulnerable to some degree of impact from increased recreational pressure and human presence in general. The type of effects will depend on the specific conditions and interest features at each site. The most common effects are through direct damage to habitats, for example through trampling, or disturbance of qualifying species, for example breeding or nesting birds.
- 3.20 It could be assumed that Natura 2000 Sites that are within easy walking distance of a

¹⁵ <u>file:///H:/Downloads/Breckland Local Plan Publication HRA 090817.pdf</u>

residential site allocation are likely to be visited more regularly than those that are not. However, HRAs of other Local Plans have considered this issue and research has demonstrated that the majority of visitors to such sites are by car. A visitor assessment of the Thames Basin Heaths SPA¹⁶ determined that the majority of visitors travel by car and 94% of visitor postcodes fell within a 5km radius of the SPA boundary. A visitor study undertaken by Footprint Ecology in 2011¹⁷, found that the median distance among visitors to Breckland SPA was 8.81km.

- 3.21 In short, there is no standard method for defining the 'zone of influence' of increased recreational pressure, and a range of approaches have been adopted nationally. Natural England have advised the Council (see **Appendix 6**), that any development within 8km of Natura 2000 sites should be taken into consideration as part of this HRA. Therefore, 8km is considered an appropriate distance inside which recreational pressure impacts should be considered and which could require mitigation measures. The nature of the proposed development will be taken into account in relation to this impact. For example, employment sites are less likely to result in increased recreation pressure than residential sites, as the employees will be in work within the employment site for the majority of their time spent there. Therefore site allocations with no housing element have been assumed to not give rise to increased recreational pressure and have been ruled out.
- 3.22 Recreational pressure can impact on Natura 2000 sites both within and outside the district, given that the majority of visitors to such sites are by car and the distances people are prepared to travel. This could lead to potential in-combination effects with development in neighbouring administrative areas. Woodwalton Fen SAC, which is in Huntingdonshire district, can be screened out due to its distance from East Cambridgeshire, as it is around 15km from the district boundary. Therefore, likely significant effects relating to recreational pressure are relevant to:
 - Fenland SAC (Wicken Fen and Chippenham Fen Ramsars)
 - Ouse Washes Ramsar / SPA
 - Devil's Dyke SAC
 - Breckland SAC / SPA

Reduced Air quality

- 3.23 There is potential for increased atmospheric pollution arising from air pollutants (nitrogen oxides) associated with increased vehicle journeys from residents, businesses and construction traffic associated with new housing and employment development proposed in the Local Plan.
- 3.24 Air pollution is most likely to affect Natura 2000 sites where plant, soil and water habitats are qualifying features. Deposition of pollutants to the ground and vegetation can alter the characteristics of the soil, affecting PH and nitrogen levels, which can then impact on plant health, productivity and species composition. Some qualifying animal species may also be affected indirectly if the habitat they rely on deteriorates as a result of air pollution.
- 3.25 According to 'The Highways Agency Design Manual for Roads and Bridges, Section 3, Part 1'¹⁸, in terms of nitrogen deposition from traffic emissions, only increases in Annual Average Daily Traffic (AADT) of 1000 AADT or more are considered significant. Additionally, it is widely accepted that air pollution from roads is unlikely to be significant beyond 200m from the road itself (**Figure 3**). In most cases, only traffic on major roads (e.g. 'A' roads) is considered sufficient to affect air quality at a level significant to habitats. 200m is therefore the distance that

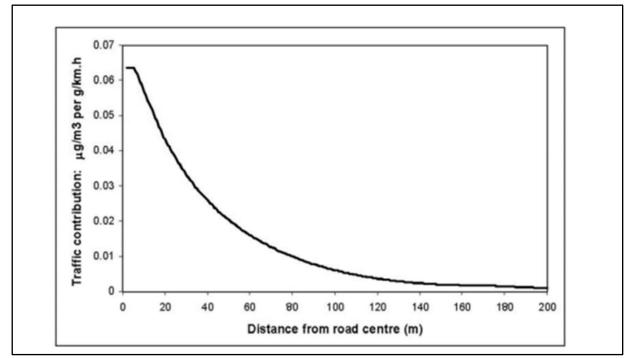
¹⁶ Fearnley, H. and Liley, D. 2013. Results of the 2012/13 visitor survey on the Thames Basin Heaths Special Protection Area (SPA). Natural England Commissioned Reports

¹⁷ Fearnley, H., Liley, D. and Cruickshanks, K. (2010). Visitor survey from results Breckland SPA. Footprint Ecology.

¹⁸ http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/section3/ha20707.pdf

has been used in this HRA to determine whether Natura 2000 sites are likely to be significantly affected by the Local Plan in terms of reduced air quality from atmospheric pollution.

Figure 3: Traffic Contribution to Pollutant Concentration at different Distances from the Road Centre (DFT)¹⁹



- 3.26 Two of the Natura 2000 sites screened into this HRA have qualifying features potentially vulnerable to atmospheric pollution.
- 3.27 The Breckland SAC/ SPA SIP identifies the impact of atmospheric pollution as a priority issue. Those features potentially affected by atmospheric pollution include; Stone Curlew, Woodlark, open grassland with grey-hair grass and common bent grass of inland dunes, European dry heaths and, dry grasslands and scrublands on chalk or limestone (important orchid sites). Given the location of the designated site in relation to the preferred site allocations in the Local Plan (5km plus) and the position of the major transport routes in East Cambridgeshire, any major roads within 200m of Breckland are not expected to experience a significant increase in traffic generation by residents of the Plan area for commuting, accessing services or facilities as a result of development in East Cambridgeshire. Likely significant effects as a result of increased air pollution can be screened out for Breckland SAC.
- 3.28 For Devil's Dyke SAC, those features potentially affected are dry grasslands and scrublands on chalk or limestone (important orchid sites). The SIP for Devil's Dyke states air pollution is a key issue: "*nitrogen deposition exceeds the site-relevant critical load for ecosystem protection and hence there is a risk of harmful effects, but the sensitive features are currently considered to be in favourable condition on the site. This requires further investigation*". Devil's Dyke lies within 200m of the A14 and A1304. Given that these roads may be used for vehicle journeys by residents from East Cambridgeshire to access services and facilities in Newmarket, consideration of air quality in relation to Devil's Dyke SAC should be included within the HRA.
- 3.29 Therefore, likely significant effects relating to increased air pollution need to be considered in relation to:
 - Devil's Dyke SAC

¹⁹ http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/section3/ha20707.pdf

Changes in Water Quality and Water Quantity

- 3.30 Many Natura 2000 sites are dependent upon there being appropriate water quality to support their integrity, including water courses and other wetland habitats, as well as habitat types such as heathlands, which may be dependent on ground water quality. Water quality can be affected by a number of factors, such as pollution, pesticides and nutrient enrichment and discharges from water treatment works. Agricultural activity poises one of the greatest risks to water quality of Natura 2000 sites, however new housing development can potentially increase the risk of adverse impact on water quality due to extra loads being placed on water treatment works and increased hard surfacing leading to run-off.
- 3.31 Both groundwater and surface levels can be affected by abstraction for public water supply and for industrial and agricultural uses. East Cambridgeshire is an area of serious water stress. Alternative sources of water are in limited supply. The district is particularly vulnerable to the impacts of climate change, where drier summers could reduce the availability of water at a time when the population is increasing.
- 3.32 Inappropriate water levels and water pollution are identified as priority issues in the SIP for the Ouse Washes SPA and SAC. Qualifying features (including breeding birds, overwintering birds and supporting grassland communities) are being adversely affected by increased flooding on the Ouse Washes. Inappropriate levels of diffuse pollution in combination with inappropriate water levels are resulting in changes to the grassland mosaic which has the potential to affect notified bird interests by destroying habitat used by the birds that visit or breed at the site.
- 3.33 At Fenland SAC sites, water pollution and hydrological changes have also been identified in the SIP as priority issues that are impacting on or threatening the condition of the site's qualifying features. Each site consists of standing water bodies, ditch systems, bogs, marshes and broad-leaved woodland carr. Woodwalton Fen is affected by high-nutrient water and winter flood water which is contributing to a decline in biodiversity and site features within the fen. Chippenham Fen is also affected by hydrological changes and high nutrient water reaching the fen from a mixture of groundwater, rainfall and run-off. Poor quality water is affecting the site's vascular plant assemblages.
- 3.34 Aquifer-fed fluctuating meres are features of the Breckland SAC, and the SIP identifies water pollution leading to high nutrient levels as a priority issues. However, these meres are restricted to the Norfolk Breckland. Given the distance between these features and East Cambridgeshire and lack of direct hydrological connectivity between East Cambridgeshire and Breckland SAC, likely significant effects on the Breckland SAC as a result of changes to water quality and/or quantity due to development proposed in the Local Plan can be screened out.
- 3.35 According to the SIP, Devil's Dyke SAC does not support any notified species that are sensitive to changes to water quality and/or quantity and does not list this impact as a priority pressure or threat. Therefore, for Devil's Dyke SAC, likely significant effects as a result of changes to water quality and/or quantity due to development proposed in the Local Plan have been screened out.
- 3.36 Therefore, likely significant effects relating to changes in water quality and/or quantity are relevant to:
 - Ouse Washes Ramsar / SPA/ SAC
 - Fenland SAC (Wicken Fen, Chippenham Fen and Woodwalton Fen Ramsars)

Identification of Other Plans or Projects That May Act In-Combination

- 3.37 The Habitats Regulations require an AA where "a land use plan is likely to have a significant effect on a European site (either alone or in-combination with other plans or projects) and is not directly connected with or necessary to the management of the site." This is because other plans could lead to potentially significant 'in-combination' effects when implemented together with the Local Plan.
- 3.38 The guidance states that only those documents that are considered most relevant should be considered for the 'in combination' test, as an exhaustive list could render the assessment exercise unworkable. The plans and projects considered relevant to the 'in-combination' assessment are set out in **Appendix 3**.
- 3.39 The Local Plans and associated HRA work of the following neighbouring authorities were taken into account when assessing in-combination effects on Natura 2000 sites with East Cambridgeshire's Local Plan and are the main focus:
 - Fenland;
 - Kings Lynn and West Norfolk
 - Forest Heath;
 - St Edmundsbury
 - South Cambridgeshire
 - Huntingdonshire
- 3.40 A review of projects on the National Infrastructure Planning website²⁰ did not reveal any projects, either within East Cambridgeshire or linked to any of the Natura 2000 sites in the study area, that need to be taken into consideration when considering in-combination effects with the Local Plan.

²⁰ https://infrastructure.planninginspectorate.gov.uk/projects/

4. HRA Screening Assessment of the Local Plan

- 4.1 A screening assessment has been undertaken to identify the likely significant effects of the Local Plan on Natura 2000 sites. Screening matrices have been prepared to assess policies and site allocations individually and these are presented in **Appendix 4**. In accordance with the requirements of the Habitats Regulations, the in-combination effects of the policies together and with other plans, projects or programmes has been taken into consideration.
- 4.2 The screening work has been checked and updated since it was presented in the HRA Report for the Proposed Submission Local Plan (November 2017), to ensure that no mitigation measures have been taken into account in considering likely significant effects and to incorporate consideration of Natural England's IRZs in relation to offsite physical damage or loss of habitat effects. The screening matrix table has been amended from previous iterations of the HRA screening to remove the column "Description of Avoidance Mitigation Measures within the Local Plan". Such measures will now be considered under Stage 2 AA. The result of this change is that the approach to the screening has adopted a more precautionary approach and therefore policies have been screened in for further consideration in Stage 2.
- 4.3 A summary of the results of the HRA Stage 1 Screening Assessment is provided below.

Significant Effects Unlikely

- 4.4 Significant effects on the integrity of Natura 2000 sites were assessed as **unlikely** for the majority of the general Local Plan policies, either because they would not result directly in development or they seek to protect, conserve or enhance the natural or historic environment, and/or positively steer development away from Natura 2000 sites. The following 31 policies were **screened out** from further HRA work (i.e. appropriate assessment):
 - LP1 A Presumption in Favour of Sustainable Development
 - LP3 The Settlement Hierarchy and the Countryside
 - LP4 Green Belt
 - LP5 Community-led Development
 - LP6 Meeting Local Housing Needs
 - LP7 Gypsies and Travellers and Travelling Showpeople Sites
 - LP9 Equine Development
 - LP10 Development Affecting the Horse Racing Industry
 - LP11 Tourist Facilities and Visitor Attractions
 - LP12 Tourist Accommodation (excluding holiday cottages)
 - LP13 Holiday Cottage Accommodation
 - LP14 Location of Retail and Town Centre Uses
 - LP15 Retail Uses in Town Centres
 - LP16 Infrastructure to Support Growth
 - LP17 Creating a Sustainable, Efficient and Resilient Transport Network
 - LP18 Improving Cycle Provision
 - LP19 Maintaining and Improving Community Facilities
 - LP20 Delivering Green Infrastructure, Trees and Woodland
 - LP21 Open Space, Sport and Recreational Facilities
 - LP22 Achieving Design Excellence
 - LP23 Water Efficiency
 - LP24 Renewable and Low Carbon Energy Development
 - LP25 Managing Water Resources and Flood Risk
 - LP26 Pollution and Land Contamination
 - LP27 Conserving and Enhancing Heritage Assets

- LP28 Landscape, Treescape and Built Environment Character, including cathedral Views
- LP29 Conserving local Green Spaces
- LP30 Conserving and Enhancing Biodiversity and Geodiversity
- LP33 Residential Annexes
- 4.5 The HRA screening also considered policies set out within the settlement chapters of the Local Plan. A total of 31 policies were **screened out** from further HRA work (i.e. appropriate assessment). Such policies mainly included general policy statements, and allocations for 'Local Green Space', which are designed to protect certain open spaces from development and, indirectly, may provide alternative accessible open space to Natura 2000 sites.

Significant Effects Likely

- 4.6 The following strategic policies in the Local Plan were assessed as **likely or uncertain** to result in significant effects on a Natura 2000 site and have therefore been **screened in** for further assessment:
 - LP2 Level and Distribution of Growth (10,385 homes, 6,000 new jobs)
 - LP8 Delivering Prosperity and Jobs (allocates strategic employment areas)
 - LP31 Development in the Countryside (sets out criteria for development in the countryside)
 - LP32 Infill Development in Locations Outside of Development Envelopes (sets out criteria for infill development outside of settlement boundaries)
- 4.7 Additionally, site allocations for 63 residential, 14 mixed use, 12 employment sites, and 1 leisure site, within the settlement chapters of the Local Plan, were considered **likely** to result in significant effects and have been **screened in** for further consideration. These sites are within the following settlements in East Cambridgeshire:
 - Bottisham
 - Burrough Green and Burrough
 End
 - Burwell
 - Cheveley
 - Dullingham
 - Ely
 - Fordham
 - Haddenham
 - Isleham
 - Kennett
 - Little Downham
 - Little Thetford

- Littleport
- Lode with Longmeadow
- Mepal
- Newmarket Fringe
- Soham
- Sutton
- Swaffham Bulbeck
- Swaffham Prior
- Wilburton
- Witcham
- Witchford
- 4.8 The results of the screening identified that Natura 2000 sites are potentially affected by impacts arising from the East Cambridgeshire Local Plan, either alone or in combination, as demonstrated in **Table 7**.

Impact Type	Summary of Screening Outcome	Consider Further in AA?
Ouse Washes R	amsar/ SPA	
Physical damage/ loss of habitat	Some site allocations within the Local Plan fall within the 'Goose and Swan Functional IRZ' for this site, recently prepared by Natural England. Land within this zone is considered to be potentially functionally linked to the Ouse Washes and therefore there is the potential for likely significant effects on the integrity of the Natura 2000 site.	Yes (offsite physical damage/loss only)
Increased recreational pressure	This Natura 2000 site lies within the East Cambridgeshire area and Natural England have advised (see Appendix 6) that the qualifying features of the site are under threat from increased visitor pressure. The screening assessment identified the potential for likely significant effects due to residential site allocations in the Plan being within 8km of the site boundary of the SPA. These could be significant in-combination, i.e. total recreation pressure from multiple residential developments within and beyond the study area.	Yes
Water quality	The features of this site are sensitive to water quality changes, particularly inappropriate levels of nutrients from diffuse pollution in combination with inappropriate water levels.	Yes
Water quantity	The features of this site are water resource sensitive and are particular vulnerable to increased flooding.	Yes
Breckland SPA/	SAC	
Physical damage/ loss of habitat	Site allocation KEN.M1 within the Local Plan falls within the IRZ for Breckland Farmland SSSI, a component of Breckland SPA. Land within this zone is considered to be potentially functionally linked to Breckland and therefore there is the potential for likely significant effects on the integrity of the Natura 2000 site.	Yes (offsite physical damage/loss only)
Increased recreational pressure	Whilst the site is outside of the East Cambridgeshire area, a mixed use site allocation at Kennett (KEN.M1) is approximately 2km from Breckland Farmland SSSI, a component of Breckland SPA and falls within the IRZ for this SSSI. The Breckland Farm SSSI has interest features that are potentially sensitive to increased recreational pressure. The screening assessment identified the potential for likely significant effects due to residential site allocations in the Plan being within 8km of the site boundary of the SPA. These could be significant in- combination, i.e. total recreation pressure from multiple residential developments within and beyond the study area.	Yes
Urbanisation	Whilst urbanisation is recognised in the SIP for Breckland SPA/ SAC as a priority issue, there is no development proposed in the Local Plan within 400m of the site boundary. The Local Plan will therefore have no effect via this pathway.	No

 Table 7: Summary of Findings for Natura 2000 Sites Screening, Based on Impact Type

Devil's Dyke SA	۱C	
Increased recreational pressure	This Natura 2000 site lies within the East Cambridgeshire area and Natural England have advised (see Appendix 6) that the qualifying features of the site are under threat from increased visitor pressure. The screening assessment identified the potential for likely significant effects due to residential site allocations being within 8km of the site boundary of the SAC. These could be significant in-combination, i.e. total recreation pressure from multiple residential developments within and beyond the study area.	Yes
Reduced air quality	The interest features of the SAC are sensitive to atmospheric pollutants and Devil's Dyke lies within 200m of the A14 and A1304, which may be used by new residents of site allocations in the settlements of: Bottisham, Burrough Green/ Borrough End, Dullingham, Swaffham Bulbeck, Swaffham Prior to access services and facilities in Newmarket. There is therefore potential for likely significant effects.	Yes
Fenland SAC - N	Nicken Fen	
Increased recreational pressure	The site lies within the East Cambridgeshire area and Natural England have advised (see Appendix 6) that the qualifying features of the site are under threat from increased visitor pressure. The screening assessment identified the potential for likely significant effects due to residential site allocations being within 8km of the site boundary of the Ramsar. These could be significant in-combination, i.e. total recreation pressure from multiple residential developments within and beyond the study area.	Yes
Water quality	The features of this site are sensitive to water quality changes. Water quality is important for floodplain fen, which is dependent on an adequate supply of nutrients being maintained to support aquatic habitats and the range of species associated with them.	Yes
Water quantity	The features of this site are water resource sensitive.	Yes
Fenland SAC –	Chippenham Fen	
Increased recreational pressure	This Natura 2000 site lies within the East Cambridgeshire area and Natural England have advised (see Appendix 6) that the qualifying features of the site are under threat from increased visitor pressure. The screening assessment identified the potential for likely significant effects due to residential site allocations being within 8km of the site boundary of the Ramsar. These could be significant in-combination, i.e. total recreation pressure from multiple residential developments within and beyond the study area.	Yes
Urbanisation	An employment allocation in Fordham (FRD.E1) is less than 400m from the site boundary of Chippenham Fen. The site's features are therefore potentially exposed to increased urbanisation pressure.	Yes (for site FRD.E1 only)

Water quality	The features of this site are sensitive to water quality changes, particularly high nutrient water reaching the fen from a mixture of groundwater, rainwater and run-off.	Yes
Water quantity	The features of this site are water resource sensitive, with concerns water does not seep into site compartments between ditches to the extent it once did.	Yes

- 4.9 Woodwalton Fen, part of the Fenland SAC, was screened in for consideration prior to Stage 1 Screening, however the screening assessment did not identified any potential impact pathways between this site and the proposals in the East Cambridgeshire Local Plan. On this basis, Woodwalton Fen can be ruled out for further consideration in the Appropriate Assessment.
- 4.10 Where likely significant effects were not ruled out through the screening assessment, the potential for these policies to have adverse effects on integrity of Natura 2000 sites included in this HRA is examined further in **Section 5** through the Appropriate Assessment stage of the HRA.

5. HRA Stage 2 Appropriate Assessment of the Local Plan

Introduction

- 5.1 The HRA screening described the aims, objectives and outlined the key policies in the Local Plan. The screening also considered and identified which policies had the potential to affect the integrity of the Natura 2000 sites within the plan's area of influence. This section considers in more detail whether the impacts identified are likely to have a significant effect on site integrity, either alone or in-combination with other plans and projects.
- 5.2 A site's integrity depends on it being able to sustain its 'qualifying features' (i.e. the features for which each site is significant) and to ensure their continued viability. As stated in EC Guidance, assessing effects on site integrity involves considering whether the predicted impacts of the Local Plan policies (either alone or in-combination) have the potential to:
 - Cause delays to the achievement of conservation objectives for the site,
 - Interrupt progress towards the achievement of conservation objectives for the site;
 - Disrupt those factors that help to maintain the favourable conditions of the site;
 - Interfere with the balance, distribution and density of key species that are the indicators of favourable condition on the site;
 - Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem;
 - Change the dynamics of relationships that define the structure or function of the site (e.g. relationships between soil and water, or animals and plants);
 - Interfere with anticipated natural changes to the site;
 - Reduce the extent of key habitats or the population of key species;
 - Reduce the diversity of the site;
 - Result in disturbance that could affect the population, density or balance between key species;
 - Result in fragmentation;
 - Result in the loss of key features.
- 5.3 An Appropriate Assessment has therefore been undertaken for the Natura 2000 sites in East Cambridgeshire where it was not considered possible to 'screen out' Local Plan policies and site allocations without more detailed appraisal and consideration. The likely significant effects from the Proposed Submission Local Plan were identified during the screening stage, in relation to the potential for effects from:
 - Development of 10,835 new homes
 - Creation of 6,000 new jobs
 - Site allocations for residential, mixed use, employment and leisure development.
- 5.4 Where the screening assessment identified potential likely significant effects in relation to a policy or proposal in the Local Plan (i.e. those policies shaded amber in the screening matrices), the potential impacts have been set out below and an assessment made (based on the information available) regarding whether the impact will have an adverse impact on the integrity of each Natura 2000 site. Both the conservation objectives for each Natura 2000 sites (listed in **Appendix 2**) and Natural England's SIPs (which provide an overview of the key issues affecting the condition of the features of the Natura 2000 sites) have been used to help understand what is needed to maintain the integrity of the Natura 2000 sites.
- 5.5 Where adverse impacts have been identified, consideration has been given to mitigation measures to be implemented that could reduce the likelihood or severity of the potential impacts, such that there would not be an adverse effect on the integrity of the site. The key steps involved in the AA are set out in **Table 8** below.

 Table 8: HRA Stage 2 Appropriate Assessment Key Stages

Stages	Habitats Regulation Assessment
Stage 2.	Explore the reasons for the Natura 2000 designation of screened in sites
Appropriate Assessment	Explore the environmental conditions required to maintain the integrity of the Natura 2000 sites and trends in current environmental processes
	Gain an understanding of the plan and its policies and consider each policy in the context of the environmental processes.
	Decide on any identified impacts and whether they would lead to an adverse effect on site integrity. Consider whether impacts are direct, indirect or cumulative.
	Identify other plans and projects that might affect the Natura 2000 sites in combination with the plan and decide whether there are any adverse effects that might not result from the plan in isolation but will do so 'in combination'.
	Develop mitigation measures to avoid the effect entirely, or if not possible, to mitigate the impact sufficiently that the effect on the Natura 2000 site is rendered effectively inconsequential.

Ouse Washes Ramsar / SPA/ SAC

Introduction

- 5.6 As concluded in **Section 4**, the Proposed Submission Local Plan has the potential to significantly effect this Natura 2000 site in relation to: physical damage or loss of habitat (offsite), disturbance from increased recreational pressure, changes in water quality and changes in water quantity.
- 5.7 The Ouse Washes is a wetland of major international importance comprising seasonally flooded wash lands, which are agriculturally managed in a traditional manner. It provides breeding and winter habitats for important assemblages of wetland bird species, particularly wildfowl and waders. The Site Improvement Plan (SIP) for the SPA and SAC states that of particular note are the large numbers of Teal, Pintail, Wigeon, Shoveler, Pochard and Berwick's Swans. The SIP indicates that the main pressures and threats on the site's interest features are: inappropriate water levels and water pollution. The majority of the Ouse Washes SSSI site is in an unfavourable (no change) condition.

Physical Damage or Loss of Habitat (offsite)

- 5.8 As the Natura 2000 sites are protected by the provisions of the Habitats Regulations, it is extremely unlikely development could result in direct, on-site damage or loss of habitat. The screening of the Local Plan (see **Appendix 4**) did not identify any potential for on-site habitat damage or loss as there are no site allocations in the Local Plan that overlap any of the boundaries of the Ouse Washes. Two of the policies (*LP2 Level and Distribution of Growth* and *LP8 Delivering Prosperity and Jobs*) could potentially result in development anywhere in the district. However, other policies in the Local Plan provide safeguards. For example, *LP30 Conserving and Enhancing Biodiversity and Geodiversity* ensures that the highest level of protection will be afforded to European sites. It is therefore highly unlikely that development of these types would take place resulting in the damage or loss of habitat from within the boundaries of the Ouse Washes.
- 5.9 However, the screening did identify potential for damage or loss of **off-site**, functionally connected habitat, which although not part of a Natura 2000 site, plays an important role in the life cycle of qualifying species and therefore, could have an adverse effect on the integrity of the Natura 2000 site. For the Ouse Washes, Natural England have advised that this is particularly relevant to swans, where feeding/foraging areas can be located beyond the boundaries of the site.
- 5.10 Numbers of Berwick's Swans have increased at the Ouse Washes since the 1940s when only a small number of birds wintered there. Around 5,000 birds now winter at this site, making it the key wintering area in Britain, supporting around 64.4% of the national population²¹. The Ouse Washes is the main wintering area for Whooper Swans in Britain, supporting around 17.2% of the national population.²²
- 5.11 The British Trust for Ornithology (BTO) calculate and provide Wetland Bird Survey Data (WeBS). Counts of swans at the Ouse Washes is shown in **Table 9** below.

²¹ www.jncc.defra.gov.uk/pdf/UKSPA/UKSPA-A6-15.pdf

²² www.jncc.defra.gov.uk/pdf/UKSPA/UKSPA-A6-15.pdf

 Table 9: Data on the Presence of Berwick's Swan and Whooper Swan at Ouse Washes²³

Species	Count Month	2012/13	2013/14	2014/15	2015/16	2016/17	5 year average
Berwick's Swan	January	1,961	1,073	2,887	1,445	2,997	2,073
Whooper Swan	January	5,412	5,372	7,139	8,016	7,663	6,720
Mute Swan	December	749	505	436	377	384	490

- 5.12 The **policies** in the Local Plan that were identified in the screening as potentially resulting in likely significant effects on the Ouse Washes as a result of physical damage or loss of habitat (offsite) were:
 - *LP2 Level and Distribution of Growth:* sets out the quantum of housing development over the period 2016-2036;
 - LP8 Delivering Prosperity and Jobs: sets out the employment allocations to assist in the delivery of jobs set out in policy LP2;
 - *LP31 Development in the Countryside:* sets out the circumstances where development in the 'countryside' is acceptable;
 - *LP32 Infill Development in Locations Outside of Development Envelopes:* sets out the circumstances where infill development outside of a Development Envelope (and hence in the countryside) is acceptable.
- 5.13 The screening identified that the Ouse Washes is potentially at risk from physical damage or loss of off-site habitat as a result of **site allocations** (see **Table 10** below) proposed in the Local Plan at the following locations:
 - Ely
 - Littleport
 - Mepal
 - Sutton
- 5.14 Natural England's SSSI Impact Risk Zones (IRZs) are a GIS based tool that can be used to identify potential risk posed by development proposals to SSSIs, SACs, SPAs and Ramsar sites. The tool identifies zones around each designated site, which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposals that could have adverse impacts.
- 5.15 A map produced by Lucking et al (2004) illustrated the areas of sensitive bird populations around the Ouse Washes SPA/ Ramsar in relation to **wind turbine** development (**Appendix 5**), However, Natural England have advised²⁴ that the IRZs have recently been updated to identify land which is potentially functionally linked to the Ouse Washes Natura 2000 site, and which provides more recent evidence than that presented in the Lucking report. These areas, identified through a BTO research project, are regularly used by Ouse Washes SPA and Ramsar qualifying species, particularly Whooper and Berwick's Swans. Whooper Swan and Berwick's Swan, are known to travel up to 30km between roosting and foraging sites²⁵. These birds select certain field types for foraging, including open grassland and arable stubble fields,

²³ <u>http://www.bto.org/volunteer-surveys/webs/publications/webs-annual-report</u>

²⁴ See **Appendix 6** Natural England's response to Proposed Submission Local Plan

²⁵ <u>https://windfarmbirdsurveys.com/services/breeding-bird-surveys/mapping-and-transect-surveys/whooper-</u>

<u>swan/</u>

so their field usage varies from year to year. A map of the 'Goose and Swan Functional Land IRZ' has been prepared by Natural England (**Figure 4**).

- 5.16 The assessment as to whether site allocations in the Local Plan may result in a loss of habitat (offsite) has been carried out on the basis that those site allocations that fall within the Goose and Swan Functional Land IRZ are potentially functionally linked to the Ouse Washes. The results of the assessment are set out in **Table 10** below.
- 5.17 The assessment shows that site allocations at Mepal and Sutton fall outside the Goose and Swan Functional Land IRZ, and therefore it is reasonable to conclude that they are not potentially functionally connected to the Ouse Washes. **Significant effects for these sites can therefore be ruled out.**
- 5.18 It then identifies sixteen sites that may support habitats that are functionally linked to the SPA in terms of providing foraging habitat for swans and geese, as the site allocations fall within the Goose and Swan Functional Land IRZ. However, sites which are Brownfield and/or have formal planning consent can be ruled out. On this basis, nine sites remain. One of these sites in Ely, and two in Littleport have planning consent, however the remaining six sites, (one in Ely and five in Littleport), are yet to receive planning consent. Without mitigation, there is a risk of likely significant effects on the qualifying species of the Ouse Washes (especially swans). Additionally, any non-allocated 'windfall' sites that were to come forward within the IRZ area on greenfield land, in agricultural use, could also potentially be functionally linked to the Ouse Washes. Natural England advise that the availability of swan functional habitat is influenced by changes in cropping patterns and crop rotations, and therefore development proposals should be accompanied by appropriate, up to date data to demonstrate no adverse impact on the Ouse Washes functional habitat.

Table 10: Assessment of the Potential for Site Allocations in the Local Plan to Contain Functionally Connected Land to the Ouse Washes SPA/ Ramsar

Name of	Details of Site Allocation	Site	Site falls within	Potential for Functional Connectivity?
settlement	and Site Status	Description/Current Use	Ouse Washes Functional Land IRZ?	
Ely	ELY.H1 Land off Lynn Road 19 dwellings Planning permission granted	Greenfield; currently in agricultural use (pasture/equestrian)	Yes	Potentially suitable habitat as the site is greenfield and in agricultural use but site has planning consent.
	ELY.H2 Land at Barton Road Car park 11 dwellings Planning permission granted	Brownfield; currently in use as a car park	Yes	No. The site is brownfield land and therefore is considered unsuitable for swan and geese foraging.
	ELY.H3 Former depot, Lisle Lane 58 dwellings Planning permission granted	Brownfield; currently in employment use	Yes	No. The site is brownfield land and therefore is considered unsuitable for swan and geese foraging.
	ELY.M1 North Ely Mixed use. 3,000 dwellings Site with part extant permission and adopted Local Plan 2015 allocation. Not the whole site has consent.	Greenfield; currently in agricultural use	Yes	Potentially suitable habitat as the site is greenfield and in agricultural use.

	ELY.M2	Brownfield; currently	Yes	No. The site is brownfield land and therefore is
	The Grange, Nutholt Lane	in employment use		considered unsuitable for swan and geese for aging.
	Mixed use (retail led), 10-50 dwellings			
	ELY.M3	Brownfield; currently	Yes	No. The site is brownfield land and therefore is
	Paradise Area, off Nutholt	in leisure use		considered unsuitable for swan and geese
	Lane			foraging.
	Mixed use (residential led), 50-65 dwellings			
	ELY.M6	Brownfield; currently	Yes	No. The site is brownfield land and therefore is
	Princess of Wales Hospital	in community use as a		considered unsuitable for swan and geese
		hospital		foraging.
	Mixed use (health led), 77 dwellings			
	ELY.E1	Brownfield; currently	Yes	No. The site is brownfield land and therefore is
	Ely Road and Rail Distribution Centre, Queen Adelaide Way	in employment use		considered unsuitable for swan and geese foraging.
	B1/B2/B8 uses only			
	ELY.L1 Downham Road Sports and Leisure Hub	Brownfield in leisure use	Yes	No. The site is brownfield land and therefore is considered unsuitable for swan and geese foraging.
	Planning permission granted			
Littleport	LIT.H3	Greenfield; currently	Yes	Potentially suitable habitat as the site is
	Land North East of 5 Back Lane	in agricultural use		greenfield and in agricultural use but site has planning consent.
	21 dwellings			

Planning permission granted			
LIT.H4 Field West of 1B Upton Lane 63 dwellings Planning permission granted	Greenfield; open space/outdoor recreation	Yes	Potentially suitable habitat as the site is greenfield and in agricultural use but site has planning consent.
LIT.H5 Land West of Highfields, Littleport Resolution to grant planning	Greenfield	Yes	Potentially suitable habitat as the site is greenfield and in agricultural use.
LIT.M1 West of Woodfen Road	Greenfield	Yes	Potentially suitable habitat as the site is greenfield and in agricultural use.
Mixed use, 250 dwellings			
LIT.M2 Land South of Grange Lane	Greenfield; currently in agricultural use	Yes	Potentially suitable habitat as the site is greenfield and in agricultural use.
Mixed use (residential led) 1,200 dwellings, plus an element of employment			
LIT.E1 Land at Wisbech Road 33 ha employment site	Mix of Greenfield and Brownfield	Yes	Potentially suitable habitat as the site is greenfield and in agricultural use.
LIT.E2 Land West of 150 Wisbech	Greenfield; currently in agricultural use	Yes	Potentially suitable habitat as the site is greenfield and in agricultural use.

	Road			
	1.5 ha existing employment allocation in adopted Local Plan 2015			
Mepal	MEP.H1 Land at Brick Lane 50 dwellings	Greenfield; currently in agricultural use	No	No. Whilst greenfield land in agricultural use, the site is outside the Ouse Washes Functional Land IRZ, and therefore, not considered to be functionally linked to the SPA
Sutton	SUT.H1 Land North of The Brook and West of Mepal Road 50-250 dwellings	Greenfield; currently in agricultural use	No	No. Whilst greenfield land in agricultural use, the site is outside the Ouse Washes Functional Land IRZ, and therefore, not considered to be functionally linked to the SPA
	SUT.H2 Land East of Garden Close 25 dwellings	Greenfield; garden and private amenity land	No	No. Whilst greenfield land in agricultural use, the site is outside the Ouse Washes Functional Land IRZ, and therefore, not considered to be functionally linked to the SPA

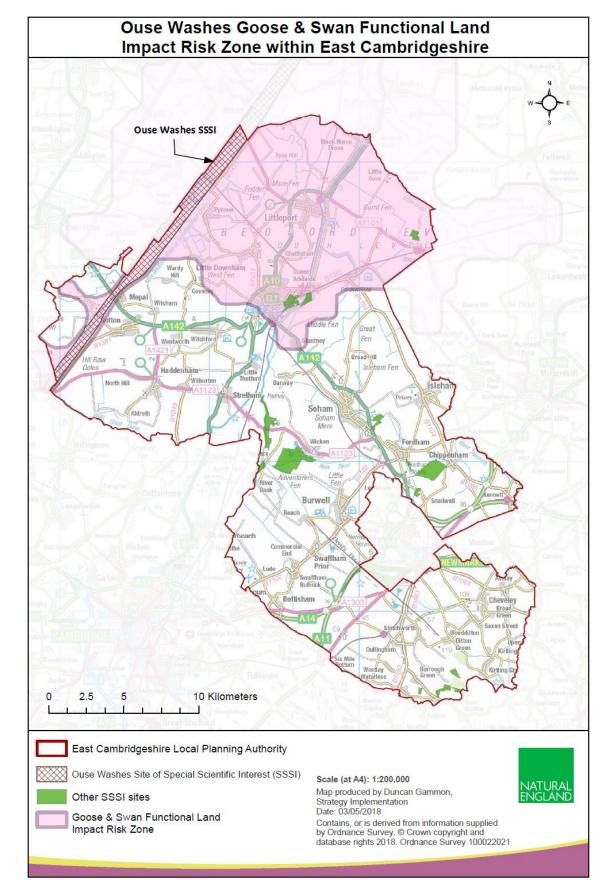


Figure 4: Ouse Washes Goose & Swan Functional Land IRZ (source: Natural England – May 2018)

In-Combination Effects

- 5.19 The above assessment of effects has considered the likely significant effects of offsite habitat damage and/or loss on the Ouse Washes of Local Plan policies acting alone. It is also necessary to consider whether different policies in the Plan could cumulatively result in likely significant effects on the integrity of the Ouse Washes. Policy LP2 Level and Distribution of Growth sets out the overall quantum of housing growth for the plan period 2016-2036. The majority of this growth will be met through allocated sites, which, in relation to offsite habitat impacts on the Ouse Washes, have been considered in Table 10 above. However, the overall growth figure makes an allowance (850 homes) for small sites coming forward on unallocated land for residential development, known as 'windfall' development. Policies LP31 and LP32 include potential for some of this windfall development in the open countryside, which could result in the damage or loss of offsite habitat should the development take place within the Ouse Washes Functional Land IRZ. The scale of such development is likely to be small; for example, policy LP32 limits infill development to 2 dwellings. As the scale and location of development coming forward under these policies is unknown, the impact on offsite habitat cannot be known until the detailed proposals come forward. Any development proposals coming forward under these policies will be assessed against policy LP30 Conserving and Enhancing Biodiversity and Geodiversity in the Local Plan, which requires development proposals that are likely to have an adverse effect, either alone or in-combination, on European designated sites to satisfy the requirements of the Habitat Regulations. However, policy LP30 does not currently recognise the Ouse Washes Goose and Swan Functional Land IRZ. There is therefore a risk of in-combination adverse effects as a result of windfall development coming forward that is not currently allocated in the plan and therefore it is not known exactly where it will be located.
- 5.20 In terms of in-combination effects with other plans and projects, the Kings Lynn & West Norfolk Core Strategy HRA considered loss of supporting habitat in relation to the Ouse Washes as a result of policy CS9 Renewable Energy and Climate Change. However, after Appropriate Assessment, it concluded no likely significant effects after the policy was modified. No other neighbouring Local Plan HRAs have identified damage or loss of habitat as a potential or likely significant effect.

Existing Mitigation Measures

- 5.21 The Ouse Washes Site Improvement Plan²⁶ lists the Ouse Washes Habitat Creation Project as an action to address current pressures and threats. The aim of the Habitat Creation Project is to create at least 500ha of new wetland grassland habitat (i.e. grassland where water levels are held near ground level in spring and summer) adjacent to the Ouse Washes for a range of birds to address a historical decline in bird numbers using the Ouse Washes (specifically breeding black tailed godwit, snipe and ruff, and wintering wigeon). At the current time, 92ha of 180ha of new wet grassland habitat creation is underway at Coveney, with a further site identified at Sutton. This project provides some mitigation to the potential loss of agricultural land used as rest and foraging areas for swans and geese outside of the Ouse Washes.
- 5.22 In the East Cambridgeshire Proposed Submission Local Plan, *Policy LP30 Conserving and Enhancing Biodiversity and Geodiversity* will provide a high level of protection to the Ouse Washes Natura 2000 site as it specifically seeks to protect international, national and local sites of importance, having regard to the hierarchy of designated sites, and requires development proposals that are likely to have an adverse effect, either alone or in-combination, on European designated sites to satisfy the requirements of the Habitat Regulations.

Settlement Policies:

²⁶ file:///H:/Downloads/SIP141009FINALv1.0%20Ouse%20Washes.pdf

Mepal

Mepal1 requires all development proposals to be carefully scrutinised to ensure that there is no adverse impact on the Ouse Washes.

• *Littleport* Littleport6 requires site LIT.M2 to deliver a significant net biodiversity gain

Recommendations to Ensure No Likely Significant Effects Resulting from the Plan

- 5.23 The Local Plan includes a strong policy framework that will ensure new development protects designated habitats and species, and delivers a net gain in biodiversity where possible, in accordance with the NPPF. However, in relation to site allocations at Ely and Littleport, as discussed in paragraph 5.17-5.18 above, the Local Plan has the potential to result in likely significant effects on the functional land of the Ouse Washes. It is therefore recommended that the Local Plan adopts a precautionary approach and includes a requirement for applicable allocation site policies (i.e. site allocations in Ely and Littleport that fall within the Goose and Swan Functional Land IRZ) to include a requirement for a project-level HRA screening to demonstrate that proposed development will not have any adverse effect on Ouse Washes functional land.
- 5.24 Following discussions with Natural England, it has been agreed that **the following text will be** added to each applicable site allocation policy for Ely and Littleport as an additional safeguard:

"Undertake a project level Habitats Regulation Assessment Screening to identify whether the land affected by the proposed development is regularly used by qualifying species (especially foraging and roosting swans) of the Ouse Washes SPA/ Ramsar site and whether the proposal will have a likely significant effect. Where this identifies a likely significant effect, applicants will be required to submit sufficient information for a project level Appropriate Assessment to be undertaken by the District Council under the Habitats Regulation Assessment process to ensure there will be no adverse impacts on European sites".

5.25 In addition, to address the potential for in-combination effects as highlighted in 5.19 above, it is recommended that an additional paragraph to the supporting text of LP30 should be added which explains how land beyond the site boundary of a European site may also provide important functional habitat for qualifying bird species and to ensure that any 'windfall' greenfield sites that fall within the Goose and Swan Functional Land IRZ also demonstrate no adverse effects on the qualifying species of the Ouse Washes. The following paragraph has been agreed with Natural England:

"In addition to the land specifically designated, land beyond the designated site boundary may also provide important habitat for qualifying bird species. This land requires appropriate consideration under the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats, &c.) Regulations 2010 (as amended). Natural England's Goose and Swan Functional Land Impact Risk Zone (IRZ) identifies land which is functionally linked to the Ouse Washes Special Protection Area (SPA) and Ramsar site. Land within this IRZ area, identified through a British Trust for Ornithology (BTO) research project, has the potential of being regularly used by Ouse Washes qualifying species, particularly swans, for foraging and roosting. An indicative map of the area is shown on the following page. Since the IRZ area is considered to be potentially functionally linked to the European designated site, development in this area requires appropriate consideration under the Conservation (of Habitats and Species) Regulations 2010 (as amended). As such, any greenfield 'major development' (see glossary) within the IRZ must undertake a project-level HRA to demonstrate that proposed development will not have any adverse effects on Ouse Washes functional land in accordance with the requirements of the Habitats Regulations. Where this applies to specific allocations in this plan, a bullet point has been included to draw the need for such an HRA to the applicants (and decision maker's) attention".

It can reasonably be concluded, after taking into account the above mitigation measures and consideration of other plans, that there will be no likely significant effects, alone or in combination, on the integrity of the Ouse Washes SPA/ Ramsar as a result of damage or loss to habitat, either onsite or offsite, through the implementation of the East Cambridgeshire Local Plan.

Disturbance from Increased Recreational Pressure

- 5.26 As identified in **Table 2** (Section 1), there is potential for increased visitor pressure and recreational activity arising from residents of new housing within East Cambridgeshire seeking recreational open space to visit close to home and further afield. However, recreational use can be managed and not cause a significant problem. At Woodwalton Fen Ramsar, dogs are not permitted on the site. At Chippenham Fen Ramsar, both the site and the surrounding area are privately owned. While there are Public Rights of Way running across the site, access beyond these paths is by permit only. Therefore, recreational use is recognised as part of the site management of most sites, and there are Management Plans to reduce and avoid adverse effects from recreational pressure.
- 5.27 There is public access to a large part of the Ouse Washes via a network of public rights of way, and visitors are encouraged and managed in some parts (the RSPB manage a nature reserve at Welches Dam and, the Wildlife Trust manage a nature reserve at Welney). Recreational activities undertaken within the site include walking and bird watching. Public access and recreational impact are not listed as vulnerabilities of the site in the SIP, however Natural England have raised disturbance from increased recreational pressure as a concern in their correspondence with the Council (**Appendix 6** and **Appendix 7**). They advise, in general for all Natura 2000 sites, that habitat degradation is occurring, particularly through trampling of vegetation and soil enrichment from dog excrement. Dogs off leads is also posing a threat to the continuance of long term management of the sites through livestock grazing.

- 5.28 The **policies** in the Local Plan that were identified in the screening (**Appendix 4**) as potentially resulting in likely significant effects on the Ouse Washes as a result in increased recreational pressure were:
 - *LP2 Level and Distribution of Growth:* sets out the quantum of housing development over the period 2016-2036;
- 5.29 The screening identified that the Ouse Washes is potentially at risk from increased recreational pressure as a result of residential **site allocations** proposed in the Local Plan at the following locations:
 - Ely: ELY.H1, ELY.H2. ELY.H3, ELY.M1, ELY.M2, ELY.M3, ELY.M4, ELY.M6
 - Haddenham: HAD.H1, HAD.H2, HAD.H3
 - Little Downham: LTD.H1
 - Littleport: LIT.H1, LIT.H3, LIT.H4, LIT.H5, LIT.M1, LIT.M2
 - Mepal: MEP.H1
 - Sutton: SUT.H1, SUT.H2
 - Wilburton: WIL.H1, WIL.H2

- Witcham: WTM.H1
- Witchford: WFD.H1, WFD.H2, WFD.H3, WFD.H4
- 5.30 These residential site allocations are located within 8km of the site boundary of the Ouse Washes. Sites located further than 8km from the designated site are unlikely to result in significant effects on the qualifying features of the site in relation to increased recreational pressure and therefore can be ruled out.
- 5.31 The screening identified that on its own, a residential allocation is unlikely to result in significant adverse effects as a result of increased recreational pressure. However, when considered together with residential allocations elsewhere in the plan, the cumulative effect could potentially result in likely significant effects. **Table 11** below shows the *indicative* newly arising population as a result of residential site allocations in settlements within 8km of the Ouse Washes. The figures are indicative, as the Local Plan allocates sites for indicative dwelling numbers and therefore these may be slightly higher or slightly lower when a planning application is submitted for a site.

Table 11: Newly Arising Population Within 8km of the Ouse Washes SAC / SPA / Ramsar

Name of settlement/s with residential allocations	Total <i>indicative</i> number of new dwellings within 8km of the Natura 2000 site	Total <i>indicative</i> new population arising from new dwelling provision (based on 2.35 people per household) ²⁷
 Ely Haddenham Little Downham Littleport Mepal Sutton Wilburton Witcham Witchford 	6,614 dwellings	15, 543 people

5.32 Natural England have advised that dogs are a key source of disturbance as part of increased recreational pressure as outlined in 5.27 above. In recent HRA work for the North East Lincolnshire Local Plan²⁸, a figure of 24% of households own a dog was used to calculate the number of newly arising dwellings with dogs that may use the Humber Estuary SAC for recreation. This figure is in line with the national Pet Population report 2017²⁹ published by the Pet Food Manufacturers Association. Taking this figure, the number of newly arising households within 8km of the Ouse Washes that may own a dog is as follows:

Table 12: Estimate of Newly Arising Households with Dogs within 8km of Ouse Washes SAC/

 SPA/Ramsar

Number of dwellings	Population (based on 2.35 people per household)	Households that own a dog (24% of households)
6,614	15, 543	1, 587

²⁷ Taken from the Cambridge Sub-Region SHMA 2013, https://cambridgeshireinsight.org.uk/wp-

content/uploads/2017/08/SHMA-Chapter-12-Forecasts-for-Homes-of-all-tenures.pdf

²⁸ https://www.nelincs.gov.uk/wp-content/uploads/2017/09/201709-Doc5-HRA.pdf

²⁹ https://www.pfma.org.uk/pet-population-2017

5.33 Therefore, the newly arising number of households that may own a dog has been estimated at 1,587. Data on visitor numbers, reasons for visiting etc. from visitor surveys is not currently available for the Ouse Washes Natura 2000 site. However, Natural England advises in their consultation response to the Proposed Submission Local Plan that "...some European site managers may be commissioning detailed visitor surveys in the near future to ensure that the effects of recreational pressure, associated with new housing development, are better assessed and mitigated in future". Any future HRA work will need to take into account this evidence when assessing effects from increased recreational pressure. Applying the precautionary principle, and in light of the evidence currently available, residential allocations in the East Cambridgeshire Local Plan, within 8km of the Ouse Washes, have the potential to result in likely significant effects as a result of increased recreational pressure. However, at the Ouse Washes, visitors are actively managed by the RSPB and Wildlife Trust, and public access and recreational pressure are not listed as a specific threats to the qualifying features of the site in the SIP (which is a live document that is updated to reflect changes in Natural England's evidence and knowledge). Mitigation measures are set out below and are required to provide certainty that the residential site allocations will not adversely affect the site integrity of the Ouse Washes.

In-Combination Effects

- 5.34 As identified in 5.31 above, there is potential for in-combination effects as a result of increased recreational pressure within the Local Plan itself, as a result of the combined effect of residential site allocations across a number of settlements. However, there is also potential for in-combination effects as a result of increased recreational pressure from cross-boundary residential development in neighbouring local authority areas and this is a concern raised by Natural England (**Appendix 6** and **Appendix 7**).
- 5.35 Those neighbouring local authorities with settlements within 8km of the Ouse Washes are:
 - Fenland
 - Huntingdonshire
 - Kinds Lynn and West Norfolk
 - South Cambridgeshire

The Local Plans (both adopted and in preparation) and associated HRA work of the four neighbouring authorities with potential for in-combination effects on the Ouse Washes as a result of increased recreational pressure were reviewed. The HRA Screening Report for Fenland concluded no likely significant effect as the development proposed in the Local Plan was greater than 5km from the Ouse Washes. The HRA Screening Report for the Huntingdonshire Local Plan concluded no likely significant effect as the majority of the proposed residential site allocations are greater than 8km from the Ouse Washes. The Kings Lynn and West Norfolk HRA Report for the Site Allocations Local Plan, whilst identifying the Ouse Washes as a Natura 2000 Site potentially affected by the Local Plan, ruled out the Ouse Washes from further consideration in the AA as likely significant effects were screened out. Finally, the South Cambridgeshire Local Plan HRA Screening Report also ruled out likely significant effects as a result of increased recreational pressure on the Ouse Washes. It is therefore reasonable to rule out likely significant effects as a result of increased recreational pressure from development within neighbouring local authorities.

Existing Mitigation Measures

5.36 The Proposed Submission Local Plan includes a number of policies that will help to mitigate potential increased recreational pressure arising from new residential development across the Local Plan area, not just in relation to likely significant effects on the Ouse Washes:

General policies:

- LP17 Creating a Sustainable, Efficient and Resilient Transport Network
- LP20 Delivering Green Infrastructure
- LP21 Open Space, Sport and Recreational Facilities
- LP29 Conserving Local Green Spaces
- LP30 Conserving and Enhancing Biodiversity and Geodiversity
- 5.37 Policies LP20 and LP21 in particular provide opportunities to mitigate increases in recreational pressure from residential development, by providing alternative open spaces for recreational activities through new development and adopting strategic approach to the delivery of high quality green infrastructure. Policy LP21 specifically recognises increased recreational pressure as a potential threat to nationally and internationally designated sites and makes provision for some major developments to provide open space, sport and recreational facilities beyond the standards set out in the policy in order to mitigate such threats.
- 5.38 The Cambridgeshire Green Infrastructure Strategy (2011) identifies a Strategic Green Infrastructure Network in Cambridgeshire. Within this network it identifies strategic areas, and target areas within these, with opportunities and projects that could help meet the strategy's objectives: to reverse the decline in biodiversity, to mitigate and adapt to climate change, to promote sustainable growth and economic development and, to support healthy living and wellbeing. Within the Eastern Fens and Towns Strategic Area, Ely, Littleport and Soham are identified as target areas with potential to deliver the strategy's objectives, as locations for future housing and employment development. Implementation of projects within the Green Infrastructure Strategy (or any revision to this document) will help to ensure that the impacts of increased recreational pressure associated with residential development are appropriately mitigated. Policy LP20 of the Local Plan specifically references the Green Infrastructure Strategy, stating the council will favour proposals for new and improved green infrastructure where they support the Green Infrastructure Strategy.
- 5.39 The following settlement policies will contribute to mitigating the effects of increased recreational pressure arising from new residential development within these settlements:
 - Little Downham

Policy Little Downham2 requires development proposals to contribute directly or through developer contributions, to improve the sports ground and open space.

• Littleport

Policy **Littleport1** requires new development to improve opportunities to access open space through investment in a network of attractive greenspaces, linking to the wider countryside.

Littleport5 requires site LIT.M2 to provide public open space and play facilities, whilst **Littleport6** requires site LIT.M3 to provide open space and recreational facilities, to include a significant area of landscaping and open space (20-25%), potentially in the form of a country park.

Mepal

Policy **Mepal1** provides specific protection to the Ouse Washes, requiring all development proposals to be carefully scrutinised to ensure that there is no adverse impact.

Sutton

Policy **Sutton4** requires site SUT.H1 to provide public open space and areas of play. This will contribute to mitigating the effects of additional recreational pressure from development within this settlement.

Recommendations to Ensure No Likely Significant Effects Resulting from the Plan

- 5.40 Residential development should deliver green infrastructure and open space in-line with the standards set out in Policy LP21 Open Space, Sport and Recreational Facilities and Annex A of the Local Plan. However, the following modifications to the Local Plan are recommended to ensure no adverse effect as a result of increased recreational pressure:
 - Littleport: Under Littleport6, the policy could be strengthened at bullet point f in relation to requiring a new Country Park that is "of a scale and quality to attract residents from the whole of Littleport, thereby creating a significant area of strategic open space". This would provide an open space for recreation, for both new and existing residents, which is a suitable alternative to the Ouse Washes.
 - Littleport: Under Littleport6, the policy could be further strengthened at bullet point g to clarify that the provision of a well-connected Green Infrastructure Network should include both internal connections as well as connections to the wider Green Infrastructure Network beyond the site allocation boundary.

It can reasonably be concluded, after taking into account the above mitigation measures and consideration of other plans, that there will be no likely significant effects, alone or in combination, on the integrity of the Ouse Washes SAC/ SPA/ Ramsar as a result of increased recreational pressure, through the implementation of the East Cambridgeshire Local Plan.

Breckland SAC/SPA

Introduction

- 5.41 As concluded in **Section 4**, the Proposed Submission Local Plan has the potential to significantly effect this Natura 2000 site in relation to: physical damage or loss of habitat (offsite) and disturbance from increased recreational pressure.
- 5.42 The Breckland SAC and SPA is characterised by extensive areas of grass heath, large arable fields, and the largest coniferous forest in lowland England. The SIP states that the SPA holds internationally important populations of Stone Curlew, Nightjar and Woodlark. Stone Curlew establishes nests on open ground provided by arable cultivation in spring, while Woodlark and Nightjar breed in recently felled areas and open heath areas within the conifer plantations. The heaths include the best preserved systems of inland sand dune vegetation. The SIP for the SPA and SAC identifies twenty priority issues for the site, including: planning permission in general and public access/disturbance.

Physical Damage or Loss of Habitat (offsite)

5.43 As the Natura 2000 sites are protected by the provisions of the Habitats Regulations, it is extremely unlikely development could result in direct, on-site damage or loss of habitat. The screening of the Local Plan (see **Appendix 4**) did not identify any potential for on-site habitat damage or loss as there are no site allocations in the Local Plan that overlap any of the boundaries of Breckland SPA / SAC. Two of the policies (*LP2 Level and Distribution of Growth* and *LP8 Delivering Prosperity and Jobs*) could potentially result in development anywhere in the district. However, other policies in the Local Plan provide safeguards. For example, *LP30 Conserving and Enhancing biodiversity* ensures that the highest level of protection will be afforded to European sites. It is therefore highly unlikely that development of these types would take place resulting in the damage or loss of habitat from within the boundaries of Breckland SAC/SPA.

- 5.44 The **policies** in the Local Plan that were identified in the screening as potentially resulting in likely significant effects on Breckland SAC/SPA as a result of physical damage or loss of habitat (offsite) were:
 - LP2 Level and Distribution of Growth: sets out the quantum of housing development over the period 2016-2036;
 - LP8 Delivering Prosperity and Jobs: sets out the employment allocations to assist in the delivery of jobs set out in policy LP2;
 - *LP31 Development in the Countryside:* sets out the circumstances where development in the 'countryside' is acceptable;
 - *LP32 Infill Development in Locations Outside of Development Envelopes:* sets out the circumstances where infill development outside of a Development Envelope (and hence in the countryside) is acceptable.
- 5.45 The screening identified that Breckland SAC/SPA is potentially at risk from physical damage or loss of off-site habitat as a result of **site allocations** proposed in the Local Plan at the following locations:
 - Kennett: KEN.M1
- 5.46 As previously discussed for the Ouse Washes, Natural England's SSSI Impact Risk Zones (IRZs) are a GIS based tool that can be used to identify potential risk posed by development

proposals to SSSIs, SACs, SPAs and Ramsar sites. In order to assess whether site allocations in the Local Plan may result in physical damage or loss of habitat (offsite) in relation to the Breckland SAC/SPA, firstly a useful starting point is to identify which site allocations fall within an IRZ of SSSIs that form a component of the Breckland SAC/SPA, and therefore are potentially functionally linked to this Natura 2000 site. The results of this assessment are set out in **Table 13** below.

Name of SSSI that is a component of Breckland SAC/SPA	Site Allocation in Local Plan falls within IRZ for SSSI?	Details of site allocation and status	Site description/ current use	Potential for functional connectivity?
Breckland	Yes	KEN.M1	Greenfield,	Yes. The IRZ lists
Farm SSSI		Land to the West	agricultural use	proposals for
		of Station Road		residential
				development of
		New site		100 units or more
		allocation in the		outside existing
		Local Plan: 41.2		settlements/urban
		ha mixed use site		areas as having
		to include around		the potential to
		500 dwellings,		impact upon the
		employment,		SSSI, and
		primary school		therefore impact
		and local centre		on the Breckland
				SPA

Table 13: Site Allocations in the Local Plan that fall within a Breckland SSSI IRZ

- 5.47 The use of the IRZ tool highlighted the potential for adverse impact on the Breckland Farm SSSI, and therefore the Breckland SPA, as a result of residential site allocation KEN.M1, Kennett, however this requires further consideration.
- 5.48 Breckland Farm SSSI lies between Bury St Edmunds in Suffolk and Swaffham in Norfolk. The designation citation for the SSSI states:

"The predominant land use within the SSSI is arable. This is characterised by field scale vegetables and root crops, generally in rotation with cereals and outdoor pig units. Management for gamebirds is also a characteristic feature. Stone curlews nest from March each year in cultivated land which has plenty of bare ground and very short vegetation. Late sown spring crops such as sugar beet and vegetables are favoured. They also occupy set-aside where this has been rotovated. Stone curlews are very sensitive to recreational disturbance and benefit from lack of recreational access on agricultural land; they are not usually affected by mechanised agricultural operations. Other habitats such as grassland are used for foraging. A restored mineral working also supports breeding stone curlews. Breckland Farmland SSSI is adjoined by a number of heathland SSSIs which also provide breeding and foraging habitat for stone curlew³⁰.

5.49 he website for the British Trust for Ornithology states that there are 350 pairs (summer) of Stone Curlew in Britain. The species has an unfavourable conservation status in Europe and its

³⁰ <u>https://necmsi.esdm.co.uk/PDFsForWeb/Citation/2000442.pdf</u>

population has declined historically but has made a substantial recent recovery and the population is currently increasing.

- 5.50 HRA work for the Breckland Core Strategy in 2008, and more recently for the Breckland Local Plan³¹, identified that Stone Curlews, a qualifying species of the Breckland SPA, use areas outside of the SPA boundary for both breeding and foraging. The HRA for the Core Strategy applied a 1500m buffer zone around the boundary of the SPA to indicate where Stone Curlews are present. Within this zone, likely significant effects from new development was presumed at the plan level and adverse effects could not be ruled out (unless the development is within existing urban areas). This is the primary buffer.
- 5.51 To provide protection for Stone Curlews that were nesting outside of the SPA boundary, but likely to be part of the same SPA population, a secondary buffer was then applied. A criterion based on 1km grid cells that had held at least 5 nesting attempts by Stone Curlews over the period 1995 2006 was used to identify areas outside the SPA that had been regularly used, and then a 1500m buffers applied to these areas.
- 5.52 More recent HRA work for the Breckland Local Plan has reviewed the buffers previously applied using more up to date data. Data provided by the RSPB, which covers the period 2011-2015, was used to update the primary and secondary buffers. A third buffer of orange grid cells was also identified to show areas where there was a deficit in data from the RSPB on the presence of Stone Curlews and therefore where additional data checks or survey data may be required to check for use by Stone Curlew populations.
- 5.53 The HRA recommended that within the primary 1500m buffer there should be a presumption against development as there was good evidence to suggest it would result in likely significant effects on the site integrity of the Breckland SPA. The secondary buffer identifies areas where land is functionally linked to the SPA and the orange cells areas where further information may be required. Within these two areas, the HRA recommended that project level HRA will be required to rule out adverse effects on integrity, and this may include provision of mitigation measures to negate the loss or deterioration of functionally linked land as a result of development and that further survey work may be necessary. The HRA also recommended that *"large developments adjacent to or just outside the primary or secondary buffer, particularly where occurring in an isolated area with few other buildings, are likely to also require project level assessment*". This approach is supported by the SIP, which states that in relation to pressure from planning permission; "Detailed, robust information submitted by applicants is required to enable Competent Authorities and statutory consultees to assess planning applications both for their impact and mitigation".
- 5.54 Footprint Ecology prepared a revised map of Stone Curlew buffers, as outlined above, to inform the Breckland Local Plan and Forest Heath Single Issue Review and Site Allocations Local Plan³². Using this map as a reference (see **Figure 5**), Site KEN.M1 in the East Cambridgeshire Local Plan appears to at least fall within the orange grid cells and potentially, partly within the secondary buffer.
- 5.55 On this basis, likely significant effects on Stone Curlew (a qualifying species of the Breckland SPA) as a result of physical damage or loss of offsite habitat, through development at site allocation KEN.M1, are currently uncertain and adverse effects cannot be ruled out at the Local Plan level. It is therefore recommended that a precautionary approach is taken.

³¹ <u>file:///H:/Downloads/Breckland_HRA_preferred_sites_and_settlements_180916.pdf</u>

³² <u>https://www.westsuffolk.gov.uk/planning/Planning_Policies/upload/Stone-Curlew-Buffers-in-the-Brecks-document-210716.pdf</u>

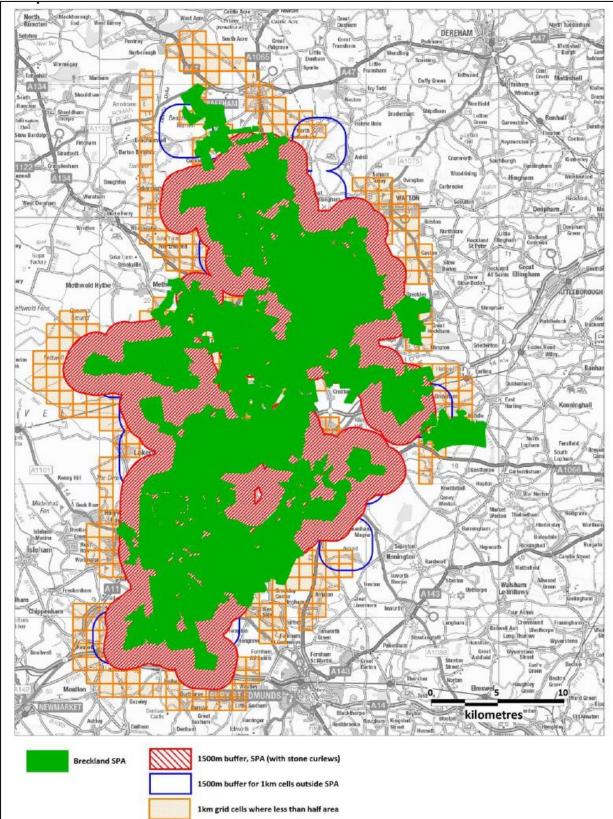


Figure 5: Stone Curlew Buffer Zones Breckland SPA

Source: Liley, D and Hoskin, R. (2017) *Breckland Local Plan Habitats Regulation Assessment at Publication Stage*, Footprint Ecology.

In-Combination Effects

5.56 The above assessment of effects has considered the likely significant effects of offsite habitat damage and/or loss on Breckland SPA of Local Plan policies acting alone. It is also necessary to consider whether different policies in the Plan could cumulatively result in likely significant effects on the integrity of the Breckland SPA. Policy LP2 Level and Distribution of Growth sets out the overall quantum of housing growth 2016-2036. The majority of this growth will be met through allocated sites, which, in relation to offsite habitat impacts on Breckland SPA, have been considered in **Table 13** above. However, the overall growth figure makes an allowance (850 homes) for small sites coming forward on unallocated land for residential development. known as 'windfall' development. Policies LP31 Development in the Countryside and LP32 Infill Development in Locations Outside of Development Envelopes, whilst not specifically allocating sites, provide guidance for potential windfall development in the open countryside, which could result in the damage or loss of offsite habitat should the development take place within the Stone Curlew Buffers as shown in **Figure 5**. The scale of such development is likely to be small; for example, policy LP32 limits infill development to 2 dwellings. The geographical area within the district of East Cambridgeshire where development could potentially impact on offsite habitat as identified in Figure 5, is also small; limited to orange 1km grid cells on the western fringes of Kennett and Chippenham Parishes. As the scale and location of development coming forward under these policies is unknown, the impact on offsite habitat cannot be known until the detailed proposals come forward. Any development proposals coming forward under these policies will be assessed against policy LP30 Conserving and Enhancing Biodiversity and Geodiversity in the Local Plan, which requires development proposals that are likely to have an adverse effect, either alone or in-combination, on European designated sites to satisfy the requirements of the Habitat Regulations. In-combination effects are therefore unlikely to be significant.

Existing Mitigation Measures

5.57 In the East Cambridgeshire Proposed Submission Local Plan, *Policy LP30 Conserving and Enhancing Biodiversity and Geodiversity* will provide a high level of protection to the Breckland SPA as it specifically seeks to protect international, national and local sites of importance, having regard to the hierarchy of designated sites, and requires development proposals that are likely to have an adverse effect, either alone or in-combination, on European designated sites to satisfy the requirements of the Habitat Regulations.

Settlement Policies:

- Kennett
- 5.58 Policy **Kennett4** requires any proposals for site KEN.M1 to include preparation of a thorough ecological assessment (incorporating mitigation measures) sufficient to enable a project level HRA to be undertaken.
- 5.59 This is an appropriate and proportionate approach for the Local Plan to take. As the site allocation lies within 'potentially' functionally linked land that may be suitable for Stone Curlew use (i.e. it lies within an area where current information to determine use by Stone Curlews is limited but which may provide suitable habitat due to its proximity to the SPA), it should be possible to provide mitigation for any impacts, as there is no loss or deterioration of land within the SPA itself. Survey work could be undertaken at project level and if that reveals regular use by Stone Curlews, then mitigation would need to be provided.

Recommendations to Ensure No Likely Significant Effects Resulting from the Plan

5.60 On the basis that the East Cambridgeshire Local Plan has taken a precautionary approach to likely significant effects on the Stone Curlew (a Breckland SPA qualifying species) as a result of

physical damage and/or loss of habitat (offsite) arising from development of site KEN.M1, by requiring a project level assessment through policy Kennett4, this HRA has no further recommendations.

It can reasonably be concluded, after taking into account the above mitigation measures and consideration of other plans, that there will be no likely significant effects, alone or in combination, on the integrity of the Breckland SPA as a result of damage or loss to habitat, either onsite or offsite, through the implementation of the East Cambridgeshire Local Plan.

Disturbance from Increased Recreational Pressure

- 5.61 There is potential for increased visitor pressure and recreational activity arising from residents of new housing within East Cambridgeshire seeking recreational open space to visit close to home and further afield, which may include Natura 2000 sites. However, recreational use can be managed and not cause a significant problem. At Woodwalton Fen Ramsar, dogs are not permitted on the site. At Chippenham Fen Ramsar, both the site and the surrounding area are privately owned. While there are Public Rights of Way running across the site, access beyond these paths is by permit only. Therefore, recreational use is recognised as part of the site management of most sites, and there are Management Plans to reduce and avoid adverse effects from recreational pressure.
- 5.62 For Breckland, the qualifying features of both the Breckland SPA and SAC are potentially affected. Stone Curlew, European Nightjar and Woodlark, are particularly sensitive to disturbance by human activity. SAC features may be affected through eutrophication as a result of dog fouling and unauthorised fires and disturbance of soils, in particular on commons and heaths.

- 5.63 The **policies** in the Local Plan that were identified in the screening (**Appendix 4**) as potentially resulting in likely significant effects on the Breckland SAC/SPA as a result in increased recreational pressure were:
 - *LP2 Level and Distribution of Growth:* sets out the quantum of housing development over the period 2016-2036;
- 5.64 The screening identified that the Stone Curlew, a qualifying species of the SPA, is potentially at risk from increased recreational pressure as a result of residential **site allocations** proposed in the Local Plan at the following locations:
 - Kennett: KEN.M1
- 5.65 This site allocation is located within 8km of the site boundary of the Breckland SPA. Sites located further than 8km from the designated site are unlikely to result in significant effects on the qualifying features of the site in relation to increased recreational pressure and therefore can be ruled out.
- 5.66 The screening identified that on its own, a residential allocation is unlikely to result in significant adverse effects as a result of increased recreational pressure. However, when considered together with residential allocations elsewhere in the plan, the combined effect could potentially result in likely significant effects. **Table 14** below shows the *indicative* newly arising population as a result of residential site allocations in Kennett which is within 8km of both Breckland SAC

and SPA boundaries. The figures are indicative, as the Local Plan allocates sites for indicative dwelling numbers and therefore these may be slightly higher or slightly lower when a planning application is submitted for a site.

 Table 14: Newly Arising Population Within 8km of Breckland SPA / SAC

Name of settlement/s with residential allocations	Total <i>indicative</i> number of new dwellings within 8km of the Natura 2000 site	Total <i>indicative</i> new population arising from new dwelling provision (based on 2.35 people per household) ³³
Kennett	500 dwellings	1,175 people

5.67 Natural England have advised that dogs are a key source of disturbance as part of increased recreational pressure as outlined in 6.27 above. Using the same methodology as was used for the Ouse Washes, the number of newly arising households within 8km of Breckland that may own a dog has been estimated at 120 (see **Table 15**). Housing sites may also come forward outside of the Local Plan allocations (known as 'windfall sites') within 8km of the Breckland Natura 2000 site.

Table 15: Estimate of newly Arising Households with Dogs within 8km of Breckland SPA/SAC

Number of dwellings	• •	Households that own a dog (24% of households)
500	1,175	120

- 5.68 Visitor surveys at Natura 2000 sites across Norfolk were undertaken in 2015 and 2016 and published in a report by Panter et al in 2017³⁴. The Natura 2000 sites surveyed were sites with public access and potentially at risk of disturbance from increased recreation levels. The Breckland SPA / SAC was included in the survey and had 9 survey points. The results revealed that 95% of those interviewed visiting sites in the Brecklands were visiting from home, with a high proportion of dogs recorded (26% of visitors). The most common reason for visiting was dog walking and the majority of visitors arrived at the sites by car. Analysis of postcode data revealed the most frequent settlements where visitors came from for the Breckland sites were Thetford, Mildenhall, Swaffham, Mumford and Brandon. The majority of visitors were from within Norfolk, and this reflects the most common reason given for choosing to visit a particular site was 'close to home'. This suggests these sites are mainly used by locals. The median distance to an interviewees home was 7.9km. However, some postcodes were also recorded from within East Cambridgeshire.
- 5.69 The report then looked at the impacts (in terms of increases in recreation) associated with planned future growth in each Norfolk planning authority and estimated the change in visitors as a result of potential new housing. The predictions for allocated new housing were an additional 233 visitors, an increase of just under 14%. There were, however, significant variations between areas. The largest increase in visitors by Norfolk residents was predicted at the Breckland sites, with an overall 30% increase in access at the 9 survey locations, predominantly as a result of new housing in Breckland district. The report found that increases in housing beyond 10km was unlikely to have a marked effect on access, unless the volume of housing is particularly large.

content/uploads/2017/08/SHMA-Chapter-12-Forecasts-for-Homes-of-all-tenures.pdf

³³ Taken from the Cambridge Sub-Region SHMA 2013, <u>https://cambridgeshireinsight.org.uk/wp-</u>

³⁴ <u>https://www.north-norfolk.gov.uk/media/3382/visitor-surveys-at-european-protection-sites-2015-16.pdf</u>

- 5.70 The report concluded with outlining potential mitigation measures based on the findings of the visitor surveys. For the Brecklands, giving that people are mainly choosing to visit sites in this area because they are local, close to home and easy to travel to, and that they are being used regularly for activities such as dog walking, the provision of alternative natural greenspace was cited as a potentially effective mitigation solution.
- 5.71 In terms of the East Cambridgeshire Local Plan, what the available evidence indicates is that housing development in a short distance (within 8km) of Breckland has the potential to lead to an increase in visits to the Natura 2000 site for recreational purposes, particularly regular visits by local residents for activities such as dog walking. Therefore, applying the precautionary principle, it is not possible to rule out likely significant effects on site integrity. Mitigation measures are set out below and are required to put into place protective measures to ensure that development proposed in the Plan will not adversely affect site integrity.

In-Combination Effects

- 5.72 As identified in 5.64 above, there is potential for in-combination effects as a result of increased recreational pressure within the Local Plan itself, as a result of the combined effect of residential site allocations across a number of settlements. However, there is also potential for in-combination effects as a result of increased recreational pressure from cross-boundary residential development in neighbouring local authority areas and this is a concern raised by Natural England (**Appendix 6** and **Appendix 7**).
- 5.73 Those neighbouring local authorities with settlements within 8km of Breckland SAC/SPA are:
 - Forest Heath
 - Breckland
 - King's Lynn and West Norfolk
- 5.74 The Local Plans (both adopted and in preparation) and associated HRA work of the three neighbouring authorities with potential for in-combination effects on the Breckland SAC/SPA as a result of increased recreational pressure were reviewed. The HRA Report for the Forest Heath Site Allocations Local Plan ruled out likely significant effects on Breckland SAC and SPA, as mitigation offered by policies in the Plan and a Recreation Mitigation and Monitoring Strategy were judged to offer sufficient mitigation to avoid likely significant effects due to recreation pressure. The HRA for Breckland Local Plan stated that, whilst significant issues in relation to recreation pressure are not currently evident, recreation pressure was a likely future impact on the Breckland SAC/SPA as a result of housing growth. It concluded that mitigation is provided by the policies in the Plan and therefore no likely significant effects as a result of increased recreation pressure. Finally, the HRA AA Report for the King's Lynn and West Norfolk Core Strategy concluded that policies in the Plan could be amended to take into account disturbance to Stone Curlews around the Breckland SPA and to stress a partnership approach to recreation management in the SPA. Following these modifications, the Plan would not adversely affect the integrity of the Breckland SPA. It is therefore reasonable to rule out likely significant effects as a result of increased recreational pressure from development within neighbouring local authorities.

Existing Mitigation Measures

5.75 The Proposed Submission Local Plan includes a number of policies that will help to mitigate potential increased recreational pressure arising from new residential development across the Local Plan area, not just in relation to likely significant effects on Breckland (see 5.36 to 5.37 under Ouse Washes which also applies here).

- 5.76 Implementation of projects within the Green Infrastructure Strategy (or any revision to this document) will help to ensure that the impacts of increased recreational pressure associated with residential development are appropriately mitigated. Policy LP20 of the Local Plan specifically references the Green Infrastructure Strategy, stating the Council will favour proposals for new and improved green infrastructure where they support the Green Infrastructure Strategy.
- 5.77 The following settlement policies will contribute to mitigating the effects of increased recreational pressure arising from new residential development within these settlements:
 - Kennett

Policy **Kennett4** requires any proposals for site KEN.M1 to include preparation of a thorough ecological assessment (incorporating mitigation measures) sufficient to enable a project level HRA to be undertaken. Any open spaces and recreational facilities created by the development should not result in significant adverse effect, due to recreational pressure, on Breckland SPA/SAC.

Recommendations to ensure no likely significant effects resulting from the Plan

5.78 All new residential development should deliver green infrastructure and open space in-line with the standards set out in Policy LP21 Open Space, Sport and Recreational Facilities and Annex A of the Local Plan. However, it is recommended that the Local Plan is strengthened at Policy *LP21 Open Space, Sport and Recreational Facilities* to ensure no likely significant effects on the Breckland Natura 2000 site as a result of increased recreational pressure arising from new residential development, so that Part B of the policy reads as follows (see the next section of this HRA report in relation to the reference below to Devil's Dyke):

"Subject to any limitations set by legislation, for some major development proposals, and especially any such provision within an assumed 8km zone of influence of Devil's Dyke SAC and Breckland SPA (see indicative Diagram on page X), it may be necessary to provide open space, outdoor sport and recreational facilities in excess of Part A requirements, with those instances being where it is identified that such additional provision is needed to mitigate the effects of increased recreational pressure on nationally or internationally designated biodiversity sites. This 'in excess', which would need to be agreed with the Council (potentially in consultation with Natural England), could be on-site, off-site and/or include a financial contribution to the delivery of a project as set out in the Cambridgeshire Green Infrastructure Strategy (2011 or successor document)".

It can reasonably be concluded, after taking into account the above mitigation measures and consideration of other plans, that there will be no likely significant effects, alone or in combination, on the integrity of the Breckland SAC/ SPA as a result of increased recreational pressure, through the implementation of the East Cambridgeshire Local Plan.

Devil's Dyke SAC

Introduction

- 5.79 As concluded in **Section 4**, the Proposed Submission Local Plan has the potential to significantly effect this Natura 2000 site in relation to: disturbance from increased recreational pressure and reduced air quality.
- 5.80 According to the SIP for Devil's Dyke SAC³⁵, the site "holds one of the best and most extensive areas of species-rich chalk grassland in Cambridgeshire... and represents a habitat type now very restricted in distribution and extent throughout its British range". The qualifying feature of the site is semi-natural dry grasslands and scrubland facies. Although the SIP does not specifically state recreational pressure as a priority issue for the site, Natural England have raised disturbance from increased recreational pressure as a concern in their correspondence with the council (**Appendix 6** and **Appendix 7**). They advise, in general for all Natura 2000 sites, that habitat degradation is occurring, particularly through trampling of vegetation and soil enrichment from dog excrement. Dogs off leads is also posing a threat to the continuance of long term management of the sites through livestock grazing.

Disturbance from Increased Recreational Pressure

- 5.81 There is potential for increased visitor pressure and recreational activity arising from residents of new housing within East Cambridgeshire seeking recreational open space to visit close to home and further afield, which may include Natura 2000 sites. However, recreational use can be managed and not cause a significant problem. At Woodwalton Fen Ramsar, dogs are not permitted on the site. At Chippenham Fen Ramsar, both the site and the surrounding area are privately owned. While there are Public Rights of Way running across the site, access beyond these paths is by permit only. Therefore, recreational use is recognised as part of the site management of most sites, and there are Management Plans to reduce and avoid adverse effects from recreational pressure.
- 5.82 For Devil's Dyke, the lowland calcareous grassland habitat for which the site qualifies as a SAC requires active management, traditionally achieved by grazing. Recreational activity, particularly dog walking, risks the effective management of the site via this approach. Devil's Dyke is accessed via a long distance footpath, a Public Right of Way, running the length of the dyke. Parking is available at the July Racecourse, Newmarket.

- 5.83 The **policies** in the Local Plan that were identified in the screening (**Appendix 4**) as potentially resulting in likely significant effects on the Devil's Dyke SAC as a result in increased recreational pressure were:
 - LP2 Level and Distribution of Growth: sets out the quantum of housing development over the period 2016-2036;
 - LP8 Delivering Prosperity and Jobs: sets out the employment allocations to assist in the delivery of jobs set out in policy LP2
- 5.84 The screening identified that the Devil's Dyke SAC is potentially at risk from increased recreational pressure as a result of residential **site allocations** proposed in the Local Plan at the following locations:
 - Bottisham: BOT.H1

³⁵ http://publications.naturalengland.org.uk/publication/6031209599598592

- Burrough Green/Burrough End: BRG.H1
- Burwell: BUR.H1, BUR.PH1
- Lode with Long Meadow: LOD.H1
- Newmarket Fringe: NFR.H1
- Swaffham Bulbeck: SWB.H1, SWB.H2, SWB.H3
- 5.85 The screening identified that on its own, a residential allocation is unlikely to result in significant adverse effects as a result of increased recreational pressure. However, when considered together with residential allocations elsewhere in the plan, the combined effect could potentially result in likely significant effects. **Table 16** below shows the *indicative* newly arising population as a result of residential site allocations in settlements within 8km of the Devil's Dyke SAC boundary. The figures are indicative, as the Local Plan allocates sites for indicative dwelling numbers and therefore these may be slightly higher or slightly lower when a planning application is submitted for a site.

Table 16: Newly Arising Population Within 8km of Devil's Dyke SAC

Name of settlement/s with residential allocations	Total <i>indicative</i> number of new dwellings within 8km of the Natura 2000 site	Total <i>indicative</i> new population arising from new dwelling provision (based on 2.35 people per household) ³⁶
 Bottisham Burrough Green/Burrough End Burwell Lode with Long Meadow Newmarket Fringe Swaffham Bulbeck 	591 dwellings	1,389 people

5.86 Natural England have advised that dogs are a key source of disturbance as part of increased recreational pressure as outlined in 5.27 above. Using the same methodology as was used for the Ouse Washes, the number of newly arising households within 8km of Devil's Dyke SAC that may own a dog has been estimated at 142 (see **Table 17**). Housing sites may also come forward outside of the Local Plan allocations (known as 'windfall sites') within 8km of Devil's Dyke.

Table 17: Estimate of Newly Arising Households with Dogs Within 8km of Devil's Dyke SAC

Number of dwellings	•	Households that own a dog (24% of households)
591	1,389	142

5.87 Data on visitor numbers, reasons for visiting etc. from visitor surveys is not currently available for the Devil's Dyke SAC, however Natural England advises in their consultation response to the Proposed Submission Local Plan that "...some European site managers may be commissioning detailed visitor surveys in the near future to ensure that the effects of recreational pressure, associated with new housing development, are better assessed and mitigated in future". Any future HRA work will need to take into account this evidence when assessing effects from increased recreational pressure.

³⁶ Taken from the Cambridge Sub-Region SHMA 2013, <u>https://cambridgeshireinsight.org.uk/wp-content/uploads/2017/08/SHMA-Chapter-12-Forecasts-for-Homes-of-all-tenures.pdf</u>

5.88 Applying the precautionary principle, and in light of the evidence currently available, housing growth in the East Cambridgeshire Local Plan, within 8km of Devil's Dyke, has the potential to result in likely significant effects as a result of increased recreational pressure. Mitigation measures are set out below and are required to provide certainty that the site allocations will not adversely affect the site integrity of Devil's Dyke.

In-Combination Effects

- 5.89 As identified in 5.85 above, there is potential for in-combination effects as a result of increased recreational pressure within the Local Plan itself, as a result of the combined effect of residential site allocations across a number of settlements. However, there is also potential for in-combination effects as a result of increased recreational pressure from cross-boundary residential development in neighbouring local authority areas and this is a concern raised by Natural England (Appendix 6 and Appendix 7). Those neighbouring local authorities with settlements within 8km of Devils' Dyke SAC are:
 - Forest Heath
 - South Cambridgeshire
- 5.90 The Local Plans (both adopted and in preparation) and associated HRA work of the two neighbouring authorities with potential for in-combination effects on the Devil's Dyke SAC as a result of increased recreational pressure were reviewed. The HRA Screening Report for Forest Heath Single Issue Review of the Core Strategy screened out Devil's Dyke SAC from further consideration in relation to effects from increased recreation pressure, as no significant vulnerability to recreation pressure was identified, based on the designated features and pressures described in the SIP. The HRA Report for the Forest Heath Site Allocations Local Plan also ruled out significant effects on Devil's Dyke SAC for the same reasons. The HRA Screening Report for the South Cambridgeshire Local Plan concluded no likely significant effects to Devil's Dyke SAC associated with the Local Plan, either alone or in-combination. Due to the distance of the SAC from South Cambridgeshire, it was considered that visitor numbers would be unlikely to increase significantly. It is therefore reasonable to rule out likely significant effects as a result of increased recreational pressure from development within neighbouring local authorities.

Existing Mitigation Measures

- 5.91 The Proposed Submission Local Plan includes a number of policies that will help to mitigate potential increased recreational pressure arising from new residential development across the Local Plan area, not just in relation to likely significant effects on Devil's Dyke (see 5.36 to 5.37 under Ouse Washes which also applies here).
- 5.92 Implementation of projects within the Green Infrastructure Strategy (or any revision to this document) will help to ensure that the impacts of increased recreational pressure associated with residential development are appropriately mitigated. Policy LP20 of the Local Plan specifically references the Green Infrastructure Strategy, stating the council will favour proposals for new and improved green infrastructure where they support the Green Infrastructure Strategy.
- 5.93 The following settlement policies will contribute to mitigating the effects of increased recreational pressure arising from new residential development within these settlements:
 - Burwell The Local Plan currently recognises the sensitivity of the Devil's Dyke SAC under the settlement chapter for Burwell. Policy **Burwell1** states all development to the south of the

village will be carefully scrutinised to ensure that there is no adverse impact upon the Dyke.

Policy **Burwell4** sets out the requirements in relation to site BUR.H1 for around 350 dwellings. This requires the provision of 2.2 ha of public open space and at least 1 play area, as well as 2.5ha of land for outdoor sports provision. This will contribute to mitigating the effects of additional recreational pressure from this development.

 Newmarket Fringe Policy Newmarket1 seeks to protect existing open space from development within the built up area of Newmarket.

Recommendations to ensure no likely significant effects resulting from the Plan

- 5.94 All new residential development should deliver green infrastructure and open space in-line with the standards set out in Policy LP21 Open Space, Sport and Recreational Facilities and Annex A of the Local Plan. However, the following modifications to the Local Plan are recommended to ensure no adverse effect as a result of increased recreational pressure:
 - **Burwell**: The text of **Burwell1** could be strengthened by recognising Devil's Dyke as a nationally designated site (i.e. a SSSI) and an internationally designated site, (i.e. a SAC).
 - It is recommended that the Local Plan is strengthened at *Policy LP21 Open Space, Sport* and *Recreational Facilities* to ensure no likely significant effects on the Devil's Dyke Natura 2000 site as a result of increased recreational pressure arising from new residential development, so that Part B of the policy reads as follows:

"Subject to any limitations set by legislation, for some major development proposals, and especially any such provision within an assumed 8km zone of influence of Devil's Dyke SAC and Breckland SPA (see indicative Diagram on page X), it may be necessary to provide open space, outdoor sport and recreational facilities in excess of Part A requirements, with those instances being where it is identified that such additional provision is needed to mitigate the effects of increased recreational pressure on nationally or internationally designated biodiversity sites. This 'in excess', which would need to be agreed with the Council (potentially in consultation with Natural England), could be on-site, off-site and/or include a financial contribution to the delivery of a project as set out in the Cambridgeshire Green Infrastructure Strategy (2011 or successor document)".

It can reasonably be concluded, after taking into account the above mitigation measures and consideration of other plans, that there will be no likely significant effects, alone or in combination, on the integrity of the Devil's Dyke SAC as a result of increased recreational pressure, through the implementation of the East Cambridgeshire Local Plan.

Reduced Air Quality

5.95 Increased atmospheric pollution resulting from increased traffic flow levels arising from new development can impact on protected habitats and species. The screening assessment was unable to rule out likely significant effects in relation to Devil's Dyke SAC, as the site lies within

200m of both the A14 and A1304, two of the main routes into Newmarket. This is because some of the site allocations are located in settlements to the south of Newmarket which are most likely to look to Newmarket for services and facilities, and whose residents would most likely use the A14 or A1304.

5.96 Likely significant effects can be ruled out on Wicken Fen, Chippenham Fen, Woodwalton Fen Ramsars and Breckland SAC. There are no roads within 200m of these designated sites that are likely to experience an increase in traffic flows as a result of new development proposed in the East Cambridgeshire Local Plan.

- 5.97 The **policies** in the Local Plan that were identified in the screening (**Appendix 4**) as potentially resulting in likely significant effects on the Devil's Dyke SAC as a result of a reduction in air quality were:
 - *LP2 Level and Distribution of Growth:* sets out the quantum of housing development over the period 2016-2036;
 - LP8 Delivering Prosperity and Jobs: sets out the employment allocations to assist in the delivery of jobs set out in policy LP2
- 5.98 The screening assessment identified the following **site allocations** that could potentially lead to reduced air quality and potentially adverse effects on the qualifying features of Devil's Dyke SAC:

Table 18: Site Allocations Screened in for Potential Likely Significant Effects on Devil's Dyke SAC in
Relation to Reduced Air Quality

Name of Settlement/s with Residential or	Details of Site Allocation
Employment Allocations	
Bottisham	BOT.H1
	Land East of Bell Road
	50 days Warms
	50 dwellings
	BOT.E1
	Extension to Tunbridge Lane Business Park
	0.9ha
Burrough Green/Burrough End	BRG.H1
	Land off Brinkley Road, Burrough End
	11 dwellings
Dullingham	DUL.H1
	Land at Kettlefields
	15 dwollingo
Swaffham Bulbeck	15 dwellings SWB.H1
	Land off Heath Road and Quarry Lane
	38 dwellings
	SWB.H2
	-
	Land fronting Heath Road

Name of Settlement/s with Residential or Employment Allocations	Details of Site Allocation	
	18 dwellings SWB.H3 Hillside Mill, Quarry Lane	
Swaffham Prior	12 dwellings SWP.H1 Rear of 73 High Street 20 dwellings	
	SWP.E1 Land at East of Goodwin Farm, Heath Road 1.1 hectares employment land	

- 5.99 The priority habitat type of Devil's Dyke SAC sensitive to nitrogen deposition is *H6210 Seminatural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (important orchid sites).* Site relevant critical loads for nitrogen are provided on the APIS website. The interest feature H6210 has a critical load range for nitrogen of 15 to 25 KgN/ha/yr. The 3 year average (2013-2015) for the deposition of nitrogen is 15.5, which slightly exceeds the minimum figure but is well below the upper level. The impacts of exceedance are states as: an increase in tall grasses; decline in diversity; increased mineralization; nitrogen leaching and surface acidification³⁷.
- 5.100 Bottisham is a large village located between Cambridge and Newmarket. It has a good range of services, including a primary and secondary school. However residents are likely to look to Cambridge or Newmarket for employment (as employment provision in the village is limited) and to undertake a large weekly shop. Burrough Green is a medium village located 5 miles south west of Newmarket. It has a primary school but not a secondary school. Employment provision is also limited. Swaffham Bulbeck and Swaffham Prior are also medium villages; Swaffham Bulbeck is located between Cambridge and Newmarket and Swaffham prior is located 5 miles west of Newmarket and 10 Miles north east of Cambridge. Again, residents are likely to look to Cambridge or Newmarket for employment.
- 5.101 The total indicative number of new dwellings arising from the East Cambridgeshire Local Plan from sites screened in for potential air quality effects is 164, and the total amount of employment land is 2ha. Whilst the actual impact of the Local Plan on air quality is difficult to quantify, the small scale nature of these developments means that there is unlikely to be a significant increase in vehicle traffic as a result of development within East Cambridgeshire. This, coupled with the fact that that Devil's Dyke SAC lies perpendicular to the A14 and A1303 and so a very small area of the SAC is potentially affected, means that **likely significant effects on Devil's Dyke SAC as a result of the policies in the East Cambridgeshire Local Plan are unlikely alone**. This conclusion was drawn in the HRA Screening Report (November 2017) and was accepted by Natural England.

In-Combination Effects

5.102The HRA of the Forest Heath Single Issue Review of the Core Strategy ruled out likely significant effects on the Devil's Dyke SAC as a result of impacts from reduced air quality as follows: "Devil's Dyke is a linear site that lies perpendicular to the A14 and A1304; this and that

³⁷ http://www.apis.ac.uk/srcl

fact that the northern end of the SAC is approximately 140m from the A14 limit the exposure of the European site to air pollution from these roads, such that likely significant effects can be ruled out".

5.103 Therefore there is unlikely to be a significant effect on the conservation objectives and qualifying features of the Devil's Dyke SAC as a result of in-combination effects of atmospheric pollution arising from increased traffic flows in neighbouring authority areas. This conclusion was drawn in the HRA Screening Report (November 2017) and was accepted by Natural England.

Existing Mitigation Measures

5.104The Proposed Submission Local Plan includes a number of policies that will help to mitigate a potential reduction in air quality arising from new development in the Local Plan:

General policies:

- LP3 The Settlement Hierarchy and the Countryside
- LP14 Retail and Other Main Town Centre Uses
- LP17 Creating a Sustainable, Efficient and Resilient Transport Network
- LP18 Improving Cycle Provision
- LP20 Delivering Green Infrastructure
- LP21 Open Space, Sport and Recreational Facilities
- LP26 Pollution and Land Contamination
- LP29 Conserving Local Green Spaces
- LP30 Conserving and Enhancing Biodiversity and Geodiversity
- 5.105 Policies LP3 and LP14 establish a preference for development to be focused in existing urban centres, which will help to reduce the need to travel by car and reduce the distance travelled to access services and facilities, which will contribute to minimising emission levels associated with vehicle traffic.
- 5.106 Policies LP17 and LP18 require development proposals to demonstrate that they minimise travel, maximise use of sustainable travel modes and assist in the delivery of a substantial increase in the uptake of cycling across the district. The implementation of these policies should also help to minimise air pollution form vehicle traffic. Policy LP26 requires major development proposals to submit an air quality assessment to demonstrate no significant adverse effect on sensitive features of designated sites.
- 5.107Open space and green infrastructure policies which protect existing open space and provide enhanced or new provision, should help to provide opportunities for recreation close to where people live, minimising the need to travel by car to access such facilities.

Settlement Policies:

• Bottisham

Policy **Bottisham1** requires development proposals to contribute directly or through developer contributions, to the creation of new cycleways and improvements to bus services and facilities. This would have a positive impact on reducing car journeys and therefore on reducing the impact on air quality of vehicle traffic.

- Burrough Green/Burrough End
 - Policy **Burrough2** requires development proposals to contribute directly or through developer contributions, to improvements to pedestrian/cycle routes. This would have a positive impact on reducing car journeys and therefore on reducing the impact on air quality of vehicle traffic.
- Burwell

The Local Plan currently recognises the sensitivity of Devil's Dyke SAC under the settlement chapter for Burwell. Policy **Burwell1** states all development to the south of the village will be carefully scrutinised to ensure that there is no adverse impact upon the Dyke.

• Swaffham Bulbeck

Policy **Swaffham Bulbeck2** requires development proposals to contribute directly or through developer contributions, to improvements to pedestrian/cycle routes and cycling facilities. This would have a positive impact on reducing car journeys and therefore on reducing the impact on air quality of vehicle traffic.

• Swaffham Prior

Policy **Swaffham Prior2** requires development proposals to contribute directly or through developer contributions, to improvements to pedestrian/cycle routes. This would have a positive impact on reducing car journeys and therefore on reducing the impact on air quality of vehicle traffic.

Recommendations to Ensure No Likely Significant Effects Resulting from the Plan

5.108 Policy *LP26 Pollution and Land Contamination* requires major development proposals to submit an air quality assessment to demonstrate no significant adverse effect on sensitive features of designated sites. The implementation of this policy and *LP30 Conserving and Enhancing Biodiversity and Geodiversity*, should ensure no likely significant effects on Devil's Dyke SAC as a result of reduced air quality. Therefore this HRA makes no further recommendations.

It can reasonably be concluded, after taking into account the above mitigation measures and consideration of other plans, that there will be no likely significant effects, alone or in combination, resulting from reduced air quality on the Devil's Dyke SAC through the implementation of the East Cambridgeshire Local Plan.

Fenland SAC (including Wicken Fen and Chippenham Fen Ramsars)

Introduction

5.109As concluded in **Section 4**, the Proposed Submission Local Plan has the potential to significantly effect this Natura 2000 site in relation to, at Wicken Fen: disturbance from increased recreational pressure, changes in water quality and changes in water quantity and at Chippenham Fen, disturbance from recreational pressure, urbanisation, changes in water quality and changes in water quantity.

Disturbance from Increased Recreational Pressure

- 5.110 There is potential for increased visitor pressure and recreational activity arising from residents of new housing within East Cambridgeshire seeking recreational open space to visit close to home and further afield, which may include Natura 2000 sites. However, recreational use can be managed and not cause a significant problem. For example, at Woodwalton Fen Ramsar, dogs are not permitted on the site. Therefore, recreational use is recognised as part of the site management of most sites, and there are Management Plans to reduce and avoid adverse effects from recreational pressure.
- 5.111 Wicken Fen is owned by the National Trust and public access is actively encouraged by the Trust, which places public access "*at the very heart of the Wicken Fen Vision*"³⁸ to provide green space for people to escape the pressures of everyday life and have access to nature. As a National Nature Reserve, visitor access to Wicken Fen is encouraged and managed. The site is open from dawn to dusk. There is a visitor centre and shop, nature trails, hides and walking routes. The car park has recently been expanded to facilitate further visitors. The site is open to the public throughout the year, however, entry to the site is by permit only to help control visitor numbers.
- 5.112At Chippenham Fen, both the site and surrounding areas are privately owned. Public access is limited to a Public Rights of Way running directly through the reserve. Access to the rest of the site is permissible by permit only from Natural England, which are mainly requested by naturalists, and therefore use of the site by local residents is minimal. The nearest car parking is in the villages of Fordham or Chippenham.
- 5.113For the Fenland SAC sites, public access and recreational impact is not listed as a vulnerability of the sites in the SIP³⁹. However Natural England have raised disturbance from increased recreational pressure as a concern in their correspondence with the council (**Appendix 6** and **Appendix 7**). They advise, in general for all Natura 2000 sites, that habitat degradation is occurring, particularly through trampling of vegetation and soil enrichment from dog excrement. Dogs off leads is also posing a threat to the continuance of long term management of the sites through livestock grazing.

- 5.114The **policies** in the Local Plan that were identified in the screening (**Appendix 4**) as potentially resulting in likely significant effects on Wicken Fen and Chippenham Fen Ramsars as a result in increased recreational pressure were:
 - LP2 Level and Distribution of Growth: sets out the quantum of housing development over the period 2016-2036;

³⁸ <u>https://www.nationaltrust.org.uk/wicken-fen-nature-reserve/documents/wicken-fen-vision-strategy-document.pdf</u>

³⁹ http://publications.naturalengland.org.uk/publication/6024783481274368?category=4873023563759616

The screening identified that the Wicken Fen and Chippenham Fen Ramsars were potentially at risk from increased recreational pressure as a result of residential **site allocations** proposed in the Local Plan at the following locations:

- Burwell: BUR.H1, BUR.PH1
- Fordham: FRD.H1, FRD.H2, FRD.H3, FRD.H4, FRD.M1, FRD.M2
- Isleham: ISL.H1, ISL.H2, ISL.H3, ISL.H4
- Kennett: KEN.M1
- Little Thetford: LTT.H1, LTT.H2
- Lode with Long Meadow: LOD.H1
- Newmarket Fringe: NFR.H1
- Soham: SOH.H1, SOH.H2, SOH.H3, SOH.H4, SOH.H5, SOH.H6, SOH.H7, SOH.H8, SOH.H9, SOH.H10, SOH.H11, SOH.H12, SOH.H13, SOH.H14, SOH.H15, SOH.M1, SOH.M2, SOH.M3
- Swaffham Bulbeck: SWB.H1, SWB.H2, SWB.H3
- Wilburton: WIL.H1, WIL.H2
- 5.115The screening identified that on its own, a residential allocation is unlikely to result in significant adverse effects as a result of increased recreational pressure. However, when considered together with residential allocations elsewhere in the plan, the combined effect could potentially result in likely significant effects. **Table 19** below shows the *indicative* newly arising population as a result of residential site allocations in settlements within 8km of the Devil's Dyke SAC boundary. The figures are indicative, as the Local Plan allocates sites for indicative dwelling numbers and therefore these may be slightly higher or slightly lower when a planning application is submitted for a site.

Table 19: Newly Arising Population Within 8km of Wicken Fen SAC

Name of settlement/s with residential allocations	Total <i>indicative</i> number of new dwellings within 8km of the Natura 2000 site	Total <i>indicative</i> new population arising from new dwelling provision (based on 2.35 people per household) ⁴⁰
 Burwell Little Thetford Lode Soham Swaffham Bulbeck Wilburton 	2,365 dwellings	5,558 people

⁴⁰ Taken from the Cambridge Sub-Region SHMA 2013, <u>https://cambridgeshireinsight.org.uk/wp-content/uploads/2017/08/SHMA-Chapter-12-Forecasts-for-Homes-of-all-tenures.pdf</u>

Table 20: Newly Arising Population Within 8km of Chippenham Fen SAC

Name of settlement/s with residential allocations	Total <i>indicative</i> number of new dwellings within 8km of the Natura 2000 site	Total <i>indicative</i> new population arising from new dwelling provision (based on 2.35 people per household) ⁴¹		
 Fordham Isleham Kennett Newmarket Fringe Soham 	3,117 dwellings	7,325 people		

5.116Natural England has advised that dogs are a key source of disturbance as part of increased recreational pressure as outlined in 5.27 above. Using the same methodology as was used for the Ouse Washes, the number of newly arising households within 8km of Wicken Fen and Chippenham Fen Ramsars that may own a dog has been estimated as per **Table 21**). Housing sites may also come forward outside of the Local Plan allocations (known as 'windfall sites') within 8km of Devil's Dyke.

Table 21: Estimate of Newly Arising Households with Dogs Within 8km of Wicken Fen and Chippenham Fen SACs

Name of Natura 2000 site	Number of dwellings	Population (based on 2.35 people per household)	Households that own a dog (24% of households)
Wicken Fen SAC	2,365	5,558	568
Chippenham Fen SAC	3,117	7,325	748

5.117 Data on visitor numbers, reasons for visiting etc. from visitor surveys is not currently available for the Fenland SAC, however Natural England advises in their consultation response to the Proposed Submission Local Plan that "...some European site managers may be commissioning detailed visitor surveys in the near future to ensure that the effects of recreational pressure, associated with new housing development, are better assessed and mitigated in future". Any future HRA work will need to take into account this evidence when assessing effects from increased recreational pressure.

In-Combination Effects

5.118As identified in 5.114 above, there is potential for in-combination effects as a result of increased recreational pressure within the Local Plan itself, as a result of the combined effect of residential site allocations across a number of settlements. However, there is also potential for in-combination effects as a result of increased recreational pressure from cross-boundary residential development in neighbouring local authority areas and this is a concern raised by Natural England (Appendix 6 and Appendix 7).

5.119Those neighbouring local authorities with settlements within 8km of Wicken Fen are:

• Forest Heath

⁴¹ Taken from the Cambridge Sub-Region SHMA 2013, <u>https://cambridgeshireinsight.org.uk/wp-content/uploads/2017/08/SHMA-Chapter-12-Forecasts-for-Homes-of-all-tenures.pdf</u>

- South Cambridgeshire
- 5.120 Those neighbouring local authorities with settlements within 8km of Chippenham Fen are:
 - Forest Heath
- 5.121 The Local Plans (both adopted and in preparation) and associated HRA work of the two neighbouring authorities with potential for in-combination effects on Fenland SAC sites as a result of increased recreational pressure were reviewed. The most recent HRA work for Forest Heath is in relation to the Single Issue Review of the Core Strategy and the Site Allocations Local Plan. The HRA Report screened out Wicken Fen and Chippenham Fen Ramsars from further consideration in the Appropriate Assessment as the sites were considered to have no significant vulnerability to recreation pressure, based on designated features plus pressures and threats described in the SIP.
- 5.122 The most recent South Cambridgeshire HRA Screening Report concluded no likely significant effects in relation to recreation pressure and disturbance on Wicken Fen; no site allocations were identified within 5km of the site and therefore it was no considered that the level of public use of Wicken Fen would increase greatly as a result of allocations in the Local Plan. The same conclusion was reached for Chippenham Fen; no allocations within 5km of the site, access to the wider site beyond public right of way is limited and by permit only.

5.123 It is therefore reasonable to rule out likely significant effects on Fenland SAC (Wicken Fen and Chippenham Fen Ramsars) as a result of increased recreational pressure from development within neighbouring local authorities.

Existing Mitigation Measures

- 5.124 The Proposed Submission Local Plan includes a number of policies that will help to mitigate potential increased recreational pressure arising from new residential development across the Local Plan area, not just in relation to likely significant effects on Fenland SAC (Wicken Fen and Chippenham Fen Ramsars) (see 5.36 to 5.37 under Ouse Washes which also applies here).
- 5.125 Implementation of projects within the Green Infrastructure Strategy (or any revision to this document) will help to ensure that the impacts of increased recreational pressure associated with residential development are appropriately mitigated. Policy LP20 of the Local Plan specifically references the Green Infrastructure Strategy, stating the council will favour proposals for new and improved green infrastructure where they support the Green Infrastructure Strategy.
- 5.126The following settlement policies will contribute to mitigating the effects of increased recreational pressure arising from new residential development within these settlements:
 - Burwell

Policy **Burwell4** sets out the requirements in relation to site BUR.H1 for around 350 dwellings. This requires the provision of 2.2 ha of public open space and at least 1 play area, as well as 2.5ha of land for outdoor sports provision. This will contribute to mitigating the effects of additional recreational pressure from this development.

• Chippenham

Policy **Chippenham1** requires any proposals that come forward in the village to be careful scrutinised to ensure that there is no adverse impact on Chippenham Fen.

• Fordham

Policy **Fordham2** requires development proposals to contribute directly, or through developer contributions, to improve open space. Policies **Fordham4** and **Fordham5** require these sites to deliver open space and recreational facilities. These policies will contribute to mitigating the effects of additional recreational pressure from development within this settlement.

Isleham

Policy **Isleham2** requires improvements to play areas and open space, which will contribute to mitigating the effects of additional recreational pressure from development within this settlement.

Kennett

Policy **Kennett4** requires any proposals for site KEN.M1 to include preparation of a thorough ecological assessment (incorporating mitigation measures) sufficient to enable a project level HRA to be undertaken.

• Newmarket Fringe

Policy **Newmarket1** seeks to protect existing open space from development within the built up area of Newmarket.

Soham

Policy **Soham1** requires development proposals to protect and enhance the green setting of Soham, including the Commons, and green network/links.

Policies **Soham4**, **5**, **6**, **7**, **8** and **9** all require their respective site allocations to provide public open space.

These above measures will contribute to mitigating the effects of additional recreational pressure from development in Soham.

• Wicken

Policy **Wicken1** provides specific protection to Wicken Fen, requiring all development proposals to be carefully scrutinised to ensure that there is no adverse impact.

Recommendations to ensure no likely significant effects resulting from the Plan

- 5.127 All new residential development should deliver green infrastructure and open space in-line with the standards set out in Policy LP21 Open Space, Sport and Recreational Facilities and Annex A of the Local Plan. However, whilst increased recreational pressure is not listed in the Fenland SAC as a current threat or pressure, where a concentration of new housing was to come forward within the 8km zone of influence, its location may be such that additional recreation could pose a risk to the sensitive features of the Fenland SAC (Wicken and Chippenham Fens). The following modification to the Local Plan is recommended to ensure no adverse effect as a result of increased recreational pressure from residential development:
 - **Isleham:** Policy **Isleham4** should include the requirement for project level HRA that should consider the effects of increased recreational pressure on Natura 2000 sites. Where there are risks, appropriate mitigation measures should be proposed.

It can reasonably be concluded, after taking into account the above mitigation measures and consideration of other plans, that there will be no likely significant effects, alone or in combination, on the integrity of Fenland SAC (i.e. Wicken Fen and Chippenham Fen Ramsars) as a result of increased recreational pressure, through the implementation of the East Cambridgeshire Local Plan.

Disturbance from Urbanisation Effects

5.128Proximity to new development, both during construction and once operational, can result in adverse effects on protected habitats and species as a result of dust. Noise and vibration impacts, lighting and visual disturbance, and surface run off.

Assessment of Effects

- 5.129The **policies** in the Local Plan that were identified in the screening assessment (**Appendix 4**) as potentially resulting in likely significant effects on Chippenham Fen Ramsar as a result of urbanisation effects were:
 - LP2 Level and Distribution of Growth: sets out the quantum of housing development over the period 2016-2036;
 - LP8 Delivering Prosperity and Jobs: sets out the employment allocations to assist in the delivery of jobs set out in policy LP2

The screening assessment identified the following Natura 2000 sites potentially at risk of adverse effect from urbanisation effects as a result of **site allocations** proposed in the Local Plan based on the assumptions set out in **Section 3** (i.e. any development within 400m has the potential to result in likely significant effects as a result of urbanisation).

Name of Natura 2000 site	Name of settlement/s with site allocations within 400m of Natura 2000 site	Details of Site Allocations
Chippenham Fen Ramsar	Fordham	FRD.E1 Employment cluster south of Fordham
		Employment allocation, 83.2 ha in total
		Consists of a cluster of sites where the following land parcels are within 400m of Chippenham Fen:
		 FRD.E1(d) Horse Racing Forensics Lab
		12.4ha, partly developed site
		 FRD.E1(e)
		Land north of Snailwell Road
		5.5ha, undeveloped site

Table 22: Natura 2000 Sites Screened in for Potential Effects in Relation to Urbanisation Impacts

5.130 Two sites, (FRD.E1(d) and FRD.E1(e)), that form part of the employment allocation FRD.E1D, are less than 400m from the Fenland SAC (Chippenham Fen Ramsar). The SIP for Fenland SAC identifies that for Chippenham Fen, water pollution and hydrological changes are threatening the following qualifying features: *H6410 Purple moor grass meadows* and *H7210 Calcium rich* fen dominated by great fen sedge. Surface water run-off from development in close proximity to Chippenham Fen could impact on these qualifying features by altering nutrient levels of the water reaching the fen. However, these impact pathways cannot be

investigated in detail at the Local Plan level, as they are related to how the site will be designed and what construction methods will be used.

5.131 Development proposals on this site will, therefore, require detailed assessment at project application stage, including, where necessary, the submission of sufficient information from the applicant to enable the Council to complete, in consultation with Natural England, a project level Appropriate Assessment under the Habitats Regulation Assessment process. Policy **Fordham6** requires this project level assessment. The inclusion of this requirement enables this impact pathway to be screened out.

In-Combination Effects

5.132None of the Local Plan HRAs of neighbouring local authorities have identified urbanisation effects as having a likely significant effect on Chippenham Fen Ramsar, **therefore no likely significant in-combination effects with other plans are expected**.

Existing Mitigation Measures

- 5.133The Proposed Submission Local Plan includes policies that will help to mitigate potential urbanisation effects arising from new residential development:
 - LP26 Pollution and Land Contamination
 - LP30 Conserving and Enhancing Biodiversity and Geodiversity
- 5.134The following settlement policies will contribute to mitigating the effects of urbanisation arising from new development within these settlements:

• Fordham

Fordham1 requires all development proposals to be carefully scrutinised to ensure that there is no adverse impacts on Brackland Rough SSSI and Chippenham Fen.

Fordham6 requires, for FRD.E1(d) and FRD.E1(e), a project level HRA screening for approval by the council. Where this identifies a likely significant effect on Chippenham Fen (or any other European protected site) applicants will be required to submit sufficient information for a project level Appropriate Assessment to be undertaken to ensure there will be no adverse effect on such European sites.

Recommendations to ensure no likely significant effects resulting from the Plan

5.135 Policy Fordham6 sets out clear criteria for a project level HRA to be carried out and considered at application stage to ensure no adverse effects on Chippenham Fen will result from development. The implementation of this criteria and *LP30 Conserving and Enhancing Biodiversity and Geodiversity*, should ensure no likely significant effects as a result of site allocation FRD.E1D. Therefore this HRA makes no further recommendations.

It can reasonably be concluded, after taking into account the above mitigation measures and consideration of other plans, that there will be no likely significant effects, alone or in combination, on Chippenham Fen resulting from urbanisation effects, through the implementation of the East Cambridgeshire Local Plan.

Ouse Washes SPA/ SAC/Ramsar and Fenland SAC (Wicken Fen and Chippenham Fen) – Changes in Water Quality and Quantity

Introduction

- 5.136Development within East Cambridgeshire will increase demand for water. Increased water abstraction for new development has the potential to impact on aquifers, surface and ground water and reduce water levels, impacting on peak river flow. An increase in peak flow runoff may result in increased flood risk downstream which could impact negatively on features of water dependent sites.
- 5.137 New development could result in increased treated waste water discharges which may reduce the quality of water entering the water network through nutrient enrichment. New development could also result in overloading of the combined sewer network during storm events with the potential for flooding and contamination of hydrologically connected Natura 2000 sites. An increase in the area of impermeable surfaces from urban development could increase the potential for contaminated surface water runoff which could impact on hydrologically connected Natura 2000 sites.
- 5.138The Environment Agency has undertaken an assessment⁴² of water stress across the UK; the assessment has classified Anglian Water supply regions as areas of "serious" water stress. Water in East Cambridgeshire is predominantly supplied by Anglian Water, with Cambridge Water supplying a small area in the west of the district. Water treatment in East Cambridgeshire is carried out by Anglian Water, through the Water Recycling Centres (WRCs). Sewerage undertakers must consider growth in demand for wastewater services when preparing their five-yearly Strategic Business Plans which set out investment for the next Asset Management Plan period.
- 5.139Through the latest cycle of River Basin Management Plans, for existing abstraction licences, the Environment Agency prioritises actions to protect and improve Natura 2000 sites and address the most seriously damaging abstractions. All abstractors in surface water and groundwater bodies, where serious damage is occurring or could occur without action, will have their licences constrained. Water level management is strictly controlled by the Catchment Abstraction Management and licencing regimes, and this is a strong mitigation measure to maintain adequate water levels and flows to the Natura 2000 sites
- 5.140Water quality is strictly controlled via a regulatory regime comprising of the Environment Agency's Review of Consents of discharges to water bodies, specifically from Anglian Water's WRCs in the case of East Cambridgeshire. The Environment Agency has a statutory duty under the Water Framework Directive and the Habitats Directive to ensure that discharge consents will be legally compliant. New legislative requirements should lead to an increase in the use of SUDs in major developments. These should help to mitigate any deterioration in water quality from development sites.

Ouse Washes SAC/SPA/ Ramsar

5.141 The Ouse Washes is a flood storage reservoir lying between two independent and parallel rivers. The Counter Drain (the outer river) drains adjacent farmland. The Old Bedford / River Delph (the inner river) is sourced by the River Great Ouse. During the winter and increasingly in the spring and summer months, the inner river takes flood water from the Great Ouse and therefore has an important flood defence function. The outer river is also a source of water for nearby arable farm land forming spray irrigation. Earith Sluice regulates flow entering the Old Bedford River and the Ouse Washes. Welmore Lake Sluice and pumping station maintain a

⁴² <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/244333/water-stressed-classification-2013.pdf</u>

defined water level in the Washes. The Ouse Washes is maintained by the Environment Agency (river and embankments), private landowners and Hundred Foot Washes IDB (riparian habitat).

- 5.142The Ouse Washes SAC/SPA is a WFD Natura 2000 protected area site. Water pollution is a priority issue highlighted in Natural England's SIP for the site⁴³. The SIP includes the priorities and measures required to achieve water-dependent Natura 2000 objectives under the WFD. Table 23 sets out the WFD waterbodies that are hydrologically connected to the Ouse Washes. Particular issues that could affect water quality at the site are:
 - Inappropriate levels of nutrients from diffuse pollution that could adversely affect the extent/composition of vegetation communities, with the resulting changes having the potential to affect the notified bird interests by destroying habitat suitable for many of the birds that visit or breed at the site.
 - Occasional incidences of low oxygen levels on River Delph and Counter Drain have the potential to impact on spined loach populations.
 - Water quantity is likely to be affected by increased flooding. Flooding during spring / early summer severely damages the breeding bird interest by flooding nests, drowning young and affecting habitat. Deep flooding during winter impacts overwintering birds such as wigeon and impacts on the wetland fauna, especially invertebrate populations.
 - Wetland flora is also affected through prolonged submersion, favouring swamp communities over the designated grassland species. Prolonged summer flooding disrupts essential management of the washland, affecting the condition of the grassland for breeding birds in subsequent spring/summer season(s).

⁴³ <u>http://publications.naturalengland.org.uk/publication/5354106084392960</u>

Name of Natura 2000 Site	WFD Management Catchment	WFD Waterbody: Name and ID	Upstream Waterbodies	Downstream Waterbodies	Ecological Water Body Classification Status	Chemical Water Body Classification Status	Reason for not Achieving Good (Business Sector and Activity)
Ouse Washes SAC/ SPA	Old Bedford including the Middle Level	Counter Drain (Sutton and Mepal IDB inc Cranbrook Drain) GB205033000 010		Counter Drain (Manea and Welney IDB)	Moderate	Good	Waste water treatment / sewage discharge (continuous)
		Counter Drain (Manea and Welney IDB) GB205033000 020	Counter Drain (Sutton and Mepal IDB inc Cranbrook Drain)	Counter Drain (Upwell and Outwell IDB)	Moderate	Good	
		Counter Drain (Upwell and Outwell IDB) GB205033000 030	Counter Drain (Manea and Welney IDB)	Great Ouse	Moderate	Good	Sector under investigation Sector under investigation
		Old Bedford River / River Delph (inc Hundred Foot Washes)		Great Ouse	Moderate	Good	
		GB205033000 060					

 Table 23: Water Framework Directive Waterbodies Hydrologically Connected to the Ouse Washes Natura 2000 Site

 Table 24: Water Framework Directive Waterbodies Hydrologically Connected to the Fenland SAC (Wicken Fen) Natura 2000 Site

Name of Natura 2000 Site	WFD Management Catchment	WFD Waterbody: Name and ID	Upstream Waterbodies	Downstream Waterbodies	Ecological Water Body Classification Status	Chemical Water Body Classification Status	Reason for not Achieving Good (Business Sector and Activity)
Fenland SAC (Wicken Fen)	Cam and Ely Ouse (including South Level)	New River GB105033042 780		Burwell Lode	Moderate	Good	Local and Central Government

 Table 25: Water Framework Directive Waterbodies Hydrologically Connected to Fenland SAC (Chippenham Fen) Natura 2000 Site

Name of Natura 2000 Site	WFD Management Catchment	WFD Waterbody: Name and ID	Upstream Waterbodies	Downstream Waterbodies	Ecological Water Body Classification Status	Chemical Water Body Classification Status	Reason for not Achieving Good (Business Sector and Activity)
Fenland SAC (Chippenham Fen)	Cam and Ely Ouse (including South Level)	Soham Lode GB1050330428 60		Ely Ouse (South Level)	Moderate	Good	Waste water treatment / sewage discharge (continuous)

Fenland SAC (Wicken Fen and Chippenham Fen Ramsars)

- 5.143Wicken Fen is a marginal remnant of the original peat fenland of the East Anglian basin. It has been preserved as a flood catchment area, and its water level is controlled by sluice gates. The dykes and other watercourses carry a wealth of aquatic plants. The habitats within the site are highly sensitive to inorganic fertilisers and pesticides.
- 5.144Fenland SAC is a WFD Natura 2000 protected area site. **Table 24** sets out the WFD waterbodies that are hydrologically connected to Wicken Fen Ramsar. Water quality issues are not specifically highlighted for Wicken Fen in the SIP, however Natural England's Views About Management for the Wicken Fen SSSI⁴⁴ states "*Water quality is crucially important for floodplain fen and management should ensure the protection of appropriate water quality. Most floodplain fens depend on an adequate supply of nutrients being maintained. However, excessive nutrient enrichment may result in the replacement of the characteristic floodplain fen communities with very species-poor vegetation".*
- 5.145Chippenham Fen comprises of areas of tall and often rich fen, fen grassland and basic flush that have developed over shallow peat soils. The site is in a shallow peat filled depression and is fed by rainfall and springs from the chalk aquifer. There are several ponds on the site and a system of dykes take water from the springs, in the south of the reserve, to the Chippenham River, near its northern boundary. The Environment Agency monitors groundwater changes in the aquifer.
- 5.146**Table 25** sets out the WFD waterbodies that are hydrologically connected to Wicken Fen Ramsar. Water pollution is a priority issue for Chippenham Fen highlighted in Natural England's SIP for Fenland SAC⁴⁵. Chippenham Fen is affected by high nutrient water reaching the fen from a mixture of groundwater, rainfall and run off. The SIP states that in periods of low flow, poor quality water may have a more dramatic effect on the site's vascular plant assemblages and that there is uncertainty of the current water quality within the site at present.

Assessment of Effects

- 5.147The **policies** in the Local Plan that were identified in the screening (**Appendix 4**) as potentially resulting in likely significant effects on the Ouse Washes SAC/ SPA Ramsar and Fenland SAC (Wicken Fen and Chippenham Fen) as a result of changes in water quality and/or quantity were:
 - *LP2 Level and Distribution of Growth:* sets out the quantum of housing development over the period 2016-2036;
 - LP8 Delivering Prosperity and Jobs: sets out the employment allocations to assist in the delivery of jobs set out in policy LP2.
- 5.148The screening identified that the Ouse Washes SAC/ SPA Ramsar and Fenland SAC (Wicken Fen and Chippenham Fen) are potentially at risk from changes in water quality and/or quantity as a result of **site allocations** proposed in the Local Plan at the following locations:
 - Burwell: BUR.H1, BUR.PH1
 - Ely: ELY.H1, ELY.H2, ELY.H3, ELY.M1, ELY.M2, ELY.M3, ELY.M4, ELY.M5, ELY.M6, ELY.E1, ELY.E1 (a-c), ELY.L1
 - Fordham: FRD.H1, FRD.H2, FRD.H3, FRD.H4, FRD.M1, FRD.M2, FRD.E1
 - Haddenham: HAD.H1, HAD.H2, HAD.H3, HAD.E1
 - Isleham: ISL.H1, ISL.H2 ISL.H3, ISL.H4, ISL.E1
 - Kennett: KEN.M1

⁴⁴ <u>https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1003251</u>

⁴⁵ <u>http://publications.naturalengland.org.uk/publication/6024783481274368?category=4873023563759616</u>

- Little Downham: LTD.H1
- Little Thetford: LTT.H1, LTT.H2
- Littleport: LIT.H1, LIT.H3, LIT.H4, LIT.H5, LIT.M1, LIT.M2, LIT.E1, LIT.E2
- Lode with Long Meadow: LOD.H1
- Mepal: MEP.H1
- Newmarket Fringe: NFR.H1
- Soham: SOH.H1, SOH.H2, SOH.H3, SOH.H4, SOH.H5, SOH.H6, SOH.H7, SOH.H8, SOH.H9, SOH.H10, SOH.H11, SOH.H12, SOH.H13, SOH.H14, SOH.H15, SOH.M1, SOH.M2, SOH.M3, SOH.E1
- Sutton: SUT.H1, SUT.H2, SUT.E1
- Swaffham Bulbeck: SWB.H1, SWB.H2, SWB.H3
- Wilburton: WIL.H1, WIL.H2
- Witcham: WTM.H1
- Witchford: WDF.H1, WDF.H2, WDF.H3, WDF.H4, WDF.E1

Water Quantity

Cam and Ely Ouse Abstraction Licensing Strategy/ Old Bedford and Middle Level Abstraction Licensing Strategy

- 5.148Catchment Abstraction Management Strategies are prepared by the Environment Agency and set out how it will manage water resources in each catchment and contribute to the implementation of the Water Framework Directive.
- 5.149The majority of East Cambridgeshire is located within the Cam and Ely Ouse abstraction area, with a small part of the area to the west located within the Old Bedford and Middle Level abstraction area. The Cam and Ely Ouse CAMS was published in 2017⁴⁶ and identifies that the main water resources pressures are extensive water supply abstraction along with river support schemes and water transfers. The CAMS identifies a number of designated sites where flows have fallen below the Environmental Flow Indicator. The relevant abstraction licences are therefore assessed to make sure they are not impacting on nationally or internationally designated sites.

Ouse Washes Water Level Management Plan

5.150The Environment Agency has produced a Water Level Management Plan which aims to maintain the current water level management regime in the long term

East Cambridgeshire Strategic Flood Risk Assessment

5.151A Strategic Flood Risk Assessment (Level 1 and 2, 2017) ⁴⁷ has been undertaken to ensure that development is directed away from areas at risk of flooding. Additionally, all development proposals are assessed in accordance with the NPPF and the advice of the Environment Agency is sought in relevant cases to ensure that inappropriate development is not allowed in flood sensitive areas.

Anglian Water's Water Resources Management Plan (WRMP)

- 5.152Water companies have a statutory duty to establish how planned development in their area can be serviced. Anglian Water's lastest WRMP was published in 2015⁴⁸ and demonstrates the pressures on water resources throughout the Anglian Water supply area. The area is divided into 19 Water Resource Zones (WRZs) of which East Cambridgeshire is mainly supplied from three; Ely, Newmarket and Cheveley. The WRMP aims to set out the company's 25-year
- ⁴⁶ https://www.gov.uk/government/publications/cams-the-cam-and-ely-ouse-abstraction-licencing-strategy
 ⁴⁷ See https://www.gov.uk/government/publications/cams-the-cam-and-ely-ouse-abstraction-licencing-strategy
 ⁴⁷ See https://www.eastcambs.gov.uk/local-development-framework/local-plan-review-document-library-0 for

⁴⁷ See <u>https://www.eastcambs.gov.uk/local-development-framework/local-plan-review-document-library-0</u> for the latest version of the Strategic Flood Risk Assessment.

⁴⁸ http://www.anglianwater.co.uk/_assets/media/WRMP_2015.pdf

strategy for maintaining the balance between supply and demand in a region at risk from population growth, climate change and growing environment needs. Both Ely and Cheveley WRZs were forecast a deficit in supply for the WRMP period to 2040. The WRMP sets out preferred schemes in each WRZ to maintain the supply demand balance. The WRMP was subject to its own HRA⁴⁹ during its preparation. The HRA concluded that the preferred schemes in the Ely, Newmarket and Cheveley WRZs would not result in adverse effects on the integrity of European Sites.

- 5.153A WRMP for the period 2020-2045 is currently being prepared. This updated WRMP takes account of the growth proposed in the emerging East Cambridgeshire Local Plan. A draft was published on 12 March 2018 and was accompanied by a HRA⁵⁰. The relevant WRZs for East Cambridgeshire continue to be Ely, Newmarket and Cheveley. The HRA screened in Fenland SAC (Chippenham Fen Ramsar) for potential likely significant effects as a result of the Principal Planning Scenario to maintain supply-demand balance in the Newmarket WRZ. This option proposes to transfer portable water from the existing Isleham WTW to the existing Warren Hill WR via a new transfer pipeline. This option also includes a new pumping station at Isleham; the exact location of which is unknown. The pipeline crosses the River Snail and is approximately 11km long. The Appropriate Assessment found adverse effects on Chippenham Fen were likely but were expected to be temporary, as they would occur during construction only. The AA concluded that the adverse effects could be mitigated and therefore no significant adverse effects were expected on the integrity of the European site as a result of the measures proposed within the WRMP, if the suggested mitigation measures are implemented.
- 5.154In submitting comments on the Proposed Submission East Cambridgeshire Local Plan HRA Report, Natural England sought assurance from the Environment Agency (EA) and/or water companies that the level of growth proposed in the Local Plan would not result in a requirement for adverse levels of water abstraction from any of the aquifers connected to Natura 2000 sites. The Environment Agency and Anglian Water have responded to that concern (see Appendix 8). The Environment Agency advised that "Anglian Water Services abstractions were assessed in the Habitats Directive Review of Consents (HD RoC) at full licensed rates. There is no likelihood that licensed quantities will be increased, so the conclusions of HD RoC still stand. Abstraction effects on Chippenham Fen SSSI which is part of Fenland SAC and a Ramsar site are mitigated by our Lodes Granta groundwater support scheme, the effectiveness of which was studied in detail for the fen as part of the review." As such, it can be concluded that delivery of the East Cambridgeshire Local Plan will not result in adverse effects on the Ouse Washes SPA/Ramsar or Fenland SAC through excessive water abstraction, whether alone or in combination with other plans and projects.

Water Quality

Anglian River Basin Management Plans (RBMP)

- 5.155The Anglian RBMP⁵¹ was published in 2015 by the Environment Agency and identified a number of pressures on the water environment and significant water management issues within the river basin district. The RBMP describes the current state of the water environment and pressures affecting the water environment, It describes how development and land-use planning needs to consider a number of issues relevant to the RBMP including sustainable drainage systems, green and blue infrastructure, sewage treatment options (tertiary phosphate treatments), water efficiency measures, infrastructure and development locations and the reduction of nutrients from diffuse pollution.
- 5.156The RBMP sets out the environmental objectives for protecting and improving waterbodies and

⁴⁹ <u>http://www.anglianwater.co.uk/_assets/media/2015_WRMP_HRA_Main_Report.pdf</u>

⁵⁰ <u>http://www.anglianwater.co.uk/about-us/draft-water-resources-management-plan-2019.aspx</u>

⁵¹ <u>https://www.gov.uk/government/publications/anglian-river-basin-district-river-basin-management-plan</u>

provides a summary of measures and actions needed to achieve these objectives, including a summary of the measures needed for water dependent habitats on Natura 2000 sites. The objective is to protect and, where necessary, improve the water environment to favourable conservation status for the water dependent features for which the site was designated as set out in the site's conservation objectives. The Environment Agency has routine monitoring programmes in place for assessing compliance with Habitats Directive sites. Current EA data⁵² classified the ecological status of the water environments near to the Ouse Washes and Fenland Natura 2000 sites as 'moderate' and the chemical status as 'good' as shown in **Tables 23 to 25**. The current condition and WFD objectives of the Natura 2000 water dependent sites in the study area are summarised in **Table 26**. The objectives are the EA's prediction for the status of the water environment by either 2015 or 2027. Most of the waterbodies hydrologically connected to the Ouse Washes and Fenland are predicted to be 'good', with the exception of Counter Drain (Upwell and Outwell IDB) and Soham Lode.

Current condition of SSSI underpinning Natura 2000 site	Area of SSSI underpinning Natura 2000 site (ha)
Ouse Washes SAC / SPA	
WFD favourable	391.13
WFD unfavourable recovering	89.67
WFD unfavourable no change	2,032.76
WFD unfavourable declining	0
WFD destroyed/partially destroyed	0
Name of Waterbody	Water Body Status Objective
Counter Drain (Sutton and Mepal IDB inc Cranbrook Drain)	Good by 2027
Counter Drain (Manea and Welney IDB)	Good by 2027
Counter Drain (Upwell and Outwell IDB)	Moderate by 2015
Old Bedford River / River Delph (inc Hundred Foot Washes)	Good by 2027
Fenland SAC	
WFD favourable	140.73
WFD unfavourable recovering	15.14
WFD unfavourable no change	0
WFD unfavourable declining	0
WFD destroyed/partially destroyed	0
Name of waterbody	Water body status objective
Soham Lode	Moderate by 2015
New River	Good by 2027

Table 26: Natura 2000 Water Dependent Protected Areas Current Condition and Objectives

⁵² Environment Agency River Basin Management Plan data: accessed online at <u>www.environment.data.gov.uk/catchment-planning</u>

East Cambridgeshire Water Cycle Study (WCS)

- 5.157 As part of the East Cambridgeshire Water Cycle Study (November 2017)⁵³, Anglian Water undertook a sewerage system capacity assessment based on the site allocations and housing numbers set out in the Further Draft Local Plan. A red/amber/green traffic light system was used to score each site. In terms of WRC capacity, 79% of the sites have access to WRC where there is capacity to serve growth. 12% would require infrastructure and/or treatment upgrades to serve growth. There are 10% of WRC that may need to be upgraded but a more detailed assessment is needed. In terms of foul sewerage capacity, 6% of sites have the capacity to serve the proposed development and 92% of sites would require infrastructure upgrades. 2% of sites are remote from the nearest sewer thus connecting to the foul sewerage network may not be viable. In terms of surface water network capacity, all sites within the AW management area face major constraints to the provision of surface water infrastructure. The East Cambridgeshire Local Plan includes policy LP16 that states that planning permission will only be granted if it can be demonstrated that there is, or will be, sufficient infrastructure capacity to support all the necessary requirements arising from the development. This includes necessary water infrastructure.
- 5.158An assessment of the available headroom and flow consents at each of the key WRCs within East Cambridgeshire District Council was carried out. All the WRCs are currently within their DWF permits, however 4 WRCs would require an upgrade in order to serve all the proposed growth. Careful planning of the phasing of development in these areas is required.
- 5.159The WCS included a water quality impact assessment. It is the objective of the Water Framework Directive that all water bodies should meet Good Ecological Status (GES), or where they have been highly modified, meet Good Ecological Potential (GEP). The WCS therefore assessed whether the proposed increase in effluent from future growth could prevent a watercourse from meeting GES or GEP. The water quality impact assessment was undertaken for the following WRCs and receiving water bodies, in agreement with the Environment Agency:

Water Recycling Centre	Nearest Settlement	Discharging Waterbody
Bottisham	Bottisham	Swaffham Bulbeck Lode
Burwell	Burwell	Burwell Lode
Ely	Ely	Ely Ouse (south level)
Ely (New)	Stutney	Ely Ouse
Newmarket	Newmarket	Newmarket No. 1 Public
		Drain
Soham	Soham	Soham Lode

- 5.160The results of the water quality impact assessment was that all WRCs are currently working within their permits with the exception of Ely (New) that exceeds its permit for Phosphate. Proposed growth is predicted to lead to deterioration greater than 10% and/or class deterioration in WFD determinants at Burwell, Ely (New) and Soham WRCs. In the case of Ely and Soham, this can be accommodated through an upgrade to the WRCs (applying Best Available Technology (BAT)) and a tightening of permits. However for Burwell the deterioration in phosphate cannot be reduced to less than 10% using BAT. For Littleport, a 'Load Standstill Assessment' indicates that proposed growth may lead to unacceptable deterioration of water quality (for BOD and P). In the cases of Burwell and Littleport, the WCS suggests environmental capacity may be a constraint to growth.
- 5.161The WCS considered potential risk of increased flood flows in watercourses due to additional flows of sewage effluent. It concluded that the impact of increased effluent flows is likely to have no significant impact upon flood risk in the receiving watercourses at any of the proposed sites.

⁵³ See <u>https://www.eastcambs.gov.uk/local-development-framework/local-plan-review-document-library-0</u>

for the latest versions of the Water Cycle Study and Strategic Flood Risk Assessment

- 5.162In submitting representations to the Proposed Submission East Cambridgeshire Local Plan, the EA raised concern that the full quantum of growth identified for Littleport might not be accommodated in the local WRC without causing a deterioration in local river quality, and that the WCS demonstrates that at Burwell, environmental capacity is considered to be a constraint to growth. Whilst the EA are primarily concerned with the Water Framework Directive (WFD), if the WFD objectives are breached due to potential worsening water quality, there is potential for significant adverse effect on the qualifying features of a Natura 2000 site that are sensitive to changes in water quality.
- 5.163An update to East Cambridgeshire's WCS (June 2018) was commissioned to investigate the EA's concerns. For Burwell WRC, the WCS update predicts a deterioration in ammonia greater than 10% as a result of planned growth. However this can be addressed through treatment within Technologically Achievable Limits and does not result in WFD class deterioration. Good Ecological Status/Potential can be met for ammonia and Biological Oxygen Demand determinands. For phosphates, proposed growth should not prevent the receiving waterbody (Burwell Lode) meeting Good Ecological Status/Potential in the future, if mid-good class upstream is achieved.
- 5.164For Littleport WRC, the WCS update concludes that all residential growth proposed within the Local Plan period can be accommodated at the works. The additional 600 homes at site allocation LIT.M2 beyond the plan period and certain employment growth scenarios can be accommodated with the inclusion of mitigation measures, for example waste water transfer to Ely (Old) WRC (which the WCS Addendum assessed and concluded that there is sufficient capacity at the WRC and within the environment).

In-Combination Effects

- 5.165The HRAs of the Local Plans of neighbouring administrative areas have considered the issue of changes to water quality and quantity. The HRA of the Forest Heath Single Issue Review of the Core Strategy could not rule out water quality effects on Breckland SAC. An Appropriate Assessment undertook a more detailed assessment in relation to Tuddenham WRC and concluded that with the tightening of treatment standards for permitted limits of ammonia and phosphorous, the Local Plan would not have adverse effect on the integrity of the Breckland SAC. The HRA screening of the Forest Heath Single Issue Review was unable to rule out likely significant effects in relation to water quantity on Chippenham Fen Ramsar and Breckland SAC. However, the Appropriate Assessment was able to rule out any adverse effects, either alone or in combination, as no changes have been proposed to abstractions relating to Breckland or Chippenham as part of the Environment Agency's Restoring Sustainable Abstraction programme.
- 5.166South Cambridgeshire Local Plan HRA screening identified potential effects on the Ouse Washes SAC/Ramsar and Fenland SAC, however the assessment concluded no likely significant effects from the Local Plan. The South Cambridgeshire Local Plan HRA screening identified possible effects on the Ouse Washes SAC/Ramsar, Breckland SAC and Fenland SAC. However, it concluded an Appropriate Assessment was not needed, as there were unlikely to be significant effects as a consequence of implementing the Local Plan.

Existing Mitigation Measures

5.167The East Cambridgeshire Local Plan includes a strong policy framework around protecting the water environment and this, alongside the regulatory regime outlined above, should ensure that the Local Plan will not have a significant adverse effect on any Natura 2000 site through the water quality impact pathway.

5.168The Proposed Submission Local Plan includes a number of policies that will help to mitigate potential effects from water quality and quantity changes arising from the demand new development will place on water supply:

General policies:

- LP16 Infrastructure to Support Growth
- LP23 Water Efficiency
- LP24 Renewable and Low Carbon Energy Development
- LP25 Managing Water Resources and Flood Risk
- LP26 Pollution and Land Contamination
- LP30 Conserving and Enhancing Biodiversity and Geodiversity
- 5.169Policy LP23 requires development proposals to meet the national water efficiency standard of 110 litres per occupier per day. This will maximise the efficient use of water. LP25 sets out specific criteria to implement multi-functional SuDS to deliver biodiversity benefits which will help to regulate surface water runoff. The policy also includes the requirement to: demonstrate adequate foul water treatment and disposal already exists or can be provided in time to serve the development; that water is available to support the development; and that development will not adversely affect surface and ground water quality in line with the Water Framework Directive. These measures will protect water-dependent habitats and the species they support from the effects of development. Policy LP30 is clear that the highest level of protection will be afforded to international biodiversity sites and that development will only be permitted where the council is satisfied that nay necessary mitigation is included such that there will be no adverse effects on the integrity of international sites.
- 5.170LP26 requires development proposals to take into account potential environmental impacts, including impacts on the natural environment, air quality and surface and groundwater quality that may arise from the development.
- 5.171 The following settlement policies will contribute to mitigating the effects of water quality and quantity changes as a result of new development within these settlements:

Chippenham

Policy **Chippenham1** requires any proposals that come forward in the village to be careful scrutinised to ensure that there is no adverse impact on Chippenham Fen.

• Ely

Policy **Ely2** requires development proposals to contribute directly or through developer contributions, to upgrade sewage treatment facilities. This will have a positive impact on ensuring the water treatment network can accommodate the increase in population and therefore avoid adverse effects on water quality.

• Fordham

Policy **Fordham1** provides specific protection for Chippenham Fen, requiring all development proposals to be carefully scrutinised to ensure that there is no adverse impact.

Policy **Fordham6** requires applications for sites FRD.E1 and FRD.E2 to undertake a project level HRA screening for approval by the council.

Isleham

Policy **Isleham2** requires development proposals to contribute directly or through developer contributions, to potentially upgrade waste water treatment works. This will have a positive impact on ensuring the water treatment network can accommodate the increase in population and therefore avoid adverse effects on water quality.

Policy **Isleham4** requires proposals for site **ISL.H4** to ensure no adverse effect on groundwater.

Kennett

Policy **Kennett4** requires proposals for site **KEN.M1** to prepare a thorough ecological assessment sufficient to enable a project level HRA.

Mepal

Policy **Mepal1** provides specific protection to the Ouse Washes, requiring all development proposals to be carefully scrutinised to ensure that there is no adverse impact.

• Pymoor

Policy **Pymoor1** provides specific protection to the Ouse Washes, requiring all development proposals to be carefully scrutinised to ensure that there is no adverse impact.

Wicken

Policy **Wicken1** provides specific protection to Wicken Fen, requiring all development proposals to be carefully scrutinised to ensure that there is no adverse impact.

Recommendations to Ensure No Likely Significant Effects Resulting from the Plan

- 5.172Avoiding adverse effects on water quality and quantity is primarily the responsibility of the Water Companies (through resource planning) and the Environment Agency (abstraction licensing and discharge regulation). However, the Local Plan can direct requirements for efficiency of water use in new developments, and require that issues relating to water supply and discharge (including potential effects on Natura 2000 sites) are in place prior to the implementation of development proposals.
- 5.173Anglian Water's updated WRMP and correspondence from the EA and Anglian Water confirm that likely significant effects on the aquifers connected to Natura 2000 sites as a result of water abstraction are unlikely. The East Cambridgeshire WCS assessed whether the amount and distribution of growth proposed in the Local Plan could be accommodated within existing WRCs discharge consents and sewer network capacity. It concluded that water quality effects would not be a constraint to growth at any of the WRCs assessed.
- 5.174As demonstrated above, the Local Plan includes a strong policy framework that will ensure new development takes into account potential environmental impacts, maximises the efficient use of water, and demonstrates that water infrastructure can be provided in time to support the development. It also includes strong policy safeguards to secure measures that may be required to protect water quality and Natura 2000 sites to meet the requirements of the WFD. Provided that these policy safeguards are implemented and the regulatory process is followed, this HRA has no further recommendations.

It can reasonably be concluded, after taking into account the above mitigation measures and consideration of other plans, that there will be no likely significant effects, alone or in combination, on the Ouse Washes SAC/SPA or Fenland SAC, resulting from water quality or quantity changes through the implementation of the East Cambridgeshire Local Plan.

6. Conclusions and Recommendations

- 6.1 This report presents the findings of the HRA for the East Cambridgeshire Local Plan (Post Submission). It updates earlier work carried out in support of the Further Draft and Proposed Submission versions of the Local Plan, by re-screening each of the policies and site allocations in the Plan for likely significant effects on identified Natura 2000 sites, and by undertaking a Stage 2 Appropriate Assessment to determine whether there will be adverse effects on site integrity.
- 6.2 To conclude, provided the recommendations made in this Report are (where applicable) incorporated into the Local Plan, it is possible to conclude that the East Cambridgeshire Local Plan is compliant with the Habitats Regulations and will not result in likely significant effects on any of the Natura 2000 Sites identified, either alone or in combination with other plans and projects.
- 6.3 The recommendations are summarised as follows:
 - The Local Plan adopts a precautionary approach and includes a requirement for applicable allocation site policies (i.e. site allocations in Ely and Littleport that fall within the Goose and Swan Functional Land IRZ) to include a requirement for a project-level HRA screening to demonstrate that proposed development will not have any adverse effect on Ouse Washes functional land.
 - An additional paragraph to the supporting text of LP30 should be added which explains how land beyond the site boundary of a European site may also provide important functional habitat for qualifying bird species and to ensure that any 'windfall' greenfield sites that fall within the Goose and Swan Functional Land IRZ also demonstrate no adverse effects on the qualifying species of the Ouse Washes.
 - Strengthening of policy Littleport6 to require a new Country Park that is "of a scale and quality to attract residents from the whole of Littleport, thereby creating a significant area of strategic open space". This would provide an open space for recreation, for both new and existing residents, which is a suitable alternative to the Ouse Washes. The policy could be further strengthened to clarify that the provision of a well-connected Green Infrastructure Network should include both internal connections as well as connections to the wider Green Infrastructure Network beyond the site allocation boundary.
 - The Local Plan is strengthened at Policy *LP21 Open Space, Sport and Recreational Facilities* to ensure no likely significant effects on the Breckland and Devil's Dyke Natura 2000 sites as a result of increased recreational pressure arising from new residential development.
 - Policy Isleham4 should include the requirement for project level HRA that should consider the effects of increased recreational pressure on Natura 2000 sites. Where there are risks, appropriate mitigation measures should be proposed.
 - It will be important that all new residential development should deliver green infrastructure and open space in-line with the standards set out in Policy LP21 Open Space, Sport and Recreational Facilities and Annex A of the Local Plan.

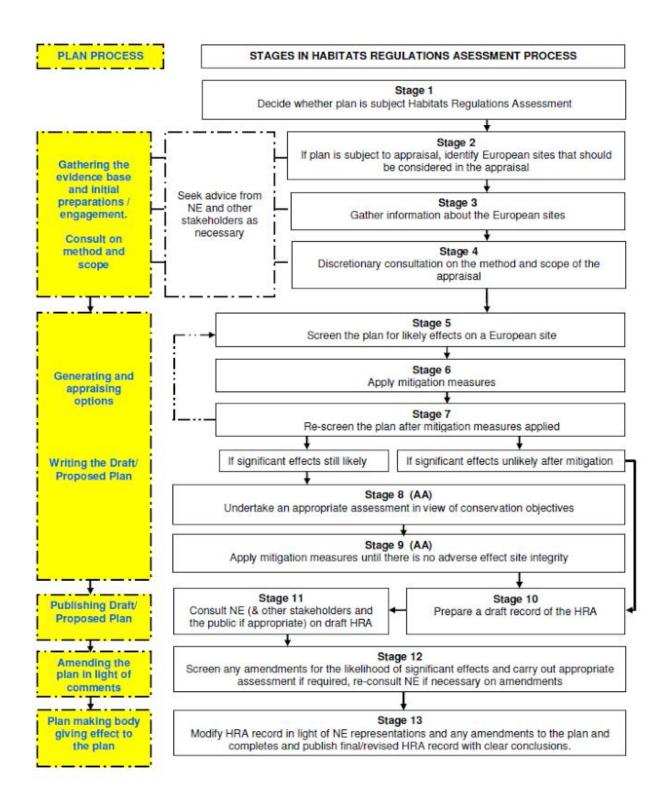
7. Future Stages

Examination of the Local Plan

7.1 The East Cambridgeshire Local Plan was submitted to the Secretary of State in February 2018 and is now at examination stage. The independent Inspector appointed to conduct the examination will determine whether the Local Plan is 'sound' and legally compliant. Following the close of the examination hearing sessions, the Inspector may recommend main modifications to the Local Plan. These modifications must be subject to consultation and may result in further HRA work to ensure no adverse effects occur as a result of the Local Plan (incorporating the main modifications).

Appendix 1: Key Stages of the Habitats Regulation Assessment Process for Plans

(Source: https://www.nature.scot/sites/default/files/2017-06/A1500925%20-%20Habitats%20Regulations%20Appraisal%20of%20Plans%20-%20Guidance%20for%20plan-making%20bodies%20in%20Scotland%20-%20Jan%202015.pdf Note: stage 6 and 7 no longer apply, due to EU ruling)



Appendix 2: Details of the Designated Natura 2000 sites

Devil's Dyke SAC

Designation and Code: Special Area of Conservation (SAC) - UK0030037

Location: The site is located within East Cambridgeshire district and also extends into Forest Heath district in Suffolk

Area: 8.02 ha

1. Characteristics of the Natura 2000 site

a) Site Description:

- This section is the most species rich of the Devil's Dyke which as a whole stretches for approximately 7.5 miles from the Fen Edge at Reach ending at Ditton Green. The section that is identified as a SAC is adjacent to Newmarket Heath. Devil's Dyke consists of a mosaic of CG3 Bromus erectus and CG5 Bromus erectus Brachypodium pinnatum calcareous grasslands.
- It is the only known UK semi-natural dry grassland site for lizard orchid Himantoglossum hircinum. Lizard orchid is nationally rare (i.e. occurring in 15 or fewer 10x10 km squares) and is vulnerable in Great Britain. It is restricted to calcareous grasslands and dunes in southern England.
- The Dyke is in private ownership. There is a Devil's Dyke Restoration Project set up which is a
 partnership scheme involving Natural England, English Heritage, Cambridgeshire Wildlife Trust and the
 Cambridgeshire County Council working with landowners and managers and local people. The aim of the
 project is to restore the Dyke and there is an agreed management plan. The species rich calcareous
 grassland requires active management without which it rapidly becomes dominated by rank grasses
 which leads to the encroachment of scrub over time. Traditional management is by grazing.
- The Pasque flower is a speciality of the dyke and a Local Species Action Plan has been produced for this plant.

b) Access: The site is in private ownership. There is a public right of way running along the Dyke. Parking is available at the July Racecourse, Newmarket. As grazing has declined in the early part of the twentieth century, scrub has encroached onto many areas of the dyke.

c) Primary Reason for Designation:

Supports Annex I Habitats, supporting the priority habitat type "orchid rich sites". Devil's Dyke consists of a mosaic of CG3 *Bromus erectus* and CG5 *Bromus erectus* – *Brachypodium pinnatum* calcareous grasslands. It is the only known UK semi-natural dry grassland site for lizard orchid *Himantoglossum hircinum*.

d) General Site Characteristics

Dry grassland. Steppes (100%) Soil and geology – Basic, Limestone. Geomorphology and landscape – Lowland

2. Qualifying Features

Not applicable

3. Conservation Objectives

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

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

4. Current Site Condition

In the SAC area there had been some scrub encroachment on the southern part of the site and some clearance work has been undertaken. A survey carried out by Natural England in September 2007 assessed this section of the dyke as being in favourable condition. The site is meeting 100% of its PSA targets.

SSSI Condition Summary for Devil's Dyke SSSI (compiled 4 October 2017)

	% meeting area of favourable or unfavourable recovering	Favourable	Unfavourable - Recovering	Unfavourable – No change	Unfavourable - Declining	Partially Destroyed	Destroyed
Area (ha)	39.77	19.71	20.06				
Percentage	100	49.57	50.43	0	0	0	0

5. Site Vulnerability (including current pressures and threats):

- Inappropriate Scrub Control: Scrub encroachment is damaging some parts of the site and is likely to cause grassland to deteriorate;
- Risk of atmospheric nitrogen deposition: nitrogen deposition exceeds the site-relevant critical local for
 ecosystem protection and hence there is a risk of harmful effects, but the sensitive features are currently
 considered to be in favourable condition on the site.

Sources:

Devil's Dyke Site Improvement Plan: file:///H:/Downloads/SIP141223FINALv1.0%20Devils%20Dyke%20(1).pdf

SAC: http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030037

Conservation objectives: file:///H:/Downloads/UK0030037-Devil%60s-Dyke-SAC-V2.pdf

Fenland SAC

Designation and Code: Special Area of Conservation (SAC) – UK 0014782 Wicken Fen – UK 11077, Chippenham Fen – UK 11014, Woodwalton Fen – UK 11078 **Location:** Wicken Fen and Chippenham Fen are in East Cambridgeshire; Woodwalton Fen is in Huntingdonshire. **Area:** 618.64 ha

1. Characteristics of the Natura 2000 site

a) Site Description:

There are three fens together that make up the Fenland SAC: Wicken Fen, Chippenham Fen, Woodwalton Fen. Fenland contains, particularly at Chippenham Fen, one of the most extensive examples of the tall herbrich East Anglian type of M24 *Molinia caerulea – Cirsium dissectum* fen meadow. It is important for the conservation of the geographical and ecological range of the habitat type, as this type of fen-meadow is rare and ecologically distinctive in East Anglia.

The individual sites within Fenland hold large areas of calcareous fens with a long and well-documented history of regular management. There is a full range from species poor *Cladium*- dominated fen to species rich fen with a lower proportion of *Cladium* and containing such species as black dog-rush *Schoenus nigricans*, tormentil *Potentilla eetcta* and meadow thistle *Cirsium dissectum*. There are good transitions to purple moor-grass *Molinia caerulea* and rush pastures, all set within a mosaic of reedbeds and wet pastures. Considered to be rare as its total extent in the UK is estimated to be less than 1,000ha.

b) Primary Reason for Designation:

Supports Annex I Habitats:

Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*), Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*

d) General Site Characteristics:

Bog Marshes. Water fringed vegetation. Fens. (70%) Broad-leaved deciduous woodland (20%) Inland water bodies (standing water, running water) (5%) Other arable land (5%)

2. Qualifying Features

Annex II Species:

Cobitis taenia (Spined loach), for which the area is considered to support a significant presence.

Triturus cristatus (Great crested newt), for which the area is considered to support a significant presence.

3. Conservation Objectives

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

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

4. Current Site Condition:

See Chippenham Fen, Wicken Fen and Woodwalton Fen.

- 5. Site Vulnerability (including pressures and threats):
- Water pollution: nutrient enrichment of Chippenham Fen component, fed from a mixture of groundwater, rainfall and surface runoff.
- Hydrological changes related to public water supply abstraction
- Air pollution impact of atmospheric nitrogen deposition.

Sources:

Fenland Site Improvement Plan: <u>file:///H:/Downloads/SIP141006FINALv1.0%20Fenland%20SAC.pdf</u>

SAC: http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0014782

Conservation objectives: file:///H:/Downloads/UK0014782-Fenland-SAC-V2.pdf

DESCRIPTION OF EACH SITE THAT TOGETHER FORMS THE FENLAND SAC

Wicken Fen Ramsar

Designation and Code: Ramsar UK11077 *Location:* East Cambridgeshire *Area:* 254 ha

1. Characteristics of the Natura 2000 site

a) Site Description:

- This site is a marginal remnant of the original peat fenland of the East Anglian basin. It has been preserved as a flood catchment area, and its water level is controlled by sluice gates.
- The original peat fen lies to the north of Wicken Lodge. The site here supports fern communities of carr and sedge. The carr scrub is largely of alder buckthorn Frangula alnus, buckthorn Rhamnus catharticus and sallow over a sparse vegetation of fen plants and including marsh fen Thelypteris palustris. The more open areas of sedge fen are typically of tall grasses, saw sedge Cladium mariscus, purple moor grass Molina caerulea, sedges Carex spp and rushes Juncus spp. Nationally important higher plants include Viola persicifolia, Lathyrus palustris, Myriophyllum verticillatum, Oenanthe fluviatilis and milk parsley Peucedanum palustre.
- To the south of the Wicken Lode, the area is of rough pasture land, reedbed and pools which are
 attractive to breeding wetland birds and to wintering wildfowl, the area being subjected to winter flooding.
- The dykes, abandoned claypits and other watercourses carry a great wealth of aquatic plants. Many, such as greater spearwort Ranunculus flammula and lesser water-plaintain Baldellia ranunculoides are now uncommon elsewhere.

b) Management and ownership:

The site is owned by the National Trust and managed by a local management committee, which reports to the East Anglian Regional Office of the National Trust. The continuation of the historic systems of management and the effective monitoring and maintenance of water levels underlies the Fen's ecology and are crucial for the success of all other management practices. The Fen is artificially protected from drying out by a water-retaining membrane.

c) Access:

There is a visitor centre and shop, nature trails, three hides and 16km of walking routes. Entry is by permit only to help control visitor numbers. Visitors are also managed by 'zoning ' parts of the Fen near the entrance, leaving the more remote parts of the site relatively undisturbed. The Fen is open throughout the year from dawn to dusk.

d) Primary Reason for Designation:

Meets Ramsar Criteria

- Criterion 1: One of the most outstanding remnants of East Anglian peat fens. The area is one of the few, which has not been drained. Traditional management has created a mosaic of habitats from open water to sedge and litter fields.
- Criterion 2: The site supports one species of British Red Data Book plant fen violet *Viola persicifolia* which survives at only two other sites in Britain. It contains eight nationally scarce plants and 121 British Red Data invertebrates.

e) General Site Characteristics:

- Soil and geology: neutral, clay, peat
- Geomorphology and landscape: lowland
- pH: acidic, alkaline
- Wetland: 100% peatlands (including peat bogs swamps, fens)

2. Qualifying Features

Not applicable

3. Conservation Objectives:

Not applicable

4. Current Site Condition:

SSSI Condition Summary for Wicken Fen SSSI (compiled 4 October 2017)

	% meeting area of favourable or unfavourable recovering	Favourable	Unfavourable - Recovering	Unfavourable – No change	Unfavourable - Declining	Partially Destroyed	Destroyed
Area (ha)	254.49	119.53	134.96				
Percentage	100	46.97	53.03	0	0	0	0

5. Site Vulnerability (including pressures and threats):

The reason for the adverse conditions is related to inappropriate water levels in the fen, marsh and swamp areas. Work carried out in the nearby river system to prevent flooding in the 1960s means that the site no longer receives the amount of winter water as it did in the past. This has brought about a lowering of the water table over the past 40 years (Ramsar Report 5.5.06).

Sources:

Fenland Site Improvement Plan: file:///H:/Downloads/SIP141006FINALv1.0%20Fenland%20SAC.pdf

Ramsar: http://jncc.defra.gov.uk/pdf/RIS/UK11077.pdf

Chippenham Fen Ramsar

Designation and Code: Ramsar UK11014 *Location:* East Cambridgeshire *Area:* 112 ha

1. Characteristics of the Natura 2000 site

a) Site description:

- The site comprises areas of tall and often rich fen, fen grassland and basic flush that have developed over shallow peat soils. The site also contains calcareous grassland, neutral grassland, woodland, mixed scrub and open water.
- The site is in a shallow peat-filled depression underlain by a thick layer of marl which rises to the surface in places. The fen is fed by rainfall and springs from the chalk aquifer. There are several ponds on the site and a system of dykes take water from the springs, in the south of the reserve, to the Chippenham River, near its northern boundary.
- The areas of tall fen are dominated by a mosaic of saw sedge *Cladium mariscus* and reed *Phragmites australis* are present with abundant purple moor grass *Molinia caerulea*. A rich fen has developed in mown areas supporting the nationally rare *Selinum carvifolia*. In one area this merges into a species rich basic flush where black bog rush *Schoenus nigricans* becomes abundant. Dense and scattered scrub has developed. There are areas of chalk grassland that grade into the fen grassland. The damp neutral grassland meadows are developing a fen meadow flora. The ditches support a rich aquatic flora.
- The water level is controlled within a series of ditches.
- Because the fen contains such a wide range of habitats it supports a wide variety of breeding bird species, including hobby, short-eared owl, nightingale and several species of warbler. It also forms the winter roosting for hen harriers.

b) Management and ownership:

Both the site and surrounding areas are privately owned. Part of the site is under unspecified tenure. The site is mainly used for nature conservation. The site is actively managed by Natural England through regular cutting and grazing with cattle. Encroaching scrub is being removed to restore fen where appropriate. A water compensation scheme has been instituted to ameliorate the effects of water abstraction. The Environment Agency monitors groundwater changes in the aquifer.

c) Access:

There are rights of way across the site. Access away from the paths is by permit only. The nearest car parking is in the villages of Fordham or Chippenham. There is a low level of usage by local inhabitants using the rights of way through the middle of the site according to the Ramsar information sheet. Few people apply for permits for recreational purposes, they are mainly requested by naturalists.

d) Primary Reason for Designation:

Meets Ramsar Criteria:

- Criterion 1: Spring-fed calcareous basin mire with a long history of management which is partly reflected in the diversity of the present-day vegetation.
- Criterion 2: The invertebrate fauna is very rich partly due to its transitional position between Fenland and Breckland. The species list is very long, including many rare and scarce invertebrates, characteristics of ancient fenland sites in GB.
- Criterion 3: the site supports diverse vegetation types, rare and scarce plants. The site is the stronghold of Cambridge milk parsley (*Selinum carvifolia*).

e) General Site Characteristics:

- Soil and geology: peat, limestone/chalk
- Geomorphology and landscape: lowland, valley, pools
- pH: alkaline
- Inland Wetland: 48.8% peatlands (including peat bogs swamps, fens); 35.5% forested peatland; 12.4% shrub-dominated wetlands; 1.7% canals and drainage channels; 0.8% freshwater marshes and; 0.8% rivers, streams, creeks.

2. Qualifying Features

Not applicable

3. Conservation Objectives:

Not applicable

4. Current Site Condition:

For reporting purposes the SSSI is divided into 15 units. Chippenham Fen has suffered from a changed hydrological regime due to abstraction from the underlying chalk aquifer. This problem is being addressed through supply of supplementary water together with a programme of vegetation and invertebrate population monitoring. Natural England, the Environment Agency and Anglian Water Group are taking this project forward.

SSSI Condition Summary for Chippenham Fen SSSI (compiled 4 October 2017)

	% meeting area of favourable or unfavourable recovering	Favourable	Unfavourable - Recovering	Unfavourable – No change	Unfavourable - Declining	Partially Destroyed	Destroyed
Area (ha)	155.87	140.73	15.14				
Percentage	100	90.29	9.71	0	0	0	0

5. Site Vulnerability (including pressures and threats):

- Hydrological changes: There is considerable pressure in the region from the water abstraction that may affect the local springs and aquifer. Persistent drought is a potential threat as 7 of 9 years in the recent past have received well below average rainfall for the regions (Report dated 2002).
- The habitats within the site are highly sensitive to inorganic fertilisers and pesticides, applications of which should be avoided both within the site itself and in adjacent surrounding areas.
- Chippenham Fen is affected by high nutrient water reaching the fen from a mixture of groundwater, rainfall and run off. In periods of low flow, poor quality water may have a more dramatic effect on the site's vascular plant assemblages.

Sources:

Fenland Site Improvement Plan: file:///H:/Downloads/SIP141006FINALv1.0%20Fenland%20SAC.pdf

Ramsar: http://jncc.defra.gov.uk/pdf/RIS/UK11014.pdf

Woodwalton Fen

Designation and Code: Ramsar UK11078 *Location:* Huntingdonshire *Area:* 229.7 ha

1. Characteristics of the Natura 2000 site

a) Site description:

- This fen holds a range of wetland plant communities once characteristic of large areas of the East Anglian fens. The site was once a raised bog associated with the former Whittlesey Mere and was dug for peat in the late 19th century when most of the acidic peat was removed, exposing the underlying fen peat. The vegetation of the area today largely reflects this historical use of the site. The open fen and swamp communities represented are of several types. A relict of the acid peat holds stands of purple moor-grass *Molinia caerulea* with ling *Calluna vulgaris*, bog myrtle *Myrica gale*, tormentil *Potentilla erecta* and the saw sedge *Cladium mariscus*. A further swamp community is dominated by purple small-reed *Calamagrostis epigejos*. Mixed fen covers a significant part of the site. This vegetation community is floristically rich and contains species such as meadow rue *Thalictrum flavum*, yellow iris *Iris pseudacorus*, swamp meadow-grass *Poa palustris* and great water dock *Rumex hydrolapathum*. Rare fen plants such as the fen wood-rush *Luzula pallescens* and fen violet *Viola persicifolia* occur.
- Of particular note is the network of ditches on the site and these hold many water plants which are now relatively uncommon in Britain including bladderwort *Urticularia vulgaris* and water violet *Hottonia palustris*. In addition, two meres have been dug in order to increase the area of standing water on the site and these have proved valuable for aquatic plant and animal communities. Further habitats of significance on the site include marshy grassland, birch and alder woodland and fen carr. The carr is varied in composition and contains willow *Salix* spp., blackthorn *Prunus spinosa*, birch *betula* spp and guelder rose *Viburnum opulus*.
- The whole site is a patchwork of wetland communities, providing a habitat for many uncommon plant and insect species-a number of which are confined to East Anglia.

b) Management and ownership:

- The site was purchased by Hon Charles Rothschild in 1910 and donated to the Society for the Promotion of Nature Reserves (now the Royal Society for Nature Conservation) in 1919. Since the 1950s the proactive management of the site has sought to reverse the drying out process and conserve this crucial fenland habitat. The site is leased from the Wildlife Trust to Natural England.
- The effective monitoring and maintenance of water levels underlies the Fen ecology and is crucial for the success of all other management practises. A Water Level Management Plan has been implemented and the site is flooded in winter in time of high water flows thus protecting low-lying farmland. However as a consequence nutrient levels in the water can be high due to agricultural runoff. Water inflows and outflows are strictly controlled. In the 1980s clay sealed banks were constructed around the perimeter of the reserve, this isolated water levels on the fen from that of the surrounding area. The Great Fen project aims to link this nature reserve with Holme Fen.

c) Access:

Parking is limited at this site, some being available alongside the Great Raveley Drain. There are three marked trails around the fen following the rides. There are no public rights of way across the reserve but visitors are allowed access to the site. There is restricted access to some areas of the site and no dogs are allowed onto any part of the site.

d) Primary Reason for Designation:

Meets Ramsar Criterion:

- Criterion 1: The site is within one of the remaining parts of East Anglia which has not been drained.
- Criterion 2: The site supports 2 species of British Red Data Book plants, fen violet (*Viola persicifolia*) and fen wood rush (*Luzula pallidula*). Aquatic beetles, flies and moths are particularly well represented.

e) General Site Characteristics:

- Soil and geology: acidic, neutral, clay, peat
- Geomorphology and landscape: lowland
- pH: acidic
- Inland Wetland: 100% peatlands (including peat bogs swamps, fens)

2. Qualifying Features

Not applicable

3. Conservation Objectives:

Not applicable

4. Current Site Condition:

Woodwalton Fen takes water in the summer months from the surrounding drains. In the winter the fen is designed to be used as a flood storage area, although this occurs infrequently. In both these circumstances the water entering the Fen is high in nutrients from agricultural run-off. It is intended to undertake research to investigate what effects the flooding may be having on the site. Considerable work has been undertaken to help progress the reed beds towards favourable conditions including annual cutting and installation of windpump to control water levels. Further scrub removal is programmed.

SSSI Condition Summary for Woodwalton Fen SSSI (compiled 4 October 2017)

	% meeting area of favourable or unfavourable recovering	Favourable	Unfavourable - Recovering	Unfavourable – No change	Unfavourable - Declining	Partially Destroyed	Destroyed
Area (ha)	204.67	111.47	93.20	4.38			
Percentage	97.91	53.32	44.58	2.09	0	0	0

5. Site Vulnerability (including pressure and threats):

- Hydrological changes: winter flood water has high silt and nutrient loads which get deposited on the site and can lie on the fields for prolonged periods. Flooding also delays the start of the grazing and mowing season, which in turn promotes vigorous growth of invasive species like soft rush and reed. Impacts include damage and disruption to management infrastructure, flooding of nests and hibernacula and, in some instances, local extinction of species.
- Water pollution: Woodwalton Fen is affected by high-nutrient water which inundates the site in winter and flows into the reserve ditches in summer. Poor water quality has resulted in a decline in biodiversity and a decline in site features within the fen.
- Air pollution: nitrogen deposition exceeds site relevant critical loads. This has the potential to affect the Molinia meadow and calcareous fen features.

Sources:

Fenland Site Improvement Plan: <u>file:///H:/Downloads/SIP141006FINALv1.0%20Fenland%20SAC.pdf</u>

Ramsar: http://jncc.defra.gov.uk/pdf/RIS/UK11078.pdf

Ouse Washes SAC, SPA, Ramsar

Designation and Code: Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar Site – UK0013011. The boundaries of the Ramsar site as extended are coincident with those of the Ouse Washes SSSI.

Location: East Cambridgeshire, Fenland and West Norfolk *Area:* 2,403 ha (Ramsar site and SSSI site), 311.35 ha (SAC site)

1. Characteristics of the Natura 2000 site

a) Site description:

- The Ouse Washes represent spined loach populations within the River Ouse catchment. The Counter Drain with its clear water and abundant macrophytes is particularly important and a healthy population of spined loach is known to occur.
- The site is an area of seasonally flooded washlands habitat managed in a traditional agricultural manner. The washlands support nationally and internationally important numbers of wintering waterfowl and nationally important numbers of breeding waterfowl. The site is also of note for the large area of unimproved neutral grassland communities, which it holds, and for the richness of the aquatic flora within the associated watercourses.

b) Management and ownership:

Given the extent of the Ouse Washes there are a number of management techniques that need to be carried out in the washes. Wetland grassland requires active management if it is to retain its conservation interest. This has traditionally been done by grazing. Partial winter flooding is required to maintain suitable habitat conditions for wintering birds. A mosaic of winter flooded grassland and permanently un-flooded grassland is desirable. Ditches are artificial habitats created by land drainage – if left unmanaged silt accumulates in the bottom of the ditches leading to the loss the range of aquatic plants and animals colonising the ditches. There needs to be a rotation undertaken on ditch management. Also the level of water in the ditches and its quality needs to be regulated to maintain the optimum level for the plant and animal community. All the habitats are highly sensitive to inorganic fertilisers and pesticides.

c) Access:

There is a network of public rights of way in the Washes. The RSPB manage a nature reserve at Welches Dam where there is a visitor centre and a number of bird hides. The WWT manage a nature reserve at Welney, Norfolk also with a centre and hides.

d) Primary Reason for Designation:

Ramsar:

- Ramsar Criterion 1a: The site qualifies by being a particularly good representative example of a natural or near-natural wetland characteristic of its biogeographical region. It is one of the most extensive areas of seasonally flooding washland of its type in Britain, and the wetland has high conservation value for many plant and animal groups.
- Ramsar Criterion 2a: The site qualifies by supporting a number of nationally rare species of plants and animals, including the whorled water-milfoil *Myriophyllum verticillatum*, greater water parsnip *Sium latifolium*, river water-dropwort *Oenanthe fluviatilis*, fringed water-lily *Nymphoides peltata*, long stalked pondweed *Potamogeton praelongus*, hair-like pondweed *Potamogeton trichoides*, grass-wrack pondweed *Potamogeton compressus*, tasteless water-pepper *Polygonum mite*, small water-pepper *Polygonum minus* and marsh dock *Rumex palustris*.

Invertebrate records indicate that the site holds a good relict fenland fauna for several groups, reflecting the diversity of wetland habitats. Two rare Red Data Book insects have been recorded, the large darter dragonfly *Libellula fulva* and the riffle beetle *Oulimnius major*.

The Ouse Washes also qualifies by supporting a diverse assemblage of rare breeding waterfowl associated with seasonally flooding wet grassland. This includes breeding migratory waders of lowland wet grassland: oystercatcher *Haematopus ostralegus*, redshank *Tringa totanus*, snipe *Gallinago*

gallinago, ruff Phdomachus pugnax. lapwing Vanellus vanellus, and black-tailed godwit Limosa limosa, and a diverse assemblage of breeding wildfowl with mute swan Cygnus olor, shelduck Tadorna tadorna, gadwall Anas strepera, teal A. crecca, mallard A. platyrhtynchus, pintail A. acuta, garganey Anas. querquedula shoveler A. clypeata, pochard Aythya ferina, tufted duck Aythya fuligulaa, moorhen Gallinula chloropus and coot Fulica atra occurring regularly. Many of these species are rare and much restricted in Britain and the European Community owing to habitat loss and degradation. The site thus has an important role in maintaining the ranges of several of these species, which have been affected by changes in habitat elsewhere in Britain. Breeding gadwall, mallard, garganey Anas. querquedula, shoveler and bar-tailed godwit are all present in nationally important numbers.

- Ramsar Criterion 5 The Ouse Washes qualifies as a wetland of international importance by virtue of regularly supporting over 20,000 waterfowl, with an average peak count of 60,950 birds recorded in the five winter periods 1986/7 to 1990/91.
- Ramsar Criterion 6 The Ouse Washes also qualifies by supporting, in winter, internationally important populations of the following species (figures given are average peak counts for the five winter period 1986/87 1990/91): 4,980 Bewick's swan *Cygnus columbarius bewickii* (29% of the north-west European wintering population); 590 whooper swans *Cygnus Cygnus* (3% of the international population); 38,000 wigeon *Anas penelope* (5% of the north-west European population); 4,100 teal *A. crecca* (1% of NW European); 1,450 pintail *Anas acuta* (2% NW European); and 750 shoveler *Anas clypeata* (2% of NW European). Also notable are the following nationally important wintering populations: 270 cormorant *Phalacrocorax carbo* (2% of the British wintering population); 490 mute swan *Cygnus olor* (3% of British); 320 gadwall *Anas strepera* (5% of British); 2,100 pochard Aythya *ferina* (4% of British); 860 tufted duck *Aythya fuligula* (1 % of British); and 2,320 coot *Fulica atra*.
- During severe winter weather elsewhere, the Ouse Washes can assume even greater national and
 international importance as wildfowl and waders from many other areas arrive, attracted by the relatively
 mild climate, compared with continental European areas, and the abundant food resources available. The
 continued international importance of this site is dependent on the maintenance of a winter flooding
 regime and a high, but controlled summer water table. Over the past 25yrs it has also been noted that
 there has been an increase in summer flooding as well as high water levels in winter. This has adversely
 affected both the breeding birds and the traditional washland management regime. It also results in
 Glyceria grass (sweet rush) competing with the other grasses and herbs, which may affect food
 availability for wintering waterfowl. Persistence of high water levels in the winter also reduces available
 area of grazing for species such as wigeon.

SPA:

Supports species referred to in Article 4 of the Wild Birds Directive and Annex II Species:

- The Ouse Washes Ramsar site and the Special Protection Area is a wetland of major international importance comprising seasonally flooded wash lands, which are agriculturally managed in a traditional manner. It provides breeding and winter habitats for important assemblages of wetland bird species, particularly wildfowl and waders.
- The boundaries of the Special Protection Area are coincident with those of the Ouse Washes SSSI, apart from the exclusion of a section of the Old Bedford River in the north of the SSSI.
- The Ouse Washes qualifies under **Article 4.1** of the EC Birds Directive by supporting, in summer, a nationally important breeding population of ruff *Philomachus pugnax*, an Annex 1 species. In recent years an average of 57 individuals have been recorded, a significant proportion of the British population.
- The site also qualifies under Article 4.1 by regularly supporting internationally or nationally important wintering populations of three Annex 1 species. During the five year period 2012/13 to 2016/17, the following average peak counts were recorded: 2.073 Bewick's swan *Cygnus columbarius bewickii* and 6,720 Whooper swans *Cygnus Cygnus*.
- The site further qualifies under **Article 4.2** as a wetland of international importance by virtue of regularly supporting over winter: cormorant *Phalacrocorax carbo*, mute swan *Cygnus olor*, wigeon *Anas penelope*, gadwall *Anas strepera*, teal *A. crecca*, pintail *Anas acuta*, shoveler *Anas clvpeata*, pochard *Aythya ferina*, tufted duck *Aythya fuligula* and coot *Fulica atra*.
- The site also qualifies under **Article 4.2** by virtue of regularly supporting, in summer, a diverse assemblage of the breeding migratory waders of lowland wet grassland including: oystercatcher *Haematopus ostralegus,* redshank *Tringa totanus,* snipe *Gallinago gallinago,* Ruff *Philomachus pugnax* lapwing *Vanellus vanellus,* and black-tailed godwit *Limosa limosa;* and a diverse assemblage of breeding wildfowl with mute swan *Cygnus olor,* shelduck *Tadorna tadorna,* gadwall *Anas strepera,* teal *A. crecca,* mallard *A. platyrhynchus,* pintail *A. acuta,* garganey *Anas. querquedula,* shoveler *A. clypeata,* pochard

Aythya farina, tufted duck Aythya fuligula, moorhen Gallinula chloropus and coot Fulica atra occurring regularly.

Many of these species are rare and much restricted in Britain and the European Community owing to habitat loss and degradation. The site thus has an important role in maintaining the ranges of several of these species, which have been affected by changes in habitat elsewhere in Britain.

SAC:

Supports Annex II species Spined loach (*Cobitis taenia*) – The Ouse Washes represents spined loach
populations within the River Ouse catchment. The Counter Drain is particularly important and a healthy
population of spined loach is known to occur.

e) General Site Characteristics:

- Inland water bodies (standing water, running water) (50%)
- Bogs Marshes. Water fringed vegetation. Fens (20%)
- Improved grassland (30%)

2. Qualifying Features

Not applicable

3. Conservation Objectives:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving Favourable Conservation Status of its Qualifying Features (SAC), or the aims of the Wild Birds Directive (SPA), by maintaining or restoring:

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

4. Current Site Condition:

Assessment work was carried out in 2003 and at this time many of the units that comprise the Washes were in an unfavourable state. Only 13% of the site meets the PSA target. 87% is in an unfavourable condition as surveyed in September 2007 but this had not changed from the previous survey in August 2003. The water quality regularly fails to meet total Phosphorus target of 0.1mg/l. Until this can be remedied the site will continue to remain unfavourable.

 -					-		
	% meeting area of favourable or unfavourable recovering	Favourable	Unfavourable - Recovering	Unfavourable – No change	Unfavourable - Declining	Partially Destroyed	Destroyed
Area (ha)	480.79	391.13	89.67	2,032.76			
Percentage	19.13	15.56	3.57	80.87	0	0	0

SSSI Condition Summary for Ouse Washes SSSI (compiled 4 October 2017)

5. Site Vulnerability (including pressures and threats):

• Two independent and parallel rivers comprise the SAC. The Counter Drain / Old Bedford (known also as the outer river) drains adjacent farmland. The New Bedford / Delph (known also as the inner river) is sourced by the River Great Ouse. During the winter and increasingly during the spring and summer months as well, the inner river takes flood-water from the Great Ouse, and therefore has an important flood defence function. Issues of concern relate to water quantity, water quality, salinity, turbidity and sediment.

- The need to ensure there is sufficient water for the rivers is addressed through the Water Level Management Plan agreed by the Environment Agency and partner organisations. The outer river is also a source of water for nearby arable land forming spray irrigation, but this abstraction is unmetered for the most part. Abstraction of water from the Great Ouse system to Essex via the Ely-Ouse Transfer Scheme is monitored through the Denver License Variation. Other proposals for water abstraction, e.g. to Rutland Water by Anglia Water, have been the subject of assessment, but there are no current proposals.
- Water quality is a major issue of concern. Increases in two plant nutrients nitrogen and particularly phosphorus (thought to be derived from sewage treatment works) are leading to changes in the macrophyte communities, shown by a decline in species diversity and the loss of species together with an increase in species tolerant of eutrophic conditions. This is particularly apparent in the inner river. There is evidence that agricultural inputs are a minor component. In addition, blanket-weed (aquatic algae) poses problems to navigation and angling, leading to issues of timing and frequency of aquatic weed-cutting. Water quality issues are currently the subject of debate between the Environment Agency and Natural England. Three sewage treatment works in the Great Ouse will be covered by the Urban Waste Water Directive, but there remain more than 90 smaller works. These will be subject to the Review of Consents to be undertaken by the Environment Agency within the next four years. A case could be prepared and submitted to OFWAT and the Water Industries AMP 4 Programme commencing 2005, in order to strip phosphates from all relevant sewage treatment works in the system.
- In addition, floodwater draining off the adjacent Ouse Washes into the inner river can be of a very poor quality (particularly in warm weather) leading to problems of deoxygenation with resultant fish-kills. The frequency of increased spring and summer flooding on the Ouse Washes is currently being studied to ascertain ways of ameliorating its effects.
- Saline intrusion through the northernmost tidal lock gate may be contributing to an increase in salinity levels of the outer river.
- Conditions must be applied to planning permissions for gravel extraction from quarries near to the SAC, to ensure that drainage water from de-watering and washings does not affect the turbidity and sediment levels in the outer river.

Sources:

Ouse Washes Site Improvement Plan: file:///H:/Downloads/SIP141009FINALv1.0%20Ouse%20Washes%20(2).pdf

SAC: <u>http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0013011</u>

Conservation objectives: file:///H:/Downloads/UK0013011-Ouse-Washes-SAC-V2.pdf

SPA: http://jncc.defra.gov.uk/pdf/SPA/UK9008041.pdf

Conservation objectives: file:///H:/Downloads/UK9008041-Ouse-Washes-SPA-V3.pdf

Ramsar: http://jncc.defra.gov.uk/pdf/RIS/UK11051.pdf

Breckland SPA, SAC

Designation and Code: Special Protection Area (SPA) – UK9009201, Special Area of Conservation (SAC) – UK0019865

Location: Forest Heath and Kings Lynn and West Norfolk

Area: Although covering much of the same land, the boundary of the SAC is not contiguous with that of the SPA. SPA – 39433.65ha, SAC – 7543.64ha

1. Characteristics of the Natura 2000 site

a) Site description:

- Wangford Warren and adjoining parts of RAF Lakenheath are included in the Breckland site as the only occurrence of this habitat type in the UK. The site has one of the best-preserved systems of active inland sand dunes in the UK. The habitat type, which is in part characterised by the nationally rare grey hair-grass *Corynephorus canescens* occurring here at its only inland station, is associated with open conditions with active sand movement. The site shows the colonisation sequence from open sand to acidic grass-heath
- The Breckland meres in Norfolk represent natural eutrophic lakes in the east of England. They are examples of hollows within glacial outwash deposits and are fed by water from the underlying chalk aquifer. Natural fluctuations in groundwater tables mean that these lakes occasionally dry out. The flora is dominated by stonewort pondweed *Characeae Potamogetonaceae* associations.
- The dry heaths of Breckland are representative of European dry heaths in East Anglia, in eastern England, developed under a semi-continental climate. Breckland has an average annual precipitation of only 600mm, relatively hot summers and cool winters. Frosts can occur in any month of the year. The dry acidic heath of Breckland represents H1 *Calluna vulgaris – Festuca ovina* heath in the SAC series. The sand sedge dominated *Carex arenaria* sub-community (H1d) is typical of areas of blown sand – a very unusual feature of this location.
- The highly variable soils of Breckland, with underlying chalk being largely covered with wind-blown sands, have resulted in mosaics of heather-dominated heathland, acidic grassland and calcareous grassland that are unlike those of any other site. In many places there is a linear or patterned distribution of heath and grassland, arising from fossilised soil patterns that formed under peri-glacial conditions. Breckland is important for rare plants, such as perennial knawel *Scleranthus perennis* ssp. *Prostrates,* and rare invertebrates.
- Breckland in East Anglia is the most extensive surviving area of the rare grassland type CG7 Festuca ovina – Hieracium pilosella – Thymus praecox grassland. The grassland is rich in rare species typical of dry, winter-cold, continental areas, and approaches the features of grassland types in central Europe more than almost any other semi-dry grassland found in the UK. The terrain is relatively flat, with few physical variations, but there are mosaics of calcareous grassland and heath/acid grassland, giving rise to patterns of structural variation.

b) Primary Reason for Designation:

SAC

Annex I Habitats:

Inland dunes with open *Corynephorus* and *Agrostis* grasslands; natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation; European dry heaths; semi-natural dry grasslands and scrubland facies on calcareous substrates; alluvia forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Pdion, Alnion incanae, Salicion albae*), Great crested newt *Triturus cristatus*

SPA

Article 4.1, Annex I Species:

During the breeding season the area regularly supports: Stone Curlew *Burhinus oedicnemus* - 60.1% of the GB breeding population, Nightjar *Caprimulgus europaeu* - 12.2% of the GB breeding population, and Woodlark *Lullula arborea* - 28.7% of the GB breeding population.

c) General Site Characteristics:

SAC

Inland water bodies (0.5%) Bogs. Marshes. Water fringed vegetation. Fens (1%) Dry grassland (59.4%) Heath. Scrub. Maquis and garrigue. Phygrana (20%) Improved grassland (0.2%) Other arable land (0.1%) Broad-leaved deciduous woodland (9%) Coniferous woodland (4%) Inland rocks. Screes. Sands. Permanent snow and ice (0.5%) Other land (0.3%)

SPA

Heath. Scrub. Maquis and garrigue. Phygrana (0.9%) Dry Grassland. Steppes (19.7) Humid grassland. Mesophile Grassland (1.3%) Improved grassland (0.3%) Other arable land (31.5%) Broad-leaved deciduous woodland (1.4%) Coniferous woodland (44.7%)

2. Qualifying Features

SAC:

Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) - priority feature.

The area is considered to support a significant presence of Triturus cristatus (Great crested newt).

3. Conservation Objectives:

SAC

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

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying features;
- 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.

SPA

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

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

4. Current Site Condition:

SSSI Condition Summary for Breckland Farmland SSSI (compiled 4 October 2017)

	% meeting area of favourable or unfavourable recovering	Favourable	Unfavourable - Recovering	Unfavourable – No change	Unfavourable - Declining	Partially Destroyed	Destroyed
Area (ha)	13,392.36	13,392.36					
Percentage	100	100	0	0	0	0	0

SSSI Condition Summary for Breckland Forest SSSI (compiled 4 October 2017)

	% meeting area of favourable or unfavourable recovering	Favourable	Unfavourable - Recovering	Unfavourable – No change	Unfavourable - Declining	Partially Destroyed	Destroyed
Area (ha)	18,125.83	16.22	18,109.61				
Percentage	100	0.09	99.91	0	0	0	0

6. Site Vulnerability (including pressures and threats): ⁵⁴

- Grazing by sheep/cattle is essential to the maintenance of habitats. Problems include nutrient deposition from the atmosphere and adjacent arable land, invasion by self-sown trees/shrubs, and uncontrolled and inappropriate recreational activities. Local ground water abstraction has a deleterious impact on the natural eutrophic lakes, the Breckland meres, and is the subject of active liaison between English Nature and the Environment Agency.
- Disturbance: Stone-curlew are largely reliant on arable land for nesting and are thus vulnerable to
 disturbance and nest destruction from agricultural operations. A recovery project operates to find nests,
 advise landowners on their operations which might affect Stone-curlews, and to ring chicks. Management
 agreements are in place to provide nest plots and thus safeguard the population. Agreements have been
 extended to cover the coming two breeding seasons, after which it is hoped that Higher Level Scheme
 agreements will be in place.
- Recreational pressure: Recreational and other activities have the potential to impact both SAC and SPA features. The impacts of increased recreational activity are uncertain. Recreational growth in Thetford Forest may impact on Woodlark and Nightjar. SAC features may be affected through eutrophication (dog fouling, unauthorised fires) and disturbance of soils, in particular on commons and heaths.
- Predation: Stone-curlew, Nightjar and Woodlark are vulnerable to predation from corvids and foxes and to disturbance caused by human activity, including dog-walking. In 2005, new public access was introduced on heaths by legislation. Safeguards to protect stone-curlew have been included but the situation will require monitoring to determine how successful restrictions have been in preventing additional disturbance.
- Air pollution: Breckland heathlands and acid grasslands supporting stone-curlew, nightjar and woodlark are fragile in terms of the high background levels of air pollution in the area, particularly high nitrogen loads causing undesirable habitat changes. Research on this topic is ongoing, and measures to export the nutrients off heaths (such as night time sheep folding or topsoil stripping) to counter the effects of pollution are potential management options.
- There are development pressures on the area, particularly for housing, roads and renewables infrastructure, which an impact on SPA species (Stone Curlew, Woodlark, Nightjar) and which requires substantial discussion and mitigation in some cases. This is achieved through Natural England commenting on planning applications and providing input to structural and local plans.
- Woodlark and nightjar benefit from clear-fell forestry rotational management. The appropriate management is currently taking place in the forests.

⁵⁴ Site Improvement Plan Breckland (Natural England, January 2015)

- Habitat fragmentation: some heaths are relatively small and the connectivity between these and the larger heaths too, is poor. In some cases, the individual heaths are physically isolated and the landscape in between is hostile to species dispersal.
- Collecting of eggs of Stone-curlew, and to some extent Nightjar and Woodlark, is believed to be a serious threat to individual birds and to population size. The loss of eggs to this illegal activity is unknown. There is a police-based alert system in place in Breckland to try and reduce this type of crime, and landowners are vigilant.
- Water pollution: there has been a considerable loss of aquatic species in Ringmere and nutrients are impacting the mere.

Appendix 3: Review of Potential In-Combination Effects with Plans or Projects

Name of plan or project	Status	Plan requirements	Details of HRA work completed	Potential impacts that could cause in-combination effects?
Fenland Local Plan	Adopted May 2014	 11,000 dwellings (2011- 2031, plus 550 on the edge of Wisbech in Kings Lynn and West Norfolk). 7,200 new jobs 85ha new employment land 	Screening Report – further assessment not required	 General effects relating to growth and development: Habitat damage and/or loss Disturbance from recreational pressure Increased demand for water resources Reduced water quality from pollution Atmospheric pollution from increased vehicle journeys Potential effects are unlikely as the HRA concluded no likely
King's Lynn and West Norfolk Core Strategy	Adopted July 2011	16,500 dwellings (2001 to 2026) 5,000 new jobs by 2021.	Appropriate Assessment Identified potential effects on Breckland SAC/SPA from proximity and disturbance and recreational pressure. With policy amendments, concluded no likely significant effects on Natura 2000 sites.	 significant effects. General effects relating to growth and development: Habitat damage and/or loss Disturbance from recreational pressure Increased demand for water resources Reduced water quality from pollution Atmospheric pollution from increased vehicle journeys

Review of Potential In-Combination Effects with Local Development Plans of Local Authorities surrounding East Cambridgeshire

Name of plan or project	Status	Plan requirements	Details of HRA work completed	Potential impacts that could cause in-combination effects?
				CS12 Environmental Assets provides mitigation for potential significant effects, restricting new development within 1,500m of the Breckland SPA.
King's Lynn and West Norfolk Site Allocations & Development Management Policies Plan	September 2016	Sets out land allocations and development management policies.	Appropriate Assessment Identified potential effects on The Wash SPA and The Wash and North Norfolk SAC from combined effects of increased recreational pressure.	 General effects relating to growth and development: Habitat damage and/or loss Disturbance from recreational pressure Increased demand for water resources Reduced water quality from pollution Atmospheric pollution from increased vehicle journeys DM19 provides mitigation for potential significant effects, requiring project level HRA and an agreed package of habitat protection measures to avoid adverse effects on European
Forest Heath Core Strategy	Adopted 2010	7,300 new jobs by 2026 16ha additional employment land	Appropriate Assessment	sites. General effects relating to growth and development: • Habitat damage and/or loss
		Policy CS 2 restricts new development to within 1500m of components of the Breckland SPA designated for Stone Curlew, and within		 Disturbance from recreational pressure Increased demand for water resources Reduced water quality from pollution

Name of plan or project	Status	Plan requirements	Details of HRA work completed	Potential impacts that could cause in-combination effects?
Forest Heath Single Issue Review Core Strategy Policy CS7 Overall Housing Provision and Distribution	Proposed Submission 2017	any 1km grid squares which has supported 5 or more nesting attempts, and to within 400m of components designated for Woodlark and Nightjar. Proposals for development in these areas will require a project level HRA. New road infrastructure or improvements will not be allowed within 200m of sites designated as SACs. 6,800 dwellings (2011-2031)	Appropriate Assessment Potential effect identified through screening on Breckland SPA from disturbance and other urban edge effects. AA recommended requirement inserted into the Plan for a project level HRA to rule out adverse effects on the integrity of the Breckland SPA.	 Atmospheric pollution from increased vehicle journeys CS2 Natural Environment provides mitigation for potential significant effects, restricting new development within 1,500m of the Breckland SPA. New road infrastructure will not be allowed within 200m of sites designated as SACs. General effects relating to growth and development: Habitat damage and/or loss Disturbance from recreational pressure Increased demand for water resources Reduced water quality from pollution Atmospheric pollution from increased vehicle journeys Potential for in-combination effects as the Plan has not been adopted and the HRA work is in- complete.
Forest Heath / St Edmundsbury Joint Development Management Policies Document	Adopted Feb 2015	Sets out development management policies	Screening Report – further assessment not required	General effects relating to growth and development: • Habitat damage and/or loss

Name of plan or project	Status	Plan requirements	Details of HRA work completed	Potential impacts that could cause in-combination effects?
			Concluded no likely significant effects.	 Disturbance from recreational pressure Increased demand for water resources Reduced water quality from pollution Atmospheric pollution from increased vehicle journeys DM12 provides mitigation for potential significant effects, requiring all new development shown to contribute to recreational disturbance and visitor pressure within the Breckland SPA and SAC to make appropriate S106 contributions towards management projects.
Forest Heath Site Allocations Local Plan	Proposed Submission, January 2017	Sets out land allocations and development management policies.	Appropriate Assessment	 General effects relating to growth and development: Habitat damage and/or loss Disturbance from recreational pressure Increased demand for water resources Reduced water quality from pollution Atmospheric pollution from increased vehicle journeys Potential for in-combination effects as the Plan has not been

Name of plan or project	Status	Plan requirements	Details of HRA work completed	Potential impacts that could cause in-combination effects?
				adopted and the HRA work is in- complete.
St Edmundsbury Core Strategy	Adopted 2010	15,631 dwellings (2008- 2031) 13,000 new jobs by 2026	Screening Report – further assessment not required Potential effects identified on Breckland SAC/SPA through increased recreational pressure, but concluded no significant effects due to mitigation measures included in the Plan.	General effects relating to growth and development: • Habitat damage and/or loss • Disturbance from recreational pressure • Increased demand for water resources • Reduced water quality from pollution • Atmospheric pollution from increased vehicle journeys CS2 Sustainable Development provides mitigation for potential significant effects, protecting the network of designated sites, including Breckland SPA. Applies 400m buffer zone for Woodlark and Nightjar and 1,500m for areas that support Stone Curlew.
St Edmundsbury Vision 2031 (set of three site allocation Local Plans)	Adopted 2014	Sets out land allocations and policies.	Screening Report – further assessment not required Concluded no likely significant effects.	 General effects relating to growth and development: Habitat damage and/or loss Disturbance from recreational pressure Increased demand for water resources Reduced water quality from pollution

Name of plan or project	Status	Plan requirements	Details of HRA work completed	Potential impacts that could cause in-combination effects?
				Atmospheric pollution from increased vehicle journeys
South Cambridgeshire Pre- Submission Draft Local Plan	Draft Local Plan submitted March 2014	19,500 dwellings and 85 Gypsy and Traveller pitches. 22,000 new jobs	Screening Report – further assessment not required Concluded no likely significant effects.	General effects relating to growth and development: • Habitat damage and/or loss • Disturbance from recreational pressure • Increased demand for water resources • Reduced water quality from pollution • Atmospheric pollution from increased vehicle journeys
Huntingdonshire Core Strategy	Adopted 2009	14,000 dwellings (2001 - 2026) 85ha new employment land before 2026 13,000 new jobs	Screening Report – further assessment not required Concluded no likely significant effects.	 General effects relating to growth and development: Habitat damage and/or loss Disturbance from recreational pressure Increased demand for water resources Reduced water quality from pollution Atmospheric pollution from increased vehicle journeys
Huntingdonshire Local Plan	Consultation Draft 2017	21,000 dwellings (2011- 2036) 14,900 new jobs	Appropriate Assessment The HRA identified potential significant effects on the Ouse	General effects relating to growth and development: • Habitat damage and/or loss

Name of plan or project	Status	Plan requirements	Details of HRA work completed	Potential impacts that could cause in-combination effects?
			Washes SAC/SPA/Ramsar from increased flooding. These effects could be avoided by changes to the wording of some of the policies in the Plan.	 Disturbance from recreational pressure Increased demand for water resources Reduced water quality from pollution Atmospheric pollution from increased vehicle journeys Potential for in-combination effects as the Plan has not been adopted and the HRA work is in- complete.

Other Relevant Plans or Projects to the In-Combination Assessment

Plan or Project	Status	Main Considerations
Cambridgeshire and Peterborough Minerals and Waste Local Plan Core Strategy Cambridgeshire and Peterborough Minerals and	Adopted 2011 Adopted 2012	Sets out strategic objectives and policies for sustainable minerals and waste development.
Waste Local Plan Site Specific Proposals		The HRA concluded no adverse effects likely on Natura 2000 sites.
Cambridgeshire Local Transport Plan 2011- 2031	Adopted July 2015	Sets out the transport strategy for the county and provides details of transport schemes to deliver the strategy. Includes schemes to improve air quality and the environment, improvements to public transport and schemes to encourage walking and cycling, therefore it focuses on how negative effects from transport can be reduced.
		HRA concluded that none of the schemes or strategic within the LTP will likely result in significant effects in any of the Natura 2000 sites included within the assessment:
		 Ely Southern Bypass – no likely significant effects, primarily due to the distance of the scheme from Natura 2000 sites.
		 Soham railway station – concluded no likely significant effects
East Cambridgeshire Transport Strategy	Adopted July 2017	Sets out a detailed policy framework and action plan of potential transport improvements for the area, addressing current problems and consistent with third Cambridgeshire Local Transport Plan.
		Supports the East Cambridgeshire Local Plan by taking into account the predicted levels of growth and detailing the transport infrastructure and services necessary to deliver this growth.
Anglian Water's Water Resources Management Plan, 2015-2040	Adopted 2015	Sets out the proposed approach for providing water resources in the future
Anglian Water's Water Resources Management Plan, 2020-2045	Draft March 2018	Sets out the proposed approach for providing water resources in the future
Cam and Ely Ouse Abstraction Licensing Strategy	Adopted May 2017	Sets out how the Environment Agency's will manage future abstraction within the Cam and Ely catchment.
		Under the Habitats Regulations, the Environment Agency has a duty to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. Water efficiency is also tested by the Environment Agency before a new licence is granted. If the assessment of a new application shows that it could

Plan or Project	Status	Main Considerations
		have an impact on a SAC/SPA, the Environment Agency will have to follows strict rules in setting a time limit for their licence.
Old Bedford and Middle Level Abstraction Licensing Strategy	Adopted May 2017	Sets out how the Environment Agency's will manage future abstraction within the Old Bedford and Middle Level catchment.
		Under the Habitats Regulations, the Environment Agency has a duty to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. Water efficiency is also tested by the Environment Agency before a new licence is granted. If the assessment of a new application shows that it could have an impact on a SAC/SPA, the Environment Agency will have to follows strict rules in setting a time limit for their licence.
Anglian River Basin Management Plan	Adopted December 2015	Sets out the measures needed to bring more waters to good status to meet the requirements of the Water Framework Directive.
Great Ouse Catchment Flood Management Plan Summary Report	January 2011	Used by the Environment Agency and partners to plan and agree the most effective way to manage flood risk in the Great Ouse catchment.

Appendix 4: HRA Stage 1 Screening Assessment

Screening Assessment of the East Cambridgeshire Proposed Submission Local (Proposed Submission, November 2017)

Policy	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
Vision	N1	None	This is a general statement which sets out the overarching vision for the future development of East Cambridgeshire to 2036. The vision would not have a direct effect on a Natura 2000 site because no development could occur through the vision itself.
Objectives	N1	None	A set of strategic objectives to address key issues facing the East Cambridgeshire area. They will not have a direct effect on a Natura 2000 site because no development could occur through the objectives themselves.
LP1: A Presumption in Favour of Sustainable Development	N1	None	This 'headline' policy sets out the overarching plan commitment to sustainability and confirms a commitment to the presumption in favour of sustainable development. The policy has no direct impact on Natura 2000 sites as it provides for sustainable development. Indirectly it has the potential for positive effects on the wider environment.
LP2: Level and Distribution of Growth	P	All	This policy sets out the overall scale of new development in the area up to 2036. It sets out the overall housing growth target across East Cambridgeshire of 10,835 new homes (2016 to 2036) and seeks to facilitate the delivery of 6,000 new jobs (2014-2036). It therefore provides for residential and employment focused development. These figures have been reduced from the Further Draft version of the Plan (from 11,400 to 10,835 homes, and from 6,900 to 6,000 jobs).
			The quantum of housing proposed means this policy could potentially lead to increased <u>recreational pressur</u> e on Natura 2000 sites, both near to allocated development sites, and as a result of windfall sites coming forward during the plan period. There could also be effects from <u>urbanisation</u> , where qualifying features are sensitive to such impacts.
			Where development is adjacent to/or in close proximity to, a Natura 2000 site, there is a risk of loss or damage to habitat that supports qualifying features of the site.
			New housing and employment has the potential to lead to increased road journeys within the district and beyond, and therefore potentially <u>reduced air quality</u> on a Natura 2000 site where it lies within 200m of a major road.

Policy	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
			There is potential for increased pressure for water abstraction and treatment, potentially leading to reduced water levels and water quality.There is also the potential for in combination and cross boundary effects beyond the district area with the levels and distribution of growth proposed in the surrounding local authority areas.
LP3: The Settlement Hierarchy and the Countryside	N1	None	 This policy establishes a settlement hierarchy and identifies settlements that fall within each of the categories. It is predominantly a means of categorising villages, and does not set out a quantity of growth, nor define how growth should be distributed across the settlement hierarchy (these issues are addressed under Policy LP3 Level and Distribution of Growth). As this policy is a general policy statement and does not detail the growth strategy for each category of settlement, the policy itself is unlikely to have any likely significant effects on the Natura 2000 sites.
LP4: Green Belt	N1	None	This policy requires development in the Green Belt to be in-line with the NPPF. Where development is acceptable, it sets out general criteria to guide proposals.This is a general criteria based policy that does not lead to development itself and therefore is not likely to result in significant effects, either alone or in combination.
LP5: Community-led development	N1	None	This policy supports community-led development schemes for housing, small business units and other appropriate uses. It is non-site specific and does not set out a quantum of development.This is a general policy statement that does not lead to development itself and therefore is not likely to result in significant effects, either alone or in combination.
LP6: Meeting Local Housing Needs	N4	None	This policy sets out the requirements for affordable housing, higher access standards, self-build homes, residential care accommodation and park homes.

Strategic and Develop	Strategic and Development Control Policies Screening Assessment			
Policy	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?	
			There is no development proposed through the policy itself, as this will occur through lower level planning applications. The policy itself will therefore not result in likely significant effects, either alone or in combination.	
LP7: Gypsies and Travellers and Travelling Showpeople sites	N6	None	 This policy sets out where Gypsy and Traveller sites are to be allocated to meet need as well as qualitative criteria which will be used in determining proposals for the development of sites to meet Gyspy and Traveller needs. Two sites are allocated on the Policies Map for Gypsy and Traveller pitch provision. These sites were allocated in the 2015 Local Plan and therefore have been 'rolled forward': Land at Muckdungle Corner, Newmarket Road, Bottisham Land at Pony Lodge, Grunty Fen Road, Witchford While the criteria based elements of the policy will not lead to development on each site means that there is potential for this policy to have effects on Natura 2000 sites, as Gypsy and Traveller sites can result in the same impact pathways as other types of residential development. However, given the proposed sites are small-scale (maximum of 2 pitches) it is considered that the potential effects of any development would be very restricted in 	
			scale and so remote from any of the Natura 2000 sites that they would not undermine the conservation objectives for the sites. On this basis, this policy can be screened out.	
LP8: Delivering Prosperity and Jobs	Р	All	This policy makes provision for employment development, which can potentially lead to likely significant effects on Natura 2000 sites.	
			This policy predominantly formalises existing employment areas and/or consents, however the policy also supports the creation of new employment sites or areas in certain locations, in principle, subject to criteria.	
			There is potential for likely significant effects on Natura 2000 sites from <u>reduced air</u> <u>quality</u> due to increased road journeys, particularly where Natura 2000 sites are within 200m of major roads.	

Strategic and Develop	oment Control F	Policies Screenin	g Assessment
Policy	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
			 There is potential for <u>urbanisation</u> effects relating to construction and operational activities, from employment development located within 400m of a Natura 2000 site. There is potential for increased pressure for water abstraction and treatment, potentially leading to <u>reduced water levels and changes in water quality</u>. Where development is adjacent to/or in close proximity to, a Natura 2000 site, there is a risk of <u>loss or damage to habitat</u> that supports qualifying features of the site. There is also the potential for in combination and cross boundary effects beyond the district area with development proposed in the surrounding local authorities.
LP9: Equine Development	N4	None	 This policy is non-site specific, and sets out general criteria for the consideration of horse racing or equestrian development. There is no development proposed through the policy itself, as this will occur through lower level planning applications. Any proposal for development must also be in accordance with other policies in the Plan. The mitigation provided by the existing wording of policy LP30 in relation to Natura 2000 sites, and required at the project level, will help to ensure that any lower level proposals for development do not have likely significant effects on any of the Natura 2000 sites, either alone or in combination.
LP10: Development Affecting the Horse Racing Industry	N1	None	 This policy is non-site specific, and ensures that development does not have an adverse impact upon the horse racing industry. There is no development proposed through the policy itself, as this will occur through lower level planning applications. Any proposal for development must also be in accordance with other policies in the Plan. The mitigation provided by the existing wording of policy LP30 in relation to Natura 2000 sites, and required at the project level, will help to ensure that any lower level proposals for development do not have likely significant effects on any of the Natura 2000 sites, either alone or in combination.

Strategic and Develop	ment Control F	Policies Screenin	g Assessment
Policy	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
LP11: Tourist Facilities and Visitor Attractions	N4	None	 This policy supports proposals for new or extended tourist facilities where a proposal can demonstrate it meets a set of criteria. One of the criterion states: 'Recreation pressure on nearby protected nature conservation sites (especially those with European protection status) is not significantly increased, or, if the proposed development has the potential to significantly increase recreational pressure, it will need to be demonstrated through an appropriate (but proportionate) assessment that such an increase is not likely to have a significant negative impact on the protected site'. As this policy includes specific protection of Natura 2000 sites, it is unlikely to lead to likely significant effects.
LP12: Tourist Accommodation (excluding holiday cottages)	N4	None	 This policy supports proposals for new or extended hotels, caravan, caravan-lodge, camping sites, marinas and moorings where a proposal can demonstrate it meets a set of criteria. One of the criterion states: '<i>Recreation pressure on nearby protected nature conservation sites (especially those with European protection status) is not significantly increased, or, if the proposed development has the potential to significantly increase recreational pressure, it will need to be demonstrated through an appropriate (but proportionate) assessment that such an increase is not likely to have a significant negative impact on the protected site'.</i> As this policy includes a specific provision to protect Natura 2000 sites, it is unlikely to lead to likely significant effects.
LP13: Holiday Cottage Accommodation	N4	None	 This policy is a general policy and is non-site specific. It states that accommodation in the countryside will only be allowed where it involves the re-use of an existing building, for a maximum of 2 dwellings. This policy does not provide for a quantum of development and so will be unlikely to have a significant effect on Natura 2000 sites.
LP14: Location of Retail and Town Centre Uses	N4	None	This policy focuses retail and town centre uses to within existing town centres and therefore away from sensitive Natura 2000 sites. It does not provide for a quantum of retail development.

Strategic and Develop	ment Control P	olicies Screenin	g Assessment
Policy	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
			As such, is unlikely to have a likely significant effect on Natura 2000 sites.
LP15: Retail Uses in Town Centres	N6	None	 This policy relates to Primary Shopping Frontages and Secondary Shopping Frontages in Ely, as well as Soham and Littleport town centres, and seeks to retain the vitality and viability of such centres. It relates to existing retail centres only. This policy does not provide for the quantum of retail development.
			As such, is unlikely to have a likely significant effect on Natura 2000 sites.
LP16: Infrastructure to Support Growth	N1	None	This policy confirms the need for infrastructure to be provided alongside development, which would including necessary water/sewerage infrastructure. It does not allocate a quantity of development or identify the location of any development. The provision of appropriate infrastructure will ensure development will not lead to likely significantly effects on Natura 2000 sites.
LP17: Creating a Sustainable, Efficient and Resilient Transport Network	N4	None	 This policy sets out the requirements for new development in relation to the transport network. The policy does not identify any specific transport related scheme, location type or quantum of development. However, the provision of transport infrastructure has the potential to increase traffic movements and therefore reduce <u>air quality</u> along roads in close proximity to the Natura 2000 sites, thus potentially resulting in a likely significant effect. Indirectly, the implementation of this policy may help Natura 2000 sites which are prone to transport related pollutants as a result of its promotion of a more sustainable transport network that have the potential to result in a reduction in emissions of air pollutants.
LP18: Improving Cycle Provision	N4	None	This policy encourages cycling as a sustainable means of transport in East Cambridgeshire. It seeks to ensure that accessibility to key destinations by bicycle is safe and sets out how this will be achieved. It refers generally to the delivery of identified cycle network improvements identified in other documents, such as the Local Transport Plan and the Transport Strategy for East Cambridgeshire, but not to the names of specific schemes contained within such documents.

Policy	Screening	Natura 2000	Likely Significant Effect (LSE), alone or in combination?
	Category	Sites Potentially Affected	
			This policy has no direct impact on Natura 2000 sites as it will not specifically lead to development itself. However, indirectly, its implementation may help Natura 2000 sites which are prone to transport related pollutants, as a result of its promotion of a more sustainable transport network, which could result in a reduction in emissions of air pollutants.
LP19: Maintaining and Improving Community Facilities	N4	None	This policy seeks to protect existing community facilities, and also encourage appropriate new stand-alone facilities, or facilities as part of wider development proposals.
			The policy encourages the development of new community facilities but does not directly lead to the development of them. The policy itself will therefore not result in likely significant effects, either alone or in combination.
LP20: Delivering Green Infrastructure, Trees and Woodland	N3	None	 This policy seeks to secure new green infrastructure, either alongside new development, or in its own right. At the Further Draft Stage, it was not possible to screen out this policy as the policy could be strengthened to ensure mitigation is delivered to address the adverse effects of recreational pressure on designated sites. The Proposed Submission version of this policy should have positive effects on Natura 2000 sites as a result of the positive aspects implementing such a policy will have on the wider environment. These benefits are twofold, firstly, direct benefits to the individual sites through creation and protection of biodiversity; but also indirectly through increased opportunities for recreation through extensive walking, cycling and other forms of recreation which can help mitigate the effects of climate change and alleviate the recreational pressure on other Natura 2000 sites.

Strategic and Develop			
Policy	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
			Additionally, the policy has been revised to state ' <i>Proposals which may result in recreational pressure on designated biodiversity sites will be particularly expected to provide such green infrastructure</i> '.
			 The Local Plan has committed to a network of green open spaces and green corridors as well as policies to improve existing sites. All provision will need to take place alongside development and would be in place before the final occupation and end of construction. In the case of Ely Country Park, Phase 1 and 2 have already been completed and has consequently created a more accessible and higher quality recreational experience as well as having a conservation and biodiversity focus, enhancing the wetlands, meadows and woodland of the Ely Pits and Meadows SSSI. Phase 3 will commence alongside the North Ely development and will have a more recreational focus whilst protecting the impact on the conservation achievements of Phase 1 and 2 on the SSSI. This is a positive policy, as it provides for the protection of green infrastructure that can result in recreational activities being diverted away from Natura 2000 sites, and it requires development proposals to provide green infrastructure where they may result in recreational pressure on designated sites.
LP21: Open Space, Sport and Recreational Facilities	N7	None	At the Further Draft stage, this policy could not be screened out of the assessment, as the policy could be strengthened in relation to the impacts of increased recreational pressure on nationally or internationally designated sites. The Proposed Submission version of this policy seeks to ensure that new residential development delivers outdoor open space, sport and recreational provision at an appropriate scale and location. It also sets out criteria against which proposals involving the loss of existing open space, sport and recreational facilities will be determined against. It does not directly lead to development itself, as the new open space, sport and recreational facilities would arise as a result of other policies (i.e. those that allocate sites), as well as windfall development. While the site allocations are defined, the exact open space requirements are not known as they are dependent on scheme design and negotiation at the planning application stage.

Strategic and Develop Policy	Screening	Natura 2000	Likely Significant Effect (LSE), alone or in combination?
Policy	Category	Sites Potentially Affected	Likely Significant Effect (LSE), alone of in combination?
			 The policy specifically states that for some major development proposals it may be necessary to provide open space in excess of what is set out in the policy, ' where it is identified that such additional provision is needed to mitigate the effects of increased recreational pressure on nationally or internationally designated biodiversity sites'. The policy is therefore considerably more comprehensive than the Local Plan 2015, and will give a much stronger ability for the council to require appropriate levels of open space, sport and recreational facilities are provided in the district.
LP22: Achieving Design Excellence	N4	None	 This policy is a design criteria based policy, which seeks to guide development in relation to achieving design excellence. The policy will not directly lead to development and promotes measures intended to have a positive effect. The policy itself will therefore not result in likely significant effects, either alone or in combination.
LP23: Water Efficiency	N3	None	 This policy requires new development to achieve the optional technical housing standard for water-efficiency of no more than 110 litres per day. In East Cambridgeshire, water resources are under stress. This policy therefore has the potential for positive effects on Natura 2000 sites as a result of the positive aspects implementing such a policy will have on the water environment. By minimise water use (to the maximum permitted by national policy), development will not only minimise water 'take' (from abstraction etc.) but also minimise volume of waste water. The Natura 2000 sites in or near East Cambridgeshire are particularly vulnerable to water related issues, and therefore this policy is particularly important in that local context.
LP24: Renewable and Low Carbon Energy Development	N7	None	This policy sets out the standards and expectations of development in relation to renewable and low carbon energy development. It states proposals will be assessed taking into account biodiversity considerations. The policy does not identify the location or quantum of development.

Strategic and Develop		-	
Policy	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
			This policy therefore, is not likely to have direct significant effects on Natura 2000 sites, though there is potential for a positive effect on air quality (the degree depending on the amount of development which implements its measures). Indirectly it has the potential for positive effects on the wider environment through its positive approach to appropriate renewable energy and energy efficiency development.
LP25: Managing Water Resources and Flood Risk	N3	None	This policy is in two parts, with the first around (minimising) flood risk, as well as positive nature conservation aspects, such as the need for and methods to reduce increases in water quantity in to river systems through use of SuDS, which also improves water quality. Part two of the policy has a particular focus on protecting the water environment.
			A major part of East Cambridgeshire District drains into the River Great Ouse catchment. The Ouse Washes (SAC, SPA and Ramsar) form part of this river system. However, River Great Ouse joins the Ouse Washes site at Denver Sluice, downstream of the Washes so development within East Cambridgeshire should not be a major factor to consider. However, main drainage systems, for example to the west of Ely, direct water to pumping stations along the Hundred Foot River and water is abstracted from the Hundred Foot River to replenish the internal ditch system within the Ouse Washes. There is therefore hydrological connectivity between the catchment and the washes. Current evidence does not indicate that existing phosphate discharges from the WwTWs in East Cambridgeshire are likely to be having an adverse effect upon the Ouse Washes SAC/SPA or SSSI. However, the District Council is committed to the use of sustainable drainage systems to reduce any possible future influence from new development. The Ouse Washes Habitat Creation Project by the Environment Agency proposes for creation of around 500 hectares of new wet grassland habitat to replace habitat deteriorated by increased flooding of the Ouse Washes and to provide for the species once supported by this habitat. This project, in combination with a strong emphasis on climate change mitigation efforts required in the Local Plan, will reduce the risk of
			flooding and will also indirectly have the potential for positive effects on the wider environment. The project should coincide with the delivery of development within Ely and Littleport, which is phased over a long delivery period and will be supported by a strong network of green spaces and use of SuDS to help improve water quality as well as construction materials and techniques which will help reduce the effects of climate change.

Strategic and Develop	I		-
Policy	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
			This policy therefore has the potential for positive effects on Natura 2000 sites as a result of the positive aspects implementing such a policy will have on the wider environment.
LP26: Pollution and Land Contamination	N3	None	 This policy seeks to minimise, and where possible reduce pollution and land contamination. It highlights the importance of reducing surface water run-off and effluent discharge as a result of development and considering impact on air quality. The policy will not lead to development itself as it sets out criteria against which developments with potential pollution, contamination and waste implications will be considered. At the Further Draft Plan stage this policy could not be screened out of the assessment, because the policy could be strengthened to require development proposals in close proximity to Natura 2000 sites to be accompanied by an air quality assessment. The Proposed Submission version of the policy has a specific section on development adjacent to designated sites and states: "major development proposals adjacent to international and nationally designated biodiversity sites will require an air quality assessment to demonstrate no significant adverse effects on sensitive features, whilst proposals of greater than 'major development' located not immediately adjacent, but within the vicinity of, such designated sites, may also require an air quality assessment if there is the possibility of significant adverse effect arising'. The policy itself will therefore not result in likely significant effects, either alone or in combination, as it seeks to protect the natural environment.
LP27: Conserving and Enhancing Heritage Assets	N3	None	 This policy seeks to protect, conserve and enhance the historic environment. The policy will not directly lead to development and promotes measures intended to have a positive effect. The policy itself will therefore not result in likely significant effects, either alone or in combination, as it seeks to protect the historic environment.

Strategic and Develop	ment Control F	Policies Screenin	g Assessment
Policy	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
LP28: Landscape, Treescape and Built Environment Character, including Cathedral Views	N3	None	 This policy seeks to ensure that development is sympathetic to the character of the area in which it is located, and also to ensure that views of Ely Cathedral are protected. It sets out criteria to guide the design of development proposals. The policy will not directly lead to development and promotes measures intended to have a positive effect. The policy itself will therefore not result in likely significant effects, either alone or in combination, as it seeks to protect the natural and built environment.
LP29: Conserving Local Green Spaces	N3	None	 This policy designates areas of open space as Local Green Space and rules out development on these sites in all but exceptional circumstances. All the designated sites are within or adjacent to settlements, are small scale, and protect what is already there. None are near any Natura 2000 sites. This is a positive policy as it provides for the protection of Local Green Space that can result in recreational activities being diverted away from Natura 2000 sites. This policy is therefore unlikely to result in likely significant effects on Natura 2000 sites, as it seeks to protect the natural environment.
LP30: Conserving and Enhancing Biodiversity and Geodiversity	N3	None	 This policy specifically seeks to protect the natural environment, including biodiversity and geodiversity, and seeks net gains in biodiversity and enhancement where possible. The policy has a specific section that explicitly provides protection for designated sites. It states: 'Development proposals likely to have an adverse effect, either alone or incombination, on European designates sites, must satisfy the requirements of the Habitats Regulations, determining site specific impacts and avoiding or mitigating against impacts where identified'. This policy only supports proposals where there will be no adverse effect on protected species and the wider environment, and therefore is not likely to result in significant effects on Natura 2000 sites. Indirectly it has the potential for positive effects on the wider environment, through for example, its policy requirement to seek to deliver a net gain in biodiversity.

Strategic and Develop	Strategic and Development Control Policies Screening Assessment			
Policy	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?	
LP31: Development in the Countryside	Ρ	Ouse Washes SPA/Ramsar Breckland SAC	 This policy guides development proposals that may come forward in the countryside, which includes any land or area outside of a development envelope or other policy designation or allocation (as identified on the Policies Map). The policy addresses various considerations, including affordable housing exception sites, dwellings for rural workers, replacement of a dwelling, re-use and conversion of non-residential buildings for residential use, mobile homes, non-residential development, agricultural diversification and, protecting the best and most versatile agricultural land. The policy could lead to development that could affect Natura 2000 sites through damage or loss of offsite habitat. 	
LP32: Infill Development in Locations Outside of Development Envelopes	P	Ouse Washes SPA/Ramsar Breckland SAC	 This policy sets out criteria to guide infill development in the countryside. It limits infill development to no more than 2 dwellings. The policy could lead to development that could affect Natura 2000 sites through damage or loss of offsite habitat. 	
LP33: Residential Annexes (new policy)	N4	None	This policy sets out criteria to guide the design of proposals in relation to residential annexes. It does not provide a location or quantum of development. It could result in very small scale development in terms of a small increase in bedspaces. However the scale of potential development means there are no impact pathways present. This policy will therefore not result in likely significant effects, either alone or in combination.	

Screening Assessment of Settlement Policies

Each settlement chapter includes a general policy that supports proposals that maintain and/or expand community facilities and states that proposals should respect the local character of the settlement. These policies promote development and change, but do not state when, where or how these will be brought forward. These policies have been categorised as 'N1', a general policy statement, and have been screened out of the assessment. Each settlement chapter also includes a policy setting out the priority infrastructure items for the settlement. These have been categorised as 'N7', as the policies promote development or change by encouraging new community facilities, but it does not state when, where or how these will be brought forward.

Some of the settlement chapters contain infrastructure policies that have been categorised differently to above, or contain with additional policies to the two standard policies common to all settlement chapters. The screening assessment of these is set out in the table below.

Settlement Policies Screening Assessment				
Settlement	Policies	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
Ely	Ely1	N1	None	This policy sets out the spatial strategy for Ely for which all development proposals need to comply and respond positively to. It includes the delivery of high quality housing-led growth, regeneration of urban brownfield sites, delivery of infrastructure and delivery of new leisure and retail facilities. The policy itself does not set out a quantity of development or allocate sites around Ely.

Settlement Policies Screening Assessment				
Settlement	Policies	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				As such, as this policy is a general policy statement the policy itself is not likely to have a significant effect on Natura 2000 sites.
	Ely2	N2/N5	None	This policy sets out priority infrastructure items for the Ely, including the Ely southern bypass, improvements to the cycle network, upgrade to sewage facilities and enhanced health facilities, including the Princess of Wales Hospital.
				The Ely southern bypass is not a proposal generated by the Local Plan, but identified in the Third Cambridgeshire Local Transport Plan, 2015 and therefore can be excluded from the assessment. For the rest of the policy, there are no likely significant effects on the nearest Natura 2000 site (Ouse Washes) as there are no impact pathways between the changes the policy may cause and the site's qualifying interests.
Soham	Soham2	N2/N5	None	This policy sets out priority infrastructure items for the village, including improvements to Soham library, provision of a railway station, improvements to the Commons and Fountain Lane recreation ground, provision of a new cricket ground, pedestrian and cycle routes and facilities and public realm enhancements.
				Soham railway station is not a project generated by the Local Plan, but is identified in the Third Cambridgeshire Local Transport Plan 2015, and therefore can be excluded from the assessment.
				There are no likely significant effects on the nearest Natura 2000 sites: Wicken Fen and Chippenham Fen, as there are no impact pathways between the changes the policy may cause and the site's qualifying interests.

Settlement Policies Screening Assessment				
Settlement	Policies	Screening Category	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
	Soham12	N6	None	This policy seeks to support the regeneration of Soham town centre, supporting, in principle, the redevelopment of sites within the town centre, especially for new, improved and intensification of sites for retail purposes. It is not considered that this policy will result in development that would have a significant effect on a Natura 2000 site because the policy focuses on the regeneration of an existing urban area to the likelihood of negative effects is low.
	Soham13	N3	None	This policy protects the network of green lanes and public rights of way in Soham and seeks to protect and enhance the wildlife, landscape and recreational quality of the Commons. As a policy that intends to protect and enhance the historic and natural (including biodiversity) environment, it is not likely to have a significant effect on a Natura 2000 site.
Witchford	Witchford7	N3	None	This policy seeks to protect open and undeveloped areas of land around the village of Witchford. Such areas may also provide opportunities for outdoor sport and recreation and access to the countryside. As a policy that intends to protect and enhance the natural environment, it is not likely to have a significant effect on a Natura 2000 site.

Screening Assessment of Site Allocations

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
Ashley	Ashley3	ASH.LGS1 Wavier Pond, Church Street	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
Bottisham	Bottisham4	BOT.H1 Land east of Bell Road 50 dwellings New allotments	Devil's Dyke SAC	Bottisham is approximately 4km from Devil's Dyke SAC. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Devil's Dyke SAC from residential allocations in the Local plan in-combination with one another, and in-combination with housing development in neighbouring district of Forest Heath. There is also the potential for this site to contribute to <u>reduced</u> <u>air quality</u> through traffic movements past Devil's Dyke SAC in combination.
	Bottisham3 Bottisham3	BOT.E1 Extension to Tunbridge Lane Business Park 0.9 ha BOT.LGS1	Devil's Dyke SAC	Bottisham is approximately 4km from Devil's Dyke SAC.There is potential for this site to contribute to reduced air quality through traffic movements past Devil's Dyke SAC in combination.This is a Local Green Space site allocation that will protect open
	Douisnains	Ancient Meadows	None	space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
Brinkley	Brinkley3	BRI.LGS.1 Beechcroft Field	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
Burrough Green / Borrough End	Burrough Green / Borrough End3	BRG.H1 Land off Brinkley Road, Burrough End	Devil's Dyke SAC	Burrough Green/Burrough End is approximately 3km from Devil's Dyke SAC. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		11 dwellings		However, there is potential for increased <u>disturbance from</u> recreational pressure on Devil's Dyke SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath.
				There is potential for this site to contribute to <u>reduced air quality</u> through traffic movements past Devil's Dyke SAC in combination.
Burwell	Burwell3	BUR.H1 Land off	Devil's Dyke SAC Wicken Fen Ramsar	Burwell is approximately 3km from Wicken Fen and within 5km of the Devil's Dyke. It has a Water Recycling Centre that connects to Burwell Lode.
		Newmarket Road 350 dwellings		There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Devil's Dyke SAC and Wicken Fen SAC from this residential allocation alone and in combination with other residential allocations and in-combination with housing development in neighbouring district of Forest Heath.
				Wicken Fen is vulnerable to <u>changes in water quantity and</u> <u>quality</u> . Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
		BUR.PH1 Land at Stanford Park, Weirs Drove	Devil's Dyke SAC Wicken Fen Ramsar	Burwell is approximately 3km from Wicken Fen and within 5km of the Devil's Dyke. It has a Water Recycling Centre that connects to Burwell Lode.
		91 dwellings		This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> recreational pressure on Devil's Dyke SAC and Wicken Fen SAC from residential allocations in combination with one another

	ons Screening As			
Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				and in-combination with housing development in neighbouring district of Forest Heath.
				Wicken Fen is vulnerable to <u>changes in water quantity and</u> <u>quality</u> . Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
		BUR.M1 Former DS Site, Reach Road 67 dwellings	None	This site is already under construction and therefore can be screened out.
		BUR.E1	None	Burwell is approximately 3km from Wicken Fen and within 5km of the Devil's Dyke. There are no impact pathways present between this site and
		2.8ha		Wicken Fen or Devil's Dyke.
		BUR.LGS1 Pauline Swamp	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
Cheveley	Cheveley3	CHV.H1 Land between 199 and 209 High Street 15 dwellings	None	This site is already under construction and therefore can be screened out.
		CHV.H2 Brook Stud, High Street	Devil's Dyke SAC.	Cheveley is approximately 4km from Devil's Dyke SAC. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		10 dwellings		However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Devil's Dyke SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath.
Dullingham	Dullingham3	DUL.H1 Land at Kettlefields 15 dwellings	Devil's Dyke SAC.	Dullingham is approximately 2km from Devil's Dyke SAC.This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased disturbance from recreational pressure on Devil's Dyke SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath.There is potential for this site to contribute to reduced air quality through traffic movements past Devil's Dyke SAC in combination.
Ely	Ely3	ELY.H1 Land off Lynn Road 19 dwellings	Ouse Washes SAC/SPA/Ramsar	Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.
				The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u> . Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
	Ely3	ELY.H2 Land at Barton Road Car Park	Ouse Washes Ramsar/ SAC/SPA	Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse.
		11 dwellings		There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ.
				This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Ouse Washes SAC from residential
				allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.
				The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u> . Development could lead to potential effects on this key vulnerability in combination with other residential allocations
	Ely3	ELY.H3 Former Depot, Lisle	Ouse Washes Ramsar/ SAC/ SPA	Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse.
		Lane 58 dwellings		There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
	Ely3	ELY.M1 North Ely 3,000 dwellings	Ouse Washes Ramsar/ SAC/ SPA	 This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire. The Ouse Washes is vulnerable to <u>changes in water quantity and quality</u>. Development could lead to potential effects on this key vulnerability in combination with other residential allocations. Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. There is potential for increased <u>disturbance from recreational pressure</u> on Ouse Washes SAC from this residential allocation alone and in combination with other residential allocation alone and in combination with other residential allocation and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.
				The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u> . Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
	Ely3	ELY.M2	Ouse Washes Ramsar/ SAC/ SPA	Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		The Grange, Nutholt Lane 10-50 dwellings		 There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire. The Ouse Washes is vulnerable to <u>changes in water quantity and quality</u>. Development could lead to potential allocations
	Ely3	ELY.M3 Paradise Area, off Nutholt Lane 50-65 dwellings	Ouse Washes Ramsar/ SAC/ SPA	 Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u> . Development could lead to potential effects on this key vulnerability in combination with other residential allocations
	Ely3 Ely4	ELY.M4 Station Gateway 100-200 dwellings Employment uses (B1 and B2) Small scale retail	Ouse Washes Ramsar/ SAC/ SPA	Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire. The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u> . Development could lead to potential effects on this key vulnerability in combination with other residential allocations
	Ely3 Ely5	ELY.M5 Octagon Business Park, Angel Drove 13.1ha	Ouse Washes Ramsar/ SAC/ SPA	Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse. The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u> . Development could lead to potential effects on this key vulnerability in combination with other residential allocations
	Ely3 Ely6	ELY.M6 Princess of Wales Hospital 77 dwellings	Ouse Washes Ramsar/ SAC/ SPA	Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				 This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire. The Ouse Washes is vulnerable to <u>changes in water quantity and quality</u>. Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
	Ely3	ELY.E1 Ely Road and Rail Distribution Centre 11.2ha	Ouse Washes Ramsar/ SAC/ SPA	Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u> . Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
	Ely3 Ely7	ELY.E2 (a-c) Lancaster Way Business Park 82.1ha	Ouse Washes Ramsar/ SAC/ SPA	Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse. The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u> . Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
	Ely3	ELY.L1	Ouse Washes Ramsar/ SAC/ SPA	Ely is approximately 7km from the Ouse Washes SAC. It has two Water Recycling Centres that connect to Ely Ouse.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		Downham Road sports and leisure hub 6.1ha		 There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u>. Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
Fordham	Fordham3	FRD.H1 Land south of Mildenhall Road, East of Collin's Hill 20 dwellings	Chippenham Fen Ramsar	 Fordham is approximately 1.5km from Chippenham Fen (part of Fenland SAC). This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Chippenham Fen from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath. Chippenham Fen is vulnerable to <u>changes in water quality and quantity</u>. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
		FRD.H2 Land north east of Rules Garden 15 dwellings	Chippenham Fen Ramsar	Fordham is approximately 1.5km from Chippenham Fen (part of Fenland SAC). This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Chippenham Fen from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				Chippenham Fen is vulnerable to <u>changes in water quality and</u> <u>quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
		FRD.H3 Land off Station Road 27 dwellings	Chippenham Fen Ramsar	 Fordham is approximately 1.5km from Chippenham Fen (part of Fenland SAC). This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Chippenham Fen from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath. Chippenham Fen is vulnerable to <u>changes in water quality and quantity</u>. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
		FRD.H4 Land off Steward's Field 12 dwellings	Chippenham Fen Ramsar	 Fordham is approximately 1.5km from Chippenham Fen (part of Fenland SAC). This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Chippenham Fen from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath. Chippenham Fen is vulnerable to <u>changes in water quality and quantity</u>. Development could lead to potential effects on these

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				key vulnerabilities in combination with other residential allocations.
	Fordham4	FRD.M1 Scotsdale Garden Centre, Market Street 150 dwellings Employment land (between 1-2ha) Community facilities, such as open space and recreational facilities	Chippenham Fen Ramsar	 Fordham is approximately 1.5km from Chippenham Fen (part of Fenland SAC). This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Chippenham Fen from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath. Chippenham Fen is vulnerable to <u>changes in water quality and quantity</u>. Development could lead to potential effects on these key vulnerabilities in combination with other residential
	Fordham5	FRD.M2 Land north of Mildenhall Road 79 dwellings (maximum) Open space and recreational facilities (an increase in dwellings from the Further Draft)	Chippenham Fen Ramsar	allocations. Fordham is approximately 1.5km from Chippenham Fen (part of Fenland SAC). This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Chippenham Fen from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath. Chippenham Fen is vulnerable to <u>changes in water quality and</u> <u>quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Fordham6	FRD.E1	Chippenham Fen Ramsar	Fordham is approximately 1.5km from Chippenham Fen (part of Fenland SAC).

Settlement	ons Screening As Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially	Likely Significant Effect (LSE), alone or in combination?
			Affected	
		Employment cluster, south of Fordham 83.2ha Allocated for B1/B2/B8 uses, except site D which is for B1/B2 only Undertake project level HRA screening		The employment allocation FRD.E1D is less than 400m from the Fenland SAC (Chippenham Fen). There is therefore potential for <u>urbanisation effects</u> relating to construction and operational activities and potentially effects on <u>water quality and quantity</u> from surface water run-off and increased demand for water. At this stage there is some uncertainty as to whether the proposals, either in isolation or in combination with other development, will have a significant effect on the integrity of Chippenham Fen and therefore they have been screened in.
Haddenham	Haddenham3 Haddenham4	HAD.H1 Land off West End (new site) 54 dwellings	Ouse Washes Ramsar/ SAC/ SPA	 Haddenham is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire. The Ouse Washes is vulnerable to <u>changes in water quantity and quality</u>. Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
	Haddenham3	HAD.H2 Land at New Road 24 dwellings	Ouse Washes Ramsar/ SAC/ SPA	 Haddenham is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> recreational pressure on Ouse Washes SAC from residential allocations in combination with one another and in-combination

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				 with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire. The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u>. Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
		HAD.H3 Land east of Chewells Lane 40 dwellings	Ouse Washes Ramsar/ SAC/ SPA	 Haddenham is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire. The Ouse Washes is vulnerable to <u>changes in water quantity and quality</u>. Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
		HAD.E1 Land at Haddenham Business Park, Station Road 0.8ha	Ouse Washes Ramsar/ SAC/ SPA	 Haddenham is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre. The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u>. Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
Isleham	Isleham3	ISL.H1 Land south and west of Lady Frances Court	Chippenham Fen Ramsar	Isleham is approximately 4 km from Chippenham Fen (part of Fenland SAC). It has a Water Recycling Centre that connects to Ely Ouse. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		40 dwellings (an increase in dwellings from the Further Draft)		However, there is potential for increased <u>disturbance from</u> recreational pressure on Chippenham Fen from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath.
				Chippenham Fen is vulnerable to <u>changes in water quality and</u> <u>quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Isleham3	ISL.H2 Land at 5a Fordham Road 10 dwellings (a reduction in dwellings from the Further Draft)	Chippenham Fen Ramsar	 Isleham is approximately 4 km from Chippenham Fen (part of Fenland SAC). It has a Water Recycling Centre that connects to Ely Ouse. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Chippenham Fen from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath. Chippenham Fen is vulnerable to <u>changes in water quality and quantity</u>. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Isleham3	ISL.H3 Land west of Hall Barn Road	Chippenham Fen Ramsar	Isleham is approximately 4 km from Chippenham Fen (part of Fenland SAC). It has a Water Recycling Centre that connects to Ely Ouse.
		14 dwellings		This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u>

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		(an increase in dwellings from the Further Draft)		recreational pressure on Chippenham Fen from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath.
				Chippenham Fen is vulnerable to <u>changes in water quality and</u> <u>quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Isleham4	ISL.H4 Land off Fordham Road	Chippenham Fen Ramsar	Isleham is approximately 4 km from Chippenham Fen (part of Fenland SAC). It has a Water Recycling Centre that connects to Ely Ouse.
		125 dwellings(a reduction in dwellings from the Further Draft)1-1.5ha for recreational facilities		This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Chippenham Fen from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath.
				Chippenham Fen is vulnerable to <u>changes in water quality and</u> <u>quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Isleham3	ISL.E1 Land adjacent to Hall Barn Road Industrial Estate	Chippenham Fen Ramsar	Isleham is approximately 4 km from Chippenham Fen (part of Fenland SAC). It has a Water Recycling Centre that connects to Ely Ouse. Chippenham Fen is vulnerable to <u>changes in water quality and</u> <u>quantity</u> . Development could lead to potential effects on these
		0.8 ha		

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				key vulnerabilities in combination with other residential allocations.
Kennett	Kennett4	KEN.M1 Land to the West of Station Road 500 dwellings 2-5ha employment element Primary school Local centre with retail and community facilities	Breckland SPA Chippenham Fen Ramsar	 Kennett is located within 2km of land designated as Breckland Farmland SSSI, a component of Breckland SPA. The site allocation falls within Natural England's IRZ for Breckland Farmland SSSI. Residential development in this location poses a potential risk to the notified Stone Curlew interest. There is potential for <u>physical damage or loss of habitat</u> used by Stone Curlews outside of the SPA boundary, as well as potential for increased disturbance from recreational pressure. This allocation is greater than 400m from the site boundary and therefore urbanisation effects are unlikely. The site is close to Chippenham Fen (approximately 4.5km) and there is potential for development to place <u>increased</u> <u>disturbance from recreational pressure</u> on this Natura 2000 site as well as the Breckland SPA. Chippenham Fen is vulnerable to <u>changes in water quality and quantity</u>. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
Kirtling	Kirtling3	KIR.LGS1 Kirtling Playing Field	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
	Kirtling3	KIR.LGS2 Cricket Pitch	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
Little Downham	Little Downham3	LTD.H1 Land West of Ely Road	Ouse Washes Ramsar/ SAC/ SPA	Little Downham is approximately 4.3km from Ouse Washes SAC. It has a Water Recycling Centre.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		25 dwellings		There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ.
				 This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire. The Ouse Washes is vulnerable to <u>changes in water quantity and quality</u>. Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
Little Thetford	Little Thetford3	LTT.H1 Land north of The Wyches 15 dwellings	Wicken Fen Ramsar	Little Thetford is approximately 6 km from Wicken Fen.This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased disturbance from recreational pressure on Wicken Fen SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire.Wicken Fen is vulnerable to changes in water quantity and quality. Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
	Little Thetford3	LTT.H2	Wicken Fen Ramsar	Little Thetford is approximately 6 km from Wicken Fen. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		Land south of Caravan Park, Two Acres, Ely Road 10 dwellings		 However, there is potential for increased <u>disturbance from</u> recreational pressure on Wicken Fen SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. Wicken Fen is vulnerable to <u>changes in water quantity and quality</u>. Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
Littleport	Littleport3	LIT.H1 Old Station Goods Yard, Station Road 50 dwellings	Ouse Washes Ramsar/ SAC/ SPA	 Littleport is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. The Ouse Washes are vulnerable to <u>changes in water quality</u> and quantity. Development in close proximity could lead to potential effects on these key vulnerabilities. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> recreational pressure on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.
	Littleport3	LIT.H2 Highfield Farm, Ely Road	None	Littleport is approximately 5km from the Ouse Washes SAC. This site allocation is already under construction and therefore can be screened out.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		269 dwellings (dwellings remaining)		
	Littleport3	LIT.H3 Land north east of 5 Beck Lane 21 dwellings (an increase in dwellings from the Further Draft)	Ouse Washes Ramsar/ SAC/ SPA	Littleport is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. The Ouse Washes are vulnerable to <u>changes in water quality</u> <u>and quantity</u> . Development in close proximity could lead to potential effects on these key vulnerabilities. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.
	Littleport3	LIT.H4 Field west of 1B Upton Lane 63 dwellings	Ouse Washes Ramsar/ SAC/ SPA	Littleport is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. The Ouse Washes are vulnerable to <u>changes in water quality</u> and quantity. Development in close proximity could lead to potential effects on these key vulnerabilities.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.
	Littleport3 Littleport4	LIT.H5 Land west of Highfields 600 dwellings Element of employment Public open space and play facilities Community facilities Local retail and small scale employment	Ouse Washes Ramsar/ SAC/ SPA	Littleport is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. The Ouse Washes are vulnerable to <u>changes in water quality</u> and <u>quantity</u> . Development in close proximity could lead to potential effects on these key vulnerabilities. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Ouse Washes SAC from this residential allocation alone and in combination with other residential allocations and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.
	Littleport3 Littleport5	LIT.M1 West of Woodfen Road 250 dwellings	Ouse Washes Ramsar/ SAC/ SPA	Littleport is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				The Ouse Washes are vulnerable to <u>changes in water quality</u> and <u>quantity</u> . Development in close proximity could lead to potential effects on these key vulnerabilities. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Ouse Washes SAC from this residential allocation alone and in combination with other residential allocations and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.
	Littleport3 Littleport6	LIT.M2 Land south of Grange Lane 1,200 dwellings (600 in the plan period) Element of employment and local retail On site community facilities and infrastructure Potential country park	Ouse Washes Ramsar/ SAC/ SPA	Littleport is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre.There is potential for physical loss of habitat boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ.The Ouse Washes are vulnerable to changes in water quality and quantity. Development in close proximity could lead to potential effects on these key vulnerabilities.There is potential for increased disturbance from recreational pressure on Ouse Washes SAC from this residential allocation alone and in combination with other residential allocations and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.
	Littleport3 Littleport7	LIT.E1 Land north of Wisbech Rd Business Park	Ouse Washes Ramsar/ SAC/ SPA	Littleport is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		33.0ha		 (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. The Ouse Washes are vulnerable to <u>changes in water quality</u> and <u>quantity</u>. Development in close proximity could lead to potential effects on these key vulnerabilities.
	Littleport3	LIT.E2 Land west of 150 Wisbech Road 1.5ha	Ouse Washes Ramsar/ SAC/ SPA	Littleport is approximately 5km from the Ouse Washes SAC. It has a Water Recycling Centre. There is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing as the site falls with the Ouse Washes Functional Land IRZ. The Ouse Washes are vulnerable to <u>changes in water quality</u> <u>and quantity</u> . Development in close proximity could lead to potential effects on these key vulnerabilities.
Lode with Long Meadow	Lode with Long Meadow3	LOD.H1 Sunny Ridge Farmyard, Station Road 20 dwellings	Devil's Dyke SAC Wicken Fen Ramsar	Lode with Long Meadow is approximately 6km from Devil's Dyke SAC and 7km from Wicken Fen. It has a Water Recycling Centre. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Devil's Dyke SAC and Wicken Fen SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire.
Mepal	Mepal3 Mepal4	MEP.H1 Land at Brick Lane	Ouse Washes Ramsar/ SAC/ SPA	Mepal is approximately 0.5 km from Ouse Washes SAC. It has a Water Recycling Centre.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		50 dwellings		Due to the close proximity of the site allocation to the Ouse Washes, there is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing. However, the site allocation falls outside Natural England's Ouse Washes Functional Land IRZ and therefore can be screened out. The Ouse Washes are vulnerable to <u>changes in water quality</u> <u>and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Ouse Washes SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.
Newmarket Fringe	Newmarket Fringe3	NFR.H1 Site Adjacent to 37 St Johns Avenue (new site) 21 dwellings	Devil's Dyke SAC and Chippenham Fen Ramsar	The Newmarket Fringe allocation is approximately 1km from Devil's Dyke SAC and 5.8km from Chippenham Fen SAC. It has a Water Recycling Centre that connects to Newmarket Public Drain. This allocation alone is unlikely to lead to a significant effect on Natura 2000 sites due to the scale of development proposed. However, there is potential for increased <u>disturbance from</u> <u>recreational pressure</u> on Devil's Dyke and Chippenham Fen SAC from residential allocations in combination with one another and in-combination with housing development in neighbouring district of Forest Heath. Chippenham Fen is vulnerable to <u>changes in water quality and</u> quantity. Development could lead to potential effects on these

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				key vulnerabilities in combination with other residential allocations.
	Newmarket Fringe3	NFR.LGS1 Peterhouse Drive	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
Reach	Reach3	REA.LGS1 The Hythe	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
Soham	Soham3 Soham4	SOH.H1 Land at Brook Street	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode.
		300 dwellings 8ha public open space on site, including at least 2 play areas		There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen from this residential allocation alone and in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire.
				Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3	SOH.H2 Land at 117 Mereside	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode.
		11 dwellings		There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen from this residential allocation alone and in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3	SOH.H3 Land rear of 23-49 Fordham Road	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode.
		87 dwellings		There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire.
				Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3	SOH.H4 Land off Fordham Road	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode.
		90 dwellings		There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire.
				Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.

Site Allocation	ons Screening As	sessment		
Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
	Soham3 Soham5	SOH.H5 Land south of Blackberry Lane 130 dwellings (a reduction from Further Draft stage) 1.1 ha open space	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3 Soham6	SOH.H6 Land north of Blackberry Lane 85 dwellings (a reduction from Further Draft stage) 0.7 ha open space	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3	SOH.H7 Land west of The Cherry Tree Public House, Cherrytree Lane	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		126 dwellings		 There is potential for increased <u>disturbance from recreational pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. Chippenham Fen and Wicken Fen are both vulnerable to changes in water quality and quantity. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3	SOH.H8 Land parcel east of 2 The Shade 88 dwellings (an increase from Further Draft stage)	Chippenham Fen Ramsar and Wicken Fen Ramsar	 Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode. There is potential for increased <u>disturbance from recreational pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. Chippenham Fen and Wicken Fen are both vulnerable to changes in water quality and quantity. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3 Soham7	SOH.H9 Land south of Cherrytree Lane, west of Orchard Row 200 dwellings On site primary school Open space	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3	SOH.H10 Land off Kingfisher Drive 100 dwellings maximum	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode.There is potential for increased disturbance from recreational pressure on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire.Chippenham Fen and Wicken Fen are both vulnerable to changes in water quality and quantity. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3 Soham8	SOH.H11 Land at Northfield 170 dwellings (a reduction from Further Draft stage) Open space	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
	Soham3	SOH.H12 Land to rear of 7 and 7A Townsend 17 dwellings	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode.There is potential for increased disturbance from recreational pressure on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire.Chippenham Fen and Wicken Fen are both vulnerable to changes in water quality and quantity. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3	SOH.H13 Soham Health Centre, Pratt Street 10 dwellings	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and over 5km from Chippenham Fen.There is potential for increased disturbance from recreational pressure on Wicken Fen and Chippenham Fen and possibly Devil's Dyke in combination and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire.Chippenham Fen and Wicken Fen are both vulnerable to changes in water quality and quantity. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3	SOH.H14 90 Paddock Street	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode.
		10 dwellings		

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3	SOH.H15 Grassed area opposite 3 The Shade (new site) 13 dwellings	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3 Soham9	SOH.M1 Eastern Gateway 550 dwellings (a reduction from Further Draft stage)	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen from this residential allocation alone and in combination with other residential allocations and in-combination with housing

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		0.5ha of B1/B2 employment land 0.4ha extension to medial centre 1.1ha for extension to primary school 11.6ha open space 3ha garden centre or employment use Small scale retail		 development in neighbouring districts of Forest Heath and South Cambridgeshire. Chippenham Fen and Wicken Fen are both vulnerable to changes in water quality and quantity. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3	SOH.M2 Land north west of The Shade School 20 dwellings	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3 Soham10	SOH.M3 Land off Station Road 90 dwellings 0.5ha employment land 0.6ha train station building and ancillary facilities	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Chippenham Fen and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Soham3 Soham11	SOH.E1 Land east of A142 bypass	Chippenham Fen Ramsar and Wicken Fen Ramsar	Soham is approximately 3km from Wicken Fen and 5km from Chippenham Fen. It has a Water Recycling Centre that connects to Soham Lode.
		10.8ha		Chippenham Fen and Wicken Fen are both vulnerable to <u>changes in water quality and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
Stretham	Stretham3 Stretham4	STR.H1 Land at Manor Farm, Stretham 100 dwellings Cemetery extension	None	Stretham is approximately 5km from Wicken Fen This site allocation is already under construction and therefore can be screened out.
Stuntney	Stuntney3	STU.LGS1 Stutney Play Area	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
Sutton	Sutton3 Sutton4	SUT.H1 Land north of the Brook and west of Mepal Rd 50-250 dwellings, Open space	Ouse Washes Ramsar/ SAC/ SPA	Sutton is approximately 1.5km from the Ouse Washes SAC. Due to the close proximity of the site allocation to the Ouse Washes, there is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing. However, the site allocation falls outside Natural England's Ouse Washes Functional Land IRZ and therefore can be screened out. The Ouse Washes are vulnerable to <u>changes in water quality</u>
				and quantity. Development could lead to potential effects on

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
			these key vulnerabilities in combination with other residential allocations. There is potential for increased <u>disturbance from recreational pressure</u> on Ouse Washes SAC from this residential allocation alone and in combination with other residential allocations and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.	
	Sutton3 Sutton5	SUT.H2 Land east of Garden Close 25 dwellings	Ouse Washes Ramsar/ SAC/ SPA	Sutton is approximately 1.5km from the Ouse Washes SAC. Due to the close proximity of the site allocation to the Ouse Washes, there is potential for <u>physical loss of habitat</u> outside of the boundary of the Ouse Washes SAC used by migratory (wintering) birds for rest and grazing. However, the site allocation falls outside Natural England's Ouse Washes Functional Land IRZ and therefore can be screened out. The Ouse Washes are vulnerable to <u>changes in water quality</u> <u>and quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Ouse Washes in combination with other residential allocations and in-combination with housing development in neighbouring districts of Kings Lynn and West Norfolk, Fenland and Huntingdonshire.
	Sutton3	SUT.E1 Elean Business Park 34.7ha	Ouse Washes Ramsar/ SAC/ SPA	Sutton is approximately 1.5km from the Ouse Washes SAC. The Ouse Washes are vulnerable to <u>changes in water quality</u> and <u>quantity</u> . Development could lead to potential effects on

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				these key vulnerabilities in combination with other residential allocations.
	Sutton3	SUT.LGS1 Receation Ground, of The Brook	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
	Sutton3	SUT.LGS2 Old Recreation Ground, Lawn Lane	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
Swaffham Bulbeck	Swaffham Bulbeck3 Swaffham Bulbeck4	SWB.H1 Land off Heath Road and Quarry Lane 38 dwellings	Devil's Dyke SAC and Wicken Fen Ramsar	Swaffham Bulbeck is approximately 4km from Devil's Dyke SAC and 7km from Wicken Fen. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Devil's Dyke and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. There is potential for this site to contribute to <u>reduced air quality</u> through traffic movements past Devil's Dyke SAC in combination. Wicken Fen is vulnerable to <u>changes in water quality and</u> <u>quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Swaffham Bulbeck3 Swaffham Bulbeck5	SWB.H2 Land fronting Heath Road 18 dwellings	Devil's Dyke SAC and Wicken Fen Ramsar	Swaffham Bulbeck is approximately 4km from Devil's Dyke SAC and 7km from Wicken Fen. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Devil's Dyke and Wicken Fen in combination with other residential allocations and in-combination with housing

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				 development in neighbouring districts of Forest Heath and South Cambridgeshire. There is potential for this site to contribute to reduced air quality through traffic movements past Devil's Dyke SAC in combination. Wicken Fen is vulnerable to changes in water quality and quantity. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Swaffham Bulbeck3	SWB.H3 Hillside Mill, Quarry Lane (new site) 12 dwellings	Devil's Dyke SAC and Wicken Fen Ramsar	Swaffham Bulbeck is approximately 4km from Devil's Dyke SAC and 7km from Wicken Fen. There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on Devil's Dyke and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. There is potential for this site to contribute to <u>reduced air quality</u> through traffic movements past Devil's Dyke SAC in
				Wicken Fen is vulnerable to <u>changes in water quality and</u> <u>quantity</u> . Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
Swaffham Prior	Swaffham Prior3 Swaffham Prior4	SWP.E1 Land east of Goodwin Farm, Heath Road	Devil's Dyke SAC	Swaffham Prior is within 1km of Devil's Dyke SAC. There is also the potential for this site to contribute to <u>reduced</u> <u>air quality</u> through traffic movements past Devil's Dyke SAC in combination.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		1.1ha		
	Swaffham Prior3 Swaffham, Prior5	SWP.H1 Rear of 73 High Street (new site) 20 dwellings	Devil's Dyke SAC and Wicken Fen Ramsar	 Swaffham Prior is within 1km of Devil's Dyke SAC and 6km of Wicken Fen. There is potential for increased <u>disturbance from recreational pressure</u> on Devil's Dyke and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath and South Cambridgeshire. Wicken Fen is vulnerable to <u>changes in water quality and quantity</u>. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations. There is also the potential for this site to contribute to <u>reduced air quality</u> through traffic movements past Devil's Dyke SAC in
				combination.
	Swaffham Prior3	SWP.LGS1 Playing Field, High Street	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
	Swaffham Prior3	SWP.LGS2 Coopers Green, Green Head Road	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
Wilburton	Wilburton3	WIL.H1 Land off Station Road	Ouse Washes Ramsar/ SAC/ SPA Wicken Fen Ramsar	Wilburton is approximately 7km from the Ouse Washes SAC and 8km from Wicken Fen SAC. It has a Water Recycling Centre that connects to Grunty Fen Catchwater.
		35 dwellings		There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on the Ouse Washes and Wicken Fen in combination with other residential allocations and in-combination with

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				 housing development in neighbouring districts of Forest Heath, South Cambridgeshire, Kings Lynn and Norfolk, Fenland and Huntingdonshire. Both the Ouse Washes and Wicken Fen are vulnerable to <u>changes in water quality and quantity</u>. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Wilburton3 Wilburton4	WIL.H2 Land west of Clarke's Lane and south of Hinton Way 25 dwellings	Ouse Washes Ramsar/ SAC/ SPA Wicken Fen Ramsar	 Wilburton is approximately 7km from the Ouse Washes SAC and 8km from Wicken Fen SAC. It has a Water Recycling Centre that connects to Grunty Fen Catchwater. There is potential for increased <u>disturbance from recreational pressure</u> on the Ouse Washes and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Forest Heath, South Cambridgeshire, Kings Lynn and Norfolk, Fenland and Huntingdonshire. Both the Ouse Washes and Wicken Fen are vulnerable to changes in water quality and quantity. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
Witcham	Witcham3	WTM.H1 Kings of Witcham, The Slade 10 dwellings	Ouse Washes Ramsar/ SAC/ SPA	Witcham is approximately 3km from the Ouse Washes SAC. It has a Water Recycling Centre. There is potential for increased <u>disturbance from recreational pressure</u> on the Ouse Washes and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Kings Lynn and Norfolk, Fenland and Huntingdonshire.

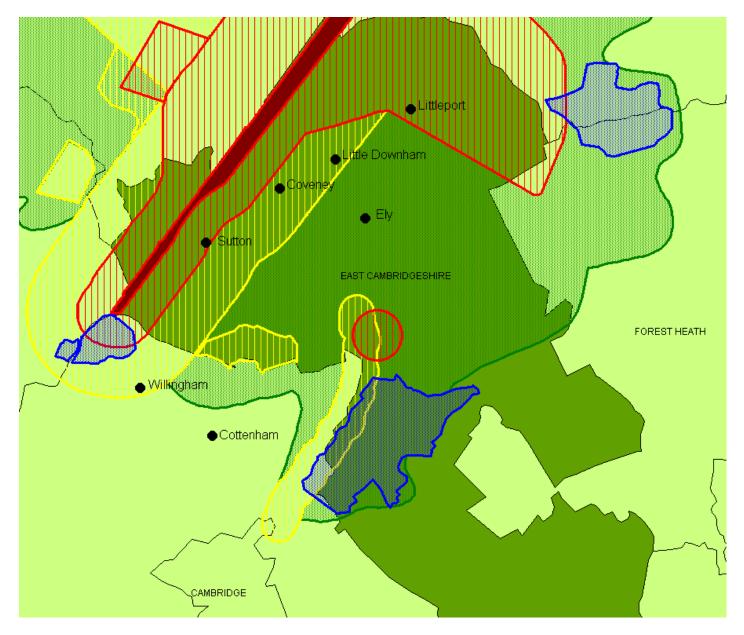
Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
				The Ouse Washes is vulnerable to <u>changes in water quantity</u> <u>and quality</u> . Development could lead to potential effects on this key vulnerability in combination with other residential allocations.
Witchford	Witchford3 Witchford4	WFD.H1 Land north of Field End 128 dwellings (maximum)	Ouse Washes Ramsar/ SAC/ SPA	 Witchford is approximately 7km from the Ouse Washes SAC. It has a Water Recycling Centre. There is potential for increased <u>disturbance from recreational pressure</u> on the Ouse Washes and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Kings Lynn and Norfolk, Fenland and Huntingdonshire. The Ouse Washes are vulnerable to <u>changes in water quality</u> and quantity. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Witchford3 Witchford5	WFD.H2 Land at Common Road 120 dwellings	Ouse Washes Ramsar/ SAC/ SPA	 Witchford is approximately 7km from the Ouse Washes SAC. It has a Water Recycling Centre. There is potential for increased <u>disturbance from recreational pressure</u> on the Ouse Washes and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Kings Lynn and Norfolk, Fenland and Huntingdonshire. The Ouse Washes are vulnerable to <u>changes in water quality and quantity</u>. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.
	Witchford3	WFD.H3	Ouse Washes Ramsar/ SAC/ SPA	Witchford is approximately 7km from the Ouse Washes SAC. It has a Water Recycling Centre.

Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
		Land south of Main Road 46 dwellings	 There is potential for increased <u>disturbance from recreational</u> <u>pressure</u> on the Ouse Washes and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Kings Lynn and Norfolk, Fenland and Huntingdonshire. The Ouse Washes are vulnerable to <u>changes in water quality</u> <u>and quantity</u>. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations. 	
	Witchford3	WFD.H4 Land to the rear of 1-7 Sutton Road 13 dwellings	Ouse Washes Ramsar/ SAC/ SPA	 Witchford is approximately 7km from the Ouse Washes SAC. It has a Water Recycling Centre. There is potential for increased <u>disturbance from recreational pressure</u> on the Ouse Washes and Wicken Fen in combination with other residential allocations and in-combination with housing development in neighbouring districts of Kings Lynn and Norfolk, Fenland and Huntingdonshire. The Ouse Washes are vulnerable to <u>changes in water quality and quantity</u>. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations. These issues need further consideration at appropriate assessment before they can be screened out.
	Witchford3	WFD.E1 Sedgeway Business Park 5.4ha	Ouse Washes Ramsar/ SAC/ SPA	Witchford is approximately 7km from the Ouse Washes SAC. It has a Water Recycling Centre. The Ouse Washes are vulnerable to changes in water quality and quantity. Development could lead to potential effects on these key vulnerabilities in combination with other residential allocations.

Site Allocatio	ons Screening Ass	sessment		
Settlement	Site Policies	Site Ref., Address and Detail	Natura 2000 Sites Potentially Affected	Likely Significant Effect (LSE), alone or in combination?
	Witchford3	WFD.LGS1 Victoria Green	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
	Witchford3	WFD.LGS2 Millenium Wood	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
	Witchford3	WFD.LGS3 Manor Road	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
	Witchford3	WFD.LGS4 Between Field End and Wheats Close	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
	Witchford3	WFD.LGS5 Broadway	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
	Witchford3	WFD.LGS6 Common Road	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.
	Witchford3	WFD.LGS7 Horse Meadow, Main Street	None	This is a Local Green Space site allocation that will protect open space from development. It can be screened out as there are no impact pathways to Natura 2000 sites.

Appendix 5: Core Areas of Sensitive Bird Populations

Extract from Lucking et al (2004) Wind Turbines and Sensitive Bird Populations: Spatial Planning for Wind Turbines in the Fens Natural Area



Legend

Areas hatched **red** indicate areas where there is a high likelihood of significant effect on an SPA, or in an area functionally linked to an SPA, or due to the presence of internationally important bird populations considered sensitive to turbine development.

Areas hatched **amber** indicate those zones where either:

• Sensitive bird populations are present but further assessment may reveal a very low risk or detailed layout planning or mitigation may remove any threat

• Sensitive bird populations are expected to be present but further monitoring is required to establish their presence and quantify the likely risk

Areas hatched in **green** are zones where to the best of our knowledge, there are no significant populations of bird species vulnerable to wind turbine development.

Areas hatched in **blue** represent areas of search for wetland and washland creation projects. For the most part, these ideas are conceptual and work on the ground has not started.

Appendix 6. Natural England's Response to the HRA Screening Report of the Further Draft East Cambridgeshire Local Plan

Habitats Directive Assessment Screening Document

Natural England welcomes the preparation of this HRA screening assessment to test the effects of the emerging new Local Plan which promotes new growth patterns across the district and some new allocations.

We agree with the European sites (N2K sites) identified as having the potential to be affected by the emerging Local Plan policies and allocations and the threats / vulnerabilities identified for these sites.

As stated in Table 5 under *Policy LP2*, the HRA for the Local Plan 2015 concluded no adverse effect on N2K sites. However, we disagree that there is no new evidence to suggest that the slightly revised growth targets, to be built over a longer period, should come to an alternative conclusion for this new Local Plan. Natural England advises that there is increasing anecdotal evidence, and evidence through visitor studies, to indicate that more people are accessing the countryside including accessible N2K sites. Additional cross-boundary growth is also being proposed.

We generally agree with the screening assessment of strategic and development control policies described in Table 5, with the following exceptions:

Policy LP2: Level and Distribution of Growth

Natural England agrees that increased dwelling stock through the Local Plan is likely to place additional recreational pressure on vulnerable N2K sites including Wicken Fen, Chippenham Fen, Ouse Washes and Breckland. We advise that the qualifying features of Devil's Dyke SAC (and SSSI) are also vulnerable to increased recreational pressure. The gualifying features of N2K sites are currently under threat from increasing visitor pressure. Habitat degradation is occurring. particularly through trampling of vegetation and soil enrichment from dog excrement. Antisocial behaviour such as littering, fires and other activities is damaging vegetation. Dogs off leads also pose a risk to the continuance of the essential long-term management of the site through livestock grazing. A number of established visitor studies (see work by Footprint Ecology⁵) have shown that people will generally travel up to 8km by car to visit attractive countryside destinations such as National Nature Reserves hence any development within 8km of N2K sites should be taken into consideration as part of this assessment. In-combination and cross-boundary effects, particularly with development in Forest Heath and South Cambridgeshire districts should be investigated. The general requirement for green infrastructure protection / provision through Policy LP20 is unlikely to provide sufficient robust mitigation to address the combined effects of all new development on European sites. We do not agree that this pressure will be satisfactorily alleviated through alternative GI proposed through the Local Plan such as Ely Country Park and green corridors. Natural England advises that Policy LP20 and policies relating to Burwell, Fordham, Isleham, Kennett and Soham should be amended in line with our advice above. This will enable the HRA to screen out likely significant effects for these polices.

It is not clear that the assessment of increased recreational pressure on N2K sites has considered the combined effects of all Plan housing development and relevant cross-boundary development. This matter requires clarification. In our view all housing development will contribute a level of increased pressure on N2K sites, particularly in-combination with other development. Where this level is significant the relevant Plan policies must ensure that proposals will deliver mitigation to address this.

Natural England agrees that on managed sites such as Wicken Fen and Ouse Washes, increased visitor numbers to the sites are not considered a vulnerability and public access is encouraged and managed. Access to Chippenham Fen is by permit only which limits the numbers of visitors to the wider site; however, public rights of ways cross the reserve and their use is likely to increase with new housing in villages such as Fordham. In order to enable the HRA to conclude that development

⁵ https://www.footprint-ecology.co.uk/services/ecological-survey-and-analysis

in Fordham is unlikely to have a significant effect on N2K sites we advise that policies Fordham4 – Fordham6 are amended in line with our advice above. Similarly site specific policies for Burwell, Soham, Kennett and Isleham should also be amended in line with our advice on those policies above.

Policy LP17: Creating a sustainable, efficient and resilient transport network

Natural England disagrees with the HRA screening assessment for this policy. As currently worded Policy LP17 does not afford sufficient protection to N2K sites from development. Unless further evidence is available to inform the HRA at this stage, through transport/air quality modelling, to demonstrate that Plan development will not have an adverse effect on N2K sites, specific mitigation / requirements should be provided through plan policies. To address this uncertainty Policy LP17 should be amended, in accordance with our advice above, in order to enable the HRA to screen out significant effects of Local Plan development through air pollution.

Policy LP21: Open space, sport and recreational facilities

The HRA states that this policy has the potential for positive effects on N2K sites through increased opportunities for recreation that the policy will provide, thus reducing the recreational pressure on protected sites. Natural England advises that Policy LP21 needs to be amended in line with our advice above in order for the HRA to screen out this policy.

Policy LP25: Managing water resources and flood risk

The HRA identifies that current evidence does not indicate that existing phosphate discharges from the WwTWs in East Cambridgeshire are likely to be having an adverse effect upon the Ouse Washes SAC/SPA or SSSI. It also states that the District Council is committed to the use of sustainable drainage systems to reduce any possible future influence from new development. Natural England notes from the Water Cycle Study (WCS) draft report (JBA Consulting, December 2016) that further investigation / work is required to ensure sufficient water resources / wastewater collection infrastructure is available to meet proposed growth. However, we welcome requirements g) to q) within *Policy LP25* including: proposals to demonstrate that water is available to support the development; that development will not adversely affect surface and ground water quality in line with the Water Framework Directive; and that adequate foul water treatment and disposal exists / can be provided in time to serve the development. We believe the WCS should be updated accordingly to inform the HRA and Local Plan and ensure proposed growth will not have any adverse effect on the natural environment, including N2K sites. However, policy LP25 requirements are considered sufficient to enable the HRA to screen out this policy.

Screening Assessment of Site Specific Policies

We generally agree with the screening assessment of site specific policies described in Table 6, with the exception of Burwell, Fordham, Soham, Kennett and Isleham. In order for the HRA to screen out these sites, the relevant policies will need to be amended in line with our advice above.

It is not clear whether the combined effects of increased recreational pressure from all proposed and cross-boundary development, has been considered for sites such as Chippenham Fen, Breckland and Devil's Dyke. Whilst it may be possible to screen out a number of the site-specific development policies on the basis that no, or only very small- scale, housing development is proposed, it is unclear how policies promoting more significant development such as Burwell, Fordham, Isleham, Kennett, Littleport and Soham have been ruled out as insignificant incombination with other development. Unless further evidence is available to demonstrate that these proposals will not have an adverse effect on N2K sites we advise that relevant policies will need to be amended in accordance with our advice above in order for the HRA to screen out these allocations.

Conclusions

Natural England's view is that the HRA and plan policies should be amended in line with our advice above in order to satisfy the requirements of the Habitats Regulations. Currently we do not agree with the conclusion of no likely significant effect.

Appendix 7. Natural England's Response to the HRA Screening Report of the Proposed Submission East Cambridgeshire Local Plan

Habitats Directive Assessment Screening Document

Natural England welcomes further consideration of issues through the HRA screening document (and relevant Plan policies) to address our previous advice and recommendations. Whilst we generally agree with the assessment of effects of policies alone, and in-combination, described in sections 4 and 5 of the document, we have the following comments to make:

Physical damage or loss of habitat

We generally agree with the conclusion of no likely significant effect from plan policies, alone and in-combination, through direct impact / habitat loss. However, we recommend further consideration be given to the potential for impacts to Ouse Washes supporting habitat.

Natural England's Impact risk Zones (IRZs) have been recently updated to identify land which is functionally linked to the Ouse Washes Special Protection Area (SPA) and Ramsar site. These areas, identified through a British Trust for Ornithology (BTO) research project, are regularly used by Ouse Washes gualifying species, particularly swans, for foraging and roosting. Since these areas are considered to be functionally linked to the European site they require appropriate consideration under the Conservation (of Habitats and Species) Regulations 2010 (as amended). Whilst the Mepal and Sutton allocations appear to fall outside of the Goose and Swan Functional Land IRZ, Littleport allocations are located within this zone. We are aware that one of the allocations was submitted for planning permission recently and the ecological assessment confirmed no records of swans using the site and adjacent land and that it is considered nearby roads and dwellings are likely to make the site less attractive to these species. Natural England advocates a similar approach to other development allocations in and around Littleport. We therefore advise that the HRA includes a recommendation for Littleport policies to include a requirement for project-level HRA to demonstrate that proposed development will not have any adverse effect on Ouse Washes functional land in accordance with the requirements of the Habitats Regulations. The Littleport policies should be amended accordingly.

Disturbance from increased recreational pressure

Section 5.24 of the HRA states that in view of the policy framework in the Local Plan for the protection and enhancement of existing open space, and new development to either provide open space on site or make financial contributions to off-site provision, additional recreational use of Devil's Dyke, Ouse Washes, Wicken Fen and Chippenham Fen is unlikely to result in significant effects. Natural England disagrees with this given the information presented within Table 13: this indicates a significant number of additional dwellings (and individuals, using the 2.8 occupancy per dwelling multiplier) within the assumed 8km zones of influence (ZoI) of accessible European sites.

No specific mitigation measures are identified, such as financial contributions, to address impacts from development within these ZoI alone. Whilst we welcome the use of ZoI to predict impacts these should be evidence based, particularly to inform assessment under the Habitats Regulations. In the absence of such evidence currently, and applying the precautionary approach advocated under the Habitats Regulations, it would seem reasonable to include a requirement for all residential development within the district to implement / provide a contribution towards implementation of appropriate projects in the Cambridgeshire Green Infrastructure Strategy 2011 (or any revision to this document). This will ensure that the impacts of recreational pressure associated with proposed development, including any residual effects, are adequately addressed in accordance with the Habitats Regulations.

We are aware that some European site managers may be commissioning detailed visitor surveys in the near future to ensure that the effects of recreational pressure, associated with new housing development, are better assessed and mitigated in future. A commitment by the Council to coordinate a strategic approach to this through the revised Cambridgeshire Green Infrastructure Strategy, with relevant stakeholders, would be strongly supported by Natural England.

We advise that this section of the HRA should also reference the proposed revision by key stakeholders to the Cambridgeshire Green Infrastructure Strategy 2011, and its adoption as an SPD, to ensure delivery of sufficient quality and quality of GI to enhance the resilience of the existing GI network and meet the needs of additional people through development.

We welcome detailed consideration of the potential for impacts through the Kennett allocation on Breckland SPA stone curlew. Recreational impacts are assessed as uncertain; Natural England therefore supports the recommendation for, and subsequent inclusion in Policy KEN.M1, of a requirement for project level HRA to demonstrate that any proposal will not have an adverse effect on the integrity of the SPA.

Natural England fully supports the recommendations for modifications to the Local Plan, identified in section 5.34, to ensure no likely significant effect. These modifications should be included within the relevant Plan policies for Burwell, Isleham, Littleport and Soham.

Disturbance from urbanisation effects

Natural England is generally satisfied with the conclusion of no likely significant effect, with the implementation of recommended mitigation. We welcome the recommendation for, and subsequent inclusion within policy Fordham6, of a requirement for project level HRA to demonstrate no adverse effect to Chippenham Fen Ramsar, part of Fenland SAC.

Reduced air quality

We agree that based on the scale of development proposed through relevant development and the mitigating effects of Plan policies, the Plan is unlikely alone, and in-combination, to have a significant effect on European sites through changes in air quality. Natural England supports the recommendation, and inclusion within Policy LP26 Pollution and Land Contamination, for a requirement for major development proposals to submit an air quality assessment to demonstrate no significant adverse effect to sensitive features of designated sites.

Water quantity changes

Section 5.60 of the report identifies that Anglian Water's Water Resources Management Plan (WRMP) was subject to HRA and this concluded that the preferred schemes (for delivery of water services to meet development needs) in the Ely, Newmarket and Cheveley Water Resource Zones (WRZs) (which supply most of East Cambridgeshire) would not result in adverse effects on the integrity of European sites. The report states that '*this implies that there should be no requirement for adverse levels of water abstraction from any of the aquifers connected to N2K sites*'. Clarification that this is the case, for the level of growth being proposed through the Local Plan, should be provided. We would welcome confirmation from EA and/or water companies, through the HRA, on this matter.

Reduction in water quality

We are pleased that the East Cambridgeshire Water Cycle Study was updated in October 2017 to inform the Further Draft Local Plan. We note that this has confirmed that, with mitigation through policy requirements for relevant development to deliver / contribute to necessary sewage treatment works upgrades, water quality effects would not be a constraint to growth at any of the Water Recycling Centres (WRCs) assessed. Whilst this approach poses a potential risk to the deliverability of those sites, Natural England considers that these policy safeguards are sufficient to demonstrate no adverse effect to European sites through deterioration in water quality.

Further Draft Local Plan Sustainability Appraisal

The Sustainability Appraisal (SA) draft report (November 2017) including the SA objectives, assessment methodology and framework generally accord with the requirements of the Planning and Compulsory Purchase Act 2004 and the Strategic Environmental Assessment Regulations. Natural England therefore considers the SA to be legally compliant.

Our recommendations for amendments to Plan policies, discussed above, should be addressed through the SA.

I hope you will find the above comments helpful. For any queries relating to the specific advice in this letter <u>only</u> please contact Janet Nuttall on 020 802 65894. For any new consultations, or to provide further information on this consultation please send your correspondences to <u>consultations@naturalengland.org.uk</u>.

Yours sincerely

Janet Nuttall Sustainable Land Use Adviser

Appendix 8. Correspondence from Environment Agency and Anglian Water Regarding Adverse Water Abstractions from Aquifers Connected to Natura 2000 Sites

From: Mugova, Elizabeth [mailto: Sent: 09 May 2018 13:32 To: Richard Kay < Subject: RE: East Cambs Local Plan - Inspector q11
Richard
Thanks for your email.
Anglian Water Services abstractions were assessed in the Habitats Directive Review of Consents (HD RoC) at full licensed rates. There is no likelihood that licensed quantities will be increased, so the conclusions of HD RoC still stand. Abstraction effects on Chippenham Fen SSSI which is part of Fenland SAC and a Ramsar site are mitigated by our Lodes Granta groundwater support scheme, the effectiveness of which was studied in detail for the fen as part of the review.
I hope this is helps.
Kind regards Elizabeth
Elizabeth Mugova Sustainable Places East Anglia Area (West)
From: Patience Stewart Sent: 01 May 2018 14:16 To: Richard Kay < >; @environment-agency.gov.uk'

; 'Mugova, Elizabeth' < Subject: RE: East Cambs Local Plan - Inspector q11

Hi Richard,

As you may be aware Anglian Water is currently consulting on a Draft Water Resource Management Plan (WRMP) to replace the current approved WRMP. This is based in part upon the scale of growth identified in the emerging East Cambridgeshire Local Plan.

A new Habitats Regulation Assessment and Appropriate Assessment (where required) has been produced to support the preparation of the Draft WRMP.

Further details of relating to the Draft WRMP 2018 and associated technical documents including the HRA and Appropriate Assessment are available to view at the following address:

http://www.anglianwater.co.uk/about-us/draft-water-resources-management-plan-2019.aspx

The conclusions for Cheveley, Ely and Newmarket WRZs set out in these reports are as follows:

WRZ name	Principal	Extended (future	Adaptive
	Planning	proofed	planning
	Solution	scenario)	scenario
Cheveley	No likely significant	No likely significant	No likely significant
	effects on	effects on	effects on
	European sites	European sites	European sites
Ely	No likely significant	No likely significant	No likely significant
	effects on	effects on	effects on
	European sites	European sites	European sites
Newmarket	Potential likely	Potential likely	Potential likely
	effects on	effects on	effects on
	European site –	European site –	European site –
	appropriate	appropriate	appropriate
	assessment	assessment	assessment
	required	required	required

In the case of Newmarket WRZ it is considered that given the impacts on Fenland SAC and Chippenham Fen Ramsar site are expected to temporary as these will occur during construction only. The Appropriate Assessment report refers to appropriate mitigation to be incorporated into the design (page 53 of the Appropriate Assessment report).

In effect there is expected to be no significant adverse impacts on the integrity of the European sites, if the suggested mitigation measures are implemented (page 56 of the Appropriate Assessment report).

I hope this helps to answer Natural England's query – should you require any further information please let me know.

Regards, Stewart Patience Spatial Planning Manager