



East Cambridgeshire
District Council

East Cambridgeshire District Council

Natural Environment – Supplementary Planning Document (SPD)

A planning policy document to help deliver a net gain in biodiversity and, in turn, assist in delivering the vision to double the area of rich wildlife habitats and natural green-space across Cambridgeshire and Peterborough, with the aim of creating a world-class environment where nature and people thrive, and businesses prosper.

Consultation Draft

February 2020

This is a draft version as being presented to ECDC Finance and Assets Committee on 6 February 2020. If approved by the Committee, it will be subject to consultation over February – March 2020.

A simple guide to this Natural Environment Supplementary Planning Document

What is this document?

Its primary purpose is to help make sure new development in East Cambridgeshire both protects the current natural environment, but also creates new areas for wildlife to thrive.

Do we have many wildlife areas worthy of protection in East Cambridgeshire?

Yes, lots!

In fact, some parts of the district are of international importance for wildlife, whilst other sites are of national or local importance.

Internationally important? That's exciting. Why are they so important?

For various reasons, but mostly it relates to surviving wetland areas in our district which are home to rare plants, birds and other animals. Wicken Fen is probably the best known, and home to all kinds of rare plants and animals (8,500 different species have been recorded, including over 1,000 different species of moths!), whereas in the north of the district the Ouse Washes (the UK's biggest washland) is especially important for birds. For example, around one-third of the entire population of north-west Europe Bewick Swans spend their winter on the Ouse Washes.

And nationally important in East Cambs?

We have a further 15 sites of national importance, and hundreds of sites of more local importance.

So, this document protects these sites does it?

Yes, absolutely, this document provides a vital role in helping to both highlight the importance of these sites and to make sure new development does not harm them.

But I hear the environment is in decline, and there is a decline in wild animals such as birds, bees and butterflies?

Sadly, across the country, this is generally true. That's another reason why the Council has prepared this document. We don't just want to **protect** what we have got, but also **create** new areas for wildlife to thrive. This is sometimes referred to as making sure new development not only provides the homes, jobs and facilities we need, but also provides a 'net gain for biodiversity'.

'Net gain for biodiversity' – what does that mean?

Net gain describes an approach to development that leaves the natural environment in a measurably better state than it was beforehand. So, if development is to take place on, say, a current agricultural field with perhaps a hedgerow around it, by the time the development is complete, there should be more land set aside for wildlife to thrive than there was before development took place. This will require new habitats to be created, such as woodlands and ponds, as well as homes that incorporate wildlife friendly measures such as bird and bat boxes.

Does 'net gain' apply to all development?

Yes, except for very small development such as householder extensions (though even then you are encouraged to make a difference if you can).

What about trees? We need more of them don't we?

Yes, we do. Trees serve a wide range of benefits, not just for wildlife, but they also help reduce flood risk and 'capture' carbon from the atmosphere, therefore helping efforts to reduce climate change. But, we need to be careful that the right sort of tree is planted in the right location. Too close to a property, and some trees can cause building damage as they grow.

I heard that Cambridgeshire wants to 'double land for nature'. Will this document help?

East Cambridgeshire District Council has joined forces with all other Cambridgeshire districts and the Local Nature Partnership to set itself a target to double the amount of land across Cambridgeshire which is classed as rich habitat for nature. About 8% or so of land is currently in such state – we want to reach 17%. This SPD will help, but lots of other projects will need to happen to make that target a reality, such as changing the way some of our farmland is managed.

What else does this document do?

Because it is a planning document, some of it is a bit technical in how it is worded. It has to be in order to enforce what it is trying to achieve through the planning application process. This is especially the case for protecting the sites which are of international importance – these sites have strict legal rules in place to make sure such sites are not harmed.

I'm a developer – what does it all mean for me?

This SPD is here to help you. There is already a lot of legislation and national policy for you to comply with in terms of the natural environment, and this SPD aims to help you get through all that as simply as possible. But this SPD also makes clear that the Council will not accept development that either harms wildlife sites or fails to make enough efforts to boost wildlife areas.

A housing scheme with just a few simple bird boxes thrown in, is not good enough – it needs to incorporate genuine net gain for biodiversity.

And it is in your interests to do so, not only so your planning application gets a speedier ride through the planning system, but development which works with nature can add considerable value to your development. The ONS has calculated, for example, that houses are worth 1-4% more if close to functional areas of open space or water areas.

Contents

[to be added on publication]

1. Introduction, Purpose and Consultation Arrangements

Introduction

- 1.1 East Cambridgeshire’s natural environment is a valuable resource, rich in international, national and locally designated sites. Ecological networks comprising designated sites, other habitats, and wildlife corridors are necessary to maintain and enhance biodiversity and prevent fragmentation and loss of connectivity. This is essential if species are to adapt to climate change and if biodiversity is to flourish.

Purpose of the Supplementary Planning Document (SPD)

- 1.2 The purpose of this SPD is to provide advice on policy requirements relating to the natural environment, including issues such as a ‘net gain’ in biodiversity through development proposals and technical advice in terms of discharging Habitat Regulation Assessment (HRA) obligations, especially in relation to swan and goose foraging in designated protection zones around the Ouse Washes. This SPD also sets out the Council’s position in relation to the recently adopted Local Nature Partnership vision to ‘double land for nature’ by 2050 across Cambridgeshire (a vision also endorsed by the Combined Authority in July 2019).
- 1.3 Whilst this SPD could cover many things, it is not intended to cover the following matters (though there may be some cross over to some of these issues). These may be addressed in future SPDs:
- Detailed design
 - Matters relating to visual impact
 - Carbon Dioxide (and equivalent) emissions
 - Green Infrastructure
 - Environmental Impact Assessment (EIA) procedures and requirements
- 1.4 Preparing this SPD was a specific commitment (amongst others) in the ‘Climate Change’ Motion passed by Full Council in October 2019.

Consultation Arrangements

- 1.5 We are consulting on this draft SPD between xxx and xxx. We invite you to make comments on this SPD, such as (but not limited to):
- Whether it is easy to understand or how it can be improved.
 - Whether you think it should include any topic or further advice that currently is not included in the document.
 - Whether you disagree with what this document is proposing.
- 1.6 The consultation is open to anybody to make comments, but the Council will make special efforts to seek the views of relevant bodies and organisations with an interest in the natural environment, as well as developers and agents on the Council’s ‘agents forum’.
- 1.7 Comments made during this consultation period will be carefully considered. We will make changes in light of these comments where we think it is appropriate. For your comments to be considered, please ensure that they reach us before the deadline.
- 1.8 After the consultation period has expired, we will make the changes that are reasonable and necessary and then the final version of the SPD will be adopted at an appropriate meeting of East Cambridgeshire District Council.

Status of this document

- 1.9 At this consultation draft stage, it is likely that limited weight will be given to it in the decision making process. Once adopted, the SPD will become a material consideration and will need to be taken into account when planning decisions are made.

2 Legislation and Policy Review

Legislation

- 2.1 The following paragraphs set out some of the key legislation which is relevant to the preparation of this SPD. However, it should only be seen as a summary of some of the legislation, as there are wide ranging other Acts and regulations which have an impact on natural environment matters.
- 2.2 **The Natural Environment and Rural Communities Act 2006¹** (NERC Act): This includes the duty on public bodies, including Local Planning Authorities, to have proper regard to conserving biodiversity in the exercising of their functions. It also lists species and habitats of principal importance for biodiversity in England. Section 40 of the NERC Act provides the source for the lists of Habitats and Species of Principal Importance.
- 2.3 **Wildlife and Countryside Act 1981 (As amended)**: The Act provides primary legislation which covers protection of wildlife (birds, and some animals and plants), the countryside and the designation of protected areas including Sites of Special Scientific Interest (SSSI's).
- 2.4 **The Conservation of Habitats and Species Regulations 2012 (As amended)**: These Regulations provide for the designation and protection of 'European sites', and the protection of European protected species.
- 2.5 **The Hedgerows Regulations (1997)**: These Regulations protect most countryside hedgerows from being removed.
- 2.6 **The Conservation of Habitats and Species Regulations 2017** consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. They also transpose elements of the EU Wild Birds Directive in England and Wales. The Regulations came into force on 30th November 2017.
- 2.7 The Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I and II of the Habitats Directive respectively) to the European Commission. Once the Commission and EU Member States have agreed that the sites submitted are worthy of designation, they are identified as Sites of Community Importance (SCIs). The EU Member States must then designate these sites as Special Areas of Conservation (SACs) within six years. The Regulations also require the compilation and maintenance of a register of European sites, to include SACs and Special Protection Areas (SPAs) classified under Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). These sites form a network termed Natura 2000.
- 2.8 The Regulations require competent authorities to consider or review planning permission, applied for or granted, affecting a European site, and, subject to certain exceptions, restrict or revoke permission where the integrity of the site would be adversely affected. Special provisions are also made as respects general development orders, special development orders, simplified planning zones and enterprise zones.
- 2.9 **The Water Framework Directive 2000**: It applies to all surface freshwater bodies (including lakes, rivers and streams), groundwater, groundwater dependent ecosystems, estuaries and coastal waters. The Directive aims to improve the ecological health of inland and coastal waters and prevent further deterioration.
- 2.10 **Environment Bill (due early 2020)**: The Environment Bill is expected to put into legislation a series of environmental principles and establish an Office for Environmental Protection, which will have scrutiny, advice and enforcement functions. It is also expected to make provision for the setting of long-term, legally binding environmental targets in four "priority areas" of air quality, water, biodiversity and resource efficiency and waste reduction, along with the

¹ <http://www.legislation.gov.uk/ukpga/2006/16/contents>

production of statutory Environmental Improvement Plans (the first being the January 2018, 25 Year Environment Plan²).

- 2.11 Following a commitment in the 25 Year Environment Plan, the Government published a consultation on Net Gain in December 2018. This was followed by a commitment to apply a requirement for biodiversity net gain of 10% for developers through the planning system. This gain will be measured using a biodiversity metric that has been developed by Defra. The Bill is expected to legislate for the creation of the net gain requirement, expand the duty on relevant authorities from conserving to “conserving and enhancing” biodiversity, and legislate for the creation of Local Nature Recovery Strategies to cover the whole of England.

Policy Review - National

- 2.12 **25 Year Environment Plan:** The Government set out its aim in the Plan of restoring and creating habitats to provide the greatest opportunity for wildlife to flourish, and “promote the economic and social benefits that healthy habitats offer”. The Government announced that, against a background of significant housebuilding, it would embed the principle of “environmental net gain” in the planning system:
“We want to put the environment at the heart of planning and development to create better places for people to live and work”³
- 2.13 The Plan includes commitments to use resources from nature more sustainably and efficiently; and to enhance beauty, heritage and engagement with the natural environment through a natural capital approach. As part of this approach it set out a range of policies aimed at preventing and reversing biodiversity loss, covering both terrestrial and marine environment.
- 2.14 A natural capital approach aims to determine the value of natural capital, and then ensure this value is maintained, or compensated for elsewhere, when considering any action. It also advocates restoring natural capital in areas where it has fallen below a self-sustaining, or renewable, level. The aim is to ensure that an overall level of sustainable natural capital is maintained for future generations.
- 2.15 **National Planning Policy Framework:** The NPPF provides policy guidance on conserving and enhancing the natural environment. Planning policies are expected to, amongst other things: protect and enhance valued landscape; recognise the intrinsic character and beauty of the countryside; minimise impacts on and provide net gains for biodiversity; and prevent adverse effect of new and existing development on the natural environment.
- 2.16 Paragraphs 175-177 are most relevant for considering development proposals:
175. When determining planning applications, local planning authorities should apply the following principles:
- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
 - b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
 - c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*

² <https://www.gov.uk/government/publications/25-year-environment-plan>

³ HM Government, A Green Future: Our 25 Year Plan to Improve the Environment, January 2018 p32

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

176. The following should be given the same protection as habitats sites: a) potential Special Protection Areas and possible Special Areas of Conservation; b) listed or proposed Ramsar sites; and c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

177. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.”

2.17 **National Planning Practice Guidance (NPPG):** The NPPG advises that development plans and planning decisions have the potential to affect biodiversity outside as well as inside relevant designated areas.

2.18 It advises that planning authorities and neighbourhood planning bodies can work collaboratively with other partners, including Local Nature Partnerships, to develop and deliver a strategic approach to protecting and improving the natural environment based on local priorities and evidence. Equally, they need to consider the opportunities that individual development proposals may provide to conserve and enhance biodiversity and geodiversity, and contribute to habitat connectivity in the wider area (including as part of the Nature Recovery Network).

Policy Review – Sub-Regional

2.19 **Local Nature Partnership (Natural Cambridgeshire):** LNPs are partnerships of a broad range of local organisations, businesses and people who aim to help bring about improvements in their local natural environment.

2.20 The role of Natural Cambridgeshire LNP is to act as an independent, objective voice for the natural environment in Cambridgeshire and Peterborough, acting as a conduit to local and central government and other stakeholders. The LNP’s work and proposals in the following areas are of particular relevance to this SPD:

- **Toolkit:** The LNP developed a Toolkit in 2018 to help developers and infrastructure providers to demonstrate their commitment to achieving a net biodiversity gain. The Toolkit comprises a simple list of 10 Things to do for Nature. More details on this are set out in section 14 of this SPD.
- **Doubling Nature:** In July 2019, the LNP launched ambitious plans for doubling land for nature across Cambridgeshire and Peterborough with the aim of creating a world-class environment where nature and people thrive, and businesses prosper.

2.21 **Cambridgeshire County Council:** In May 2019, CCC declared a climate and environmental emergency, and recently issued (Dec 2019) for consultation until end of January 2020 a ‘Climate Change and Environment Strategy’, with one of its priorities being to create ‘space for nature to thrive’. More details here:

<https://consultcambs.uk.engagementhq.com/climate-strategy>

Policy Review – East Cambridgeshire

2.22 **East Cambridgeshire Local Plan:** The Local Plan was adopted in 2015, and forms the primary basis upon which this SPD document sits under.

2.23 The most relevant policy in the Local Plan that provides protection to the natural environment is Policy ENV7 (Biodiversity and geology):

Policy ENV7 Biodiversity and geology

All development proposals will be required to:

- *Protect the biodiversity and geological value of land and buildings and minimise harm to or loss of environmental features, such as trees, hedgerows, woodland, wetland and ponds.*
- *Provide appropriate mitigation measures, reinstatement or replacement of features and/or compensatory work that will enhance or recreate habitats on or off site where harm to environmental features and habitat is unavoidable; and*
- *Maximise opportunities for creation, restoration, enhancement and connection of natural habitats as an integral part of development proposals.*

Development proposals where the main aim is to conserve biodiversity will be permitted; and opportunities to incorporate biodiversity into new development will be supported.

All applications for development that may affect biodiversity and geology interests must be accompanied by sufficient information to be determined by the Local Planning Authority, including an ecological report, to allow potential impacts and possible mitigation measures to be assessed fully. Where there is reason to suspect the presence of protected species, trees and woodland, applications must be accompanied by a survey carried out by a qualified individual assessing their presence and, if present, the proposal must be sensitive to, and make provision for, their needs, in accordance with the relevant protecting legislation. Where appropriate, there will be a requirement for the effective management of designated sites and other features, controlled through the imposition of conditions or Section 106 agreements.

Proposals which have an adverse impact on a site of international importance will not normally be permitted unless there are exceptional overriding reasons of public interest (human health, public safety or environmental benefit).

Proposals which have an adverse impact on a site of national importance will not normally be permitted unless the benefits of development at the site significantly outweigh the impacts.

Proposals which would cause harm to County Wildlife Sites, Ancient Woodland, aged and veteran trees, Local Nature Reserves, Protected Roadside Verges, any other irreplaceable habitats, and green corridors or important species will not be permitted unless the need for, and benefits of development in that location outweigh the potential harm to nature conservation interests.

- 2.24 **Neighbourhood Plans:** These are plans prepared by parish councils, with support from the district council. To date, a number of parishes have commenced neighbourhood plans, with two formally adopted. Neighbourhood Plans can contain policies relevant to the natural environment for the local parish area.
- 2.25 **Climate Change Motion:** In October 2019, East Cambridgeshire District Council agreed a motion which recognised the need to build on the positive work already done by the Council, to further embed positive environmental thinking, behaviours, and action throughout the organisation and to seek to influence partners and others to do the same. The motion declared there was a climate emergency and committed the Council to undertake a number of activities, including: setting up an Ideas Forum; preparing this SPD; developing a costed Environment and Climate Change Strategy and Action Plan, including targets and timescales to reduce carbon emissions and pollution and protect and enhance biodiversity; and promotion of tree planting.

3 Overarching Natural Environment Vision of the Council

Introduction

- 3.1 In order to set the context for the detailed policies and guidance in this SPD, the following box sets out the overarching vision of the Council in terms of its approach, via the planning responsibilities it has, to the natural environment:

East Cambridgeshire District Council will, through the development management process, management agreements and other positive initiatives:

- a. aid the management, protection, enhancement and creation of priority habitats, including fens, calcareous limestone grasslands, woodlands and hedgerows, wet-woodlands, rivers and floodplain grazing marsh meadows;
- b. promote the creation of an effective, functioning ecological network throughout the district, consisting of core sites, buffers, wildlife corridors and stepping stones that link to wildlife rich sites in adjoining local authority areas;
- c. take decisions which respond to, and help nature adapt to, a changing climate;
- d. safeguard the value of previously developed land where it is of significant importance for biodiversity; and
- e. work with other bodies, in order to support the delivery of strategic ambitions for nature, such as the vision of ‘doubling the area of rich wildlife habitats and natural green space’ across Cambridgeshire and Peterborough (Natural Cambridgeshire LNP, 2019) and emerging nature related ambitions of the Cams-Ox Arc project.

4 Step by Step Guide

Introduction

- 4.1 The rest of this SPD sets out a wide range of policy requirements, guidance, suggestions and links to other information.
- 4.2 To help developers work their way through this SPD, and to help all parties to establish whether the natural environment has been suitably taken into account in developer proposals, the following flow chart has been developed:

Table 1: Recommended Approach to Natural Environment for all Planning Applications			
	All Development Proposals (scale and degree being proportionate to the development proposed)	Additional for 'Major' Proposals	Planning Stage
STEP 1	<ul style="list-style-type: none"> Seek pre-application advice from East Cambridgeshire District Council and relevant agencies and organisations is strongly recommended. In addition it is advised that Natural England is contacted at the earliest stage possible where a development is likely to impact on a National or International Site as there may be a requirement to carry out an Appropriate Assessment under the Habitats Regulations. <p><i>This will ensure all potential ecological and/or Green Infrastructure issues and requirements are considered before a planning application is submitted and help prevent delays.</i></p>		Prior to application submission
STEP 2 See section 11 for more information.	<ul style="list-style-type: none"> Complete a suitable Biodiversity Checklist, which is highly recommended for all applications other than: <ul style="list-style-type: none"> - householder applications; and - most applications which create no additional floor space (though it is recommended for barn conversions). Without it, it may be hard to demonstrate how you can meet the 'net gain' national policy requirements. <p><i>For most developments, the County Council checklist should suffice. However, other checklist are available and may be more suitable for your particular proposal.</i></p> <p><i>It should be possible for a non-specialist member of the public, planning agent or developer to complete the County Council checklist.</i></p>	For strategic scale proposals, the LNP 'Developing with Nature Toolkit' would be beneficial	Prior to application submission

<p>STEP 3</p>	<ul style="list-style-type: none"> • If the checklist identifies the potential presence of protected species and/or habitats, relevant ecological survey(s) must be undertaken by a suitably qualified ecologist in accordance with British Standard BS42020 and details of this must be submitted with your application. Provision of this information is a pre-requisite to the planning validation process. • If the initial survey indicates the need for additional survey(s) (eg a detailed survey for a specific species), then these must also be completed and submitted with the application – they will not be a condition added to any approval. <p><i>The Chartered Institute of Ecology and Environmental Management (CIEEM) provides a professional directory of qualified, regulated ecologists which can be found at www.cieem.net/members</i></p> <p><i>Submission of appropriate surveys will help to avoid potentially costly delays at a later date and allow a planning decision to be made in a timely manner, which is beneficial for both the applicant and the planning authority. It is also important to consider that some species can only be surveyed at certain times of the year, for example bat roost emergence and activity surveys may only be carried out between May and September. Failure to address this aspect at the onset of the application could result in costly time delays for the developer and may potentially result in the application being rejected at a later date.</i></p>	<p>It is recommended that professional ecological expertise is appointed at start of concept design process for all major development schemes.</p>	<p>Prior to application submission</p>
<p>STEP 4</p>	<ul style="list-style-type: none"> • Carefully design scheme in context of wider landscape and ecological networks, taking all reasonable opportunities to make biodiversity gains. This should in most instances be achieved on site, but exceptionally the use of S.106 contributions may be sought to assist in delivery of a nearby project. <p>Plan green and hard infrastructure at same time, following the ecological mitigation hierarchy by retaining existing natural features such as hedgerows, woodlands and mature trees, ponds and water courses wherever possible, around which connectivity of habitats can be further enhanced, benefiting priority habitats and species.</p>		<p>Strategic Concept Design Stage</p>
<p>STEP 5</p>	<ul style="list-style-type: none"> • Design a landscaping scheme which uses native species of trees, shrubs and other plants, with a view to it benefitting birds, bats and invertebrates (as well as wider benefits such as carbon offsetting, shading, flood alleviation and visual amenity). However, for trees, choose species suitable for their location, so as to prevent future 		<p>Detailed Technical Design Stage</p>

	<p>problems (such as damage to foundations, footpaths and roads) as the trees mature.</p> <ul style="list-style-type: none"> Where trees are present on site, a Tree Survey will be required, and, potentially, an Arboricultural Method Statement, Impact Assessment and Tree Protection Plan (see Chapter 11). <p><i>Incorporating native wildflower species into seed mixes for areas of public open space is also extremely beneficial to invertebrates (as well as being visually attractive to new residents), and should be used wherever possible. Wild-flower grassland will usually require less frequent mowing and therefore can reduce management costs. Flora Locale’s website is a useful source of further information and also provides a link to approved UK wildflower seed suppliers: www.floralocale.org</i></p> <p><i>The RHS has produced the following list of pollinator-friendly plants:</i></p> <p>www.rhs.org.uk/science/pdf/conservation-and-biodiversity/wildlife/rhs_perfectforpollinators_plantlist-ian15</p>		
<p>STEP 6</p>	<ul style="list-style-type: none"> Provide Sustainable Drainage Systems (SuDS) with integral wildlife features. <p>See separate Flood and Water SPD for more details.⁴</p> <p><i>The natural features offered by grass swales, infiltration strips, reed beds and ponds may provide habitats for amphibians, birds, mammals and invertebrates. The replacement of open drains and gully pots with surface features will also reduce the number of animals becoming trapped in drains.</i></p> <p><i>The RSPB has also produced a useful guide which provides more detailed SuDS information including the use of Green Roofs, Living Walls and Rain Gardens:</i></p> <p>www.rspb.org.uk/Images/SuDS_report_final_tcm9-338064.pdf</p> <p><i>Buglife has produced a best practice guide to creating green roofs for invertebrates:</i></p> <p>www.buglife.org.uk/sites/default/files/Creating%20Green%20Roofs%20for%20Invertebrates_Best%20practice%20guidance_2.pdf</p> <p><i>For more information on Green Roofs, see the independent trade organisation NRFC website: https://www.nrfc.co.uk/green-roof-installations</i></p>		<p>Detailed Technical Design Stage</p>
<p>STEP 7</p>	<ul style="list-style-type: none"> Provide full range of breeding sites, shelter and year-round food resources for protected/ priority species as part of on-site ecological mitigation and enhancement measures. Full details and 		<p>Detailed Technical Design Stage</p>

⁴ See <https://www.eastcambs.gov.uk/local-development-framework/supplementary-planning-documents>

	<p>specifications may be provided as part of the application or, where appropriate, later at the detailed planning stage and secured by condition.</p>		
STEP 8	<ul style="list-style-type: none"> • Submit completed Biodiversity Checklist along with additional protected species survey reports as required (and any EIA reports if necessary). <p><i>Professional scrutiny from statutory and non-governmental bodies to ensure adequate ecological information has been provided; requests for further information from the applicant may be made should it not be considered adequate.</i></p> <p><i>Statutory obligations including having due regard to biodiversity conservation, must be fulfilled.</i></p> <p><i>Approved applications may be subject to relevant biodiversity planning conditions.</i></p> <p><i>To ensure biodiversity is protected during the construction phase, measures such as Construction Environmental Management Plans (CEMP), use of Ecological Clerk of Works (ECW) and restrictions on timings of works may be required.</i></p>		<p>Validation & registration</p> <p>Decision-making</p> <p>Determination</p>
STEP 9	<ul style="list-style-type: none"> • Post-development management and/ or monitoring of habitats and species should be carried out as appropriate (may be subject to specific conditions). <p><i>It is important to implement appropriate management of biodiversity features and habitats that are retained or created on site. These may include measures such as reducing the frequency of grassland/ wild-flower meadow mowing, avoiding or reducing the use of pesticides and herbicides and retaining rough grassland buffer zones along field margins, hedges and ditches. Details of all such management measures should be clearly identified in an Ecological/ Landscape Management Plan.</i></p> <p><i>Ecological monitoring (and reporting) of natural green-spaces and associated species/ habitats for a period of five or more years may be required to ensure their satisfactory establishment.</i></p> <p><i>Options for long-term management of natural green-space may include entering into an agreement with conservation bodies such as the Wildlife Trust or Parish Council as an alternative to the land's adoption by the Local Authority.</i></p>		<p>Implementation</p>

4.3 By following the above steps, the Council should be able to deal with your application in a timely manner, and your development proposal should provide wide ranging natural environment benefits.

5 What sort of nature conservation measures will decision makers look for?

Introduction

- 5.1 It is important to understand that no two sites or proposals are the same. Different sites will have different biodiversity value pre-development, and differing biodiversity potential which can be created via development.
- 5.2 Some sites will largely have issues confined to that site, whereas others will have potential issues off-site (possibly even several miles away, depending on the 'connection' between the proposal site and the habitat affected). Even on the same site, the development itself can also have significantly different outcomes depending on what sort of development is proposed.
- 5.3 Nevertheless, the following box lists the sorts of things that decision makers will be looking out for when determining applications for their impact (positive or negative) on the natural environment. But, it must be emphasised that this list is not comprehensive, and many other issues may well need looking at, and the issues below might not be relevant to all proposals.

Potential impact of development proposals

Decision makers on planning applications might consider implications relating to:

- Changes to water table height and hydrology of the area and the subsequent impact on habitats and important plant communities.
- Changes to stream/river flow and the resulting impacts on aquatic and riparian ecology.
- Pollution of water courses from run-off from roads and parking areas.
- Impacts of any archaeological investigations or remediation of contaminated land on habitats not identified through constraints mapping.
- Wildlife disturbance and damage to habitats through construction, recreation and increased risks of unlawful activities, such as trespass, vandalism and introduction of non-native species. This extends to offsite effects via public rights of way, other publicly accessible land, permissive routes and potential routes of trespass.
- Loss of foraging/roosting/commuting habitat for important species.
- Loss of general ecological resources needed to support biodiversity, such as water sources, food plants and nectar sources, and nest sites and song posts for birds.
- Effects of lighting, especially any floodlighting, on important nocturnal species such as bats.
- Effects of pet predation on important species.
- Disturbance of important species and habitats due to construction work (including noise and piling), and the intended use of the proposed development. A method of construction report may need to be submitted.
- Risk of pollution from construction materials/effluents, such as dust/cement powder or cement washings.
- Storage of materials, location of site huts, construction traffic (parking, turning areas, routes and site access).
- Effects on the long-term viability of land management required to conserve important habitats.
- Effects on bats from construction materials such as breathable roof membranes which pose a risk to bats through entanglement.
- Effects of traffic once the development is complete and operational.

By using the checklist approach (see section 14) or submission of a suitable ecology assessment(s), the above issues should be more easily assessed by the decision maker.

6 Protecting the Most Valuable Sites: Internationally Designated Sites

Introduction

- 6.1 Most nature sites are identified as falling within a hierarchy of importance, with international and then nationally important sites being at the top of the hierarchy. These sites usually contain rare habitats or species (often both), and are heavily protected through international and national legislation.
- 6.2 Below international and national important sites are more locally designated sites, usually listed as being of county-importance. For national advice on planning applications and such designations, please see:

<https://www.gov.uk/guidance/protected-sites-and-areas-how-to-review-planning-applications>

- 6.3 This chapter, and the following two chapters, provides local guidance and policy in respect of all such designated sites. Of course, other sites may well have rich biodiversity within them, but are not necessarily designated for protection. These areas are not covered in the following three chapters, but are covered by the more generic chapters within this SPD.

Internationally Designated Sites

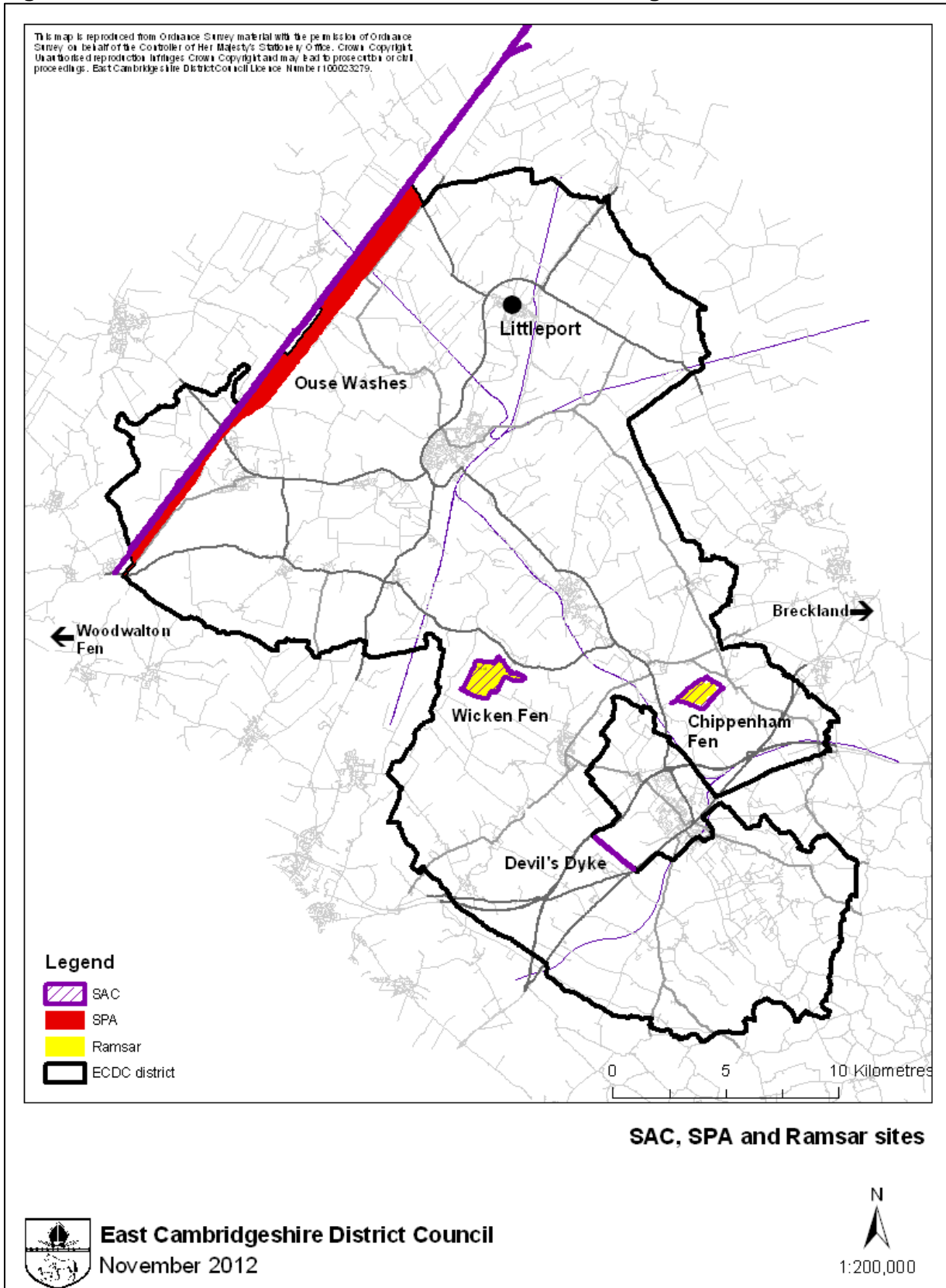
(Note: for the purpose of this draft SPD, the following text is written on the basis of the UK still implementing EU legislation in respect of habitat protection. This section may need adjusting prior to this SPD being adopted, depending on the transition arrangements in respect of leaving the EU, and the incorporation or otherwise of EU legislation within UK law).

- 6.4 Within East Cambridgeshire, there are five sites of relevance for their international importance:
- Wicken Fen (part of the Fenland SAC, which is a collection of three sites formed by Wicken Fen, Woodwalton Fen and Chippenham Fen Ramsars. The Woodwalton Fen site falls within Huntingdonshire district, rather than East Cambridgeshire, and therefore any policies or guidance in this SPD do not apply to that site)
 - Chippenham Fen (part of Fenland SAC – see above)
 - Ouse Washes SAC/SPA/Ramsar
 - Devil's Dyke SAC
 - Breckland SAC/SPA (not physically located within East Cambridgeshire, but part of the buffer zones around it are)
- 6.5 The above sites are known as 'Natura 2000 sites', which is a Europe-wide network of sites of international importance for nature conservation established under the Habitats Directive⁵. 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.
- 6.6 Ramsar sites (which are separate to Natura 2000 EU related sites, albeit often overlap in terms of designation, where applicable) support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).
- 6.7 A map identifying four sites is on the next page (Breckland SAC/SPA buffer zone is not shown).
- 6.8 In recognition of their importance, development proposals which may have an impact on these sites must undertake a rigorous process to determine what those effects might be. Importantly,

⁵ the European Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna (the Habitats Directive)

it is not just proposals which are located within the designated sites which must be assessed, but also proposals away from such sites, potentially several miles away, if a connection exists between the designated site and the proposed development site. This SPD provides some specific guidance in this respect.

Figure 1: Location of Natura 2000 Sites within East Cambridgeshire



Policy for Internationally designated sites

- 6.9 The Local Plan (2015), in respect of specific policy for internationally protected sites, states as follows (extract of Policy ENV7):

“Proposals which have an adverse impact on a site of international importance will not normally be permitted unless there are exceptional overriding reasons of public interest (human health, public safety or environmental benefit).”

- 6.10 The above policy is, however, somewhat dated. It does not accurately reflect the latest international law, and provides some doubt through the use of the phrase ‘not normally’. The NPPF (2019) provides a more up to date policy framework for considering such sites. Whilst the thrust of the NPPF is that there should be a presumption in favour of sustainable development, at para 177 it clarifies that such a presumption does not apply to internationally protected sites (referred to as a ‘habitats site’):

“The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.”

- 6.11 Having taken account all of the above (Local Plan, NPPF and NPPG), the following sets out supplementary detailed supporting policy in respect of considering development proposals in East Cambridgeshire:

Policy SPD.NE1: Conserving and Enhancing Biodiversity - Internationally Designated Sites

The highest level of protection will be afforded to international sites designated for their nature conservation importance. Proposals having an adverse impact on the integrity of such areas, that cannot be avoided or adequately mitigated to remove any adverse effect, will not be permitted other than in exceptional circumstances. These circumstances will only apply where:

- (a) there are no suitable alternatives;
- (b) there are imperative reasons of overriding public interest; and
- (c) necessary compensatory provision can be secured.

Development will only be permitted where the Council is satisfied that any necessary mitigation is included such that, in combination with other development, there will be no adverse effects on the integrity of international sites.

Development proposals that are likely to, or have the potential to, have an adverse effect, either alone or in-combination, on European designated sites must satisfy the requirements of the Habitats Regulations (or any superseding similar UK legislation, post the UK leaving the EU), determining site specific impacts (which could be off-site as well as on-site) and avoiding or mitigating against impacts where identified. Mitigation may involve providing or contributing towards a combination of the following measures:

- (i) Access and visitor management measures within the designated site;
- (ii) Improvement of existing greenspace and recreational routes;
- (iii) Provision of alternative natural greenspace and recreational routes;
- (iv) Monitoring of the impacts of new development on European designated sites to inform the necessary mitigation requirements and future refinement of any mitigation measures;
- (v) Other potential mitigation measures to address air pollution impacts e.g. emission reduction measures, on site management measures.

Guidance to applying the policy

- 6.12 The NPPF (paragraph 177) refers to the need for an ‘appropriate assessment’ and the policy above also makes reference to meeting the requirements of the Habitats Regulations. Both of

these are making reference to The Conservation of Habitats and Species Regulations 2010 (as amended) ('the Habitat Regulations') which require a Habitats Regulation Assessment (HRA) to be undertaken for all relevant projects or proposals. Therefore, in accordance with these Regulations, Local Planning Authorities such as East Cambridgeshire District Council must demonstrate that the implementation of a development proposal would not adversely affect the integrity of Natura 2000 sites within or outside of its area, either alone or in combination with other plans or projects.

- 6.13 Theoretically, any development proposal within East Cambridgeshire could be 'caught' by the need to undergo a HRA. However, the purpose of preparing a HRA is to determine whether or not the proposal will have a **significant adverse effect** on the Natura 2000 site. Consequently, many small scale development proposals (e.g. a house extension within an urban area) would clearly not result in a significant adverse effect, and it would be nonsensical to go through the HRA process for such proposals.
- 6.14 However, other proposals are less clear cut, and sometimes proposals which might not initially seem relevant for consideration under the HRA regime, may well require such consideration.
- 6.15 This SPD aims to set out some clear guidance as to when the provisions of the HRA legislation will need to be applied to proposals within East Cambridgeshire.

What proposals might have an adverse effect on an international designated site?

- 6.16 It is unlikely the Council will receive many proposals for development within an internationally designated site itself, on the basis that it is highly unlikely that such a proposal would be able to meet the national and local policy tests (the only exception likely being a proposal which is directly related to and necessary for the management of the site itself).
- 6.17 However, many proposals 'off-site' could have an adverse effect on a designated site. For example, an increase in populations near a designated site might result in increased recreational pressure on the designated site (e.g. new homes will result in more people in a particular area, thereby more people potentially undertaking leisure activities on a nearby designated site), and such increased pressure could have an adverse effect on the integrity of the designated site. Another example could be that a site is designated for its population of a certain species (eg bird(s)), but such species use land outside of the designated area for foraging. If such foraging land was lost, then the integrity of the designated site could be adversely effected.
- 6.18 To help determine what effects may occur, first it is necessary to provide details of each Natura 2000 site, setting out the qualifying features for which the sites are designated and specific sensitivities 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).⁶ Appendix 1 provides the detailed information, whereas table 2 below provides a summary:

⁶ These were obtained from the JNCC and Natural England websites (www.jncc.gov.uk and www.naturalengland.org.uk)

Table 2: Natura 2000 Sites: Vulnerability, Pressures and Threats (Summarised from Natural England's Site Improvement Plans and advice to the Council)

Site	Vulnerability (✓ means site is vulnerable)						Summary of Pressures/Threats
	Physical Habitat Loss	Physical Damage	Disturbance Recreational	Water Quantity	Water Pollution	Atmospheric Pollution	
Devil's Dyke	✓	✓	✓	x	x	✓	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	✓	✓	✓	✓	✓	✓	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 nitrification from agricultural run-off and abstraction from the underlying aquifer is a threat. 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	✓	✓	✓	✓	✓	✓	Key threats include water pollution and hydrological changes. There is considerable pressure in the region from the water abstraction that may affect 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.
Ouse Washes	✓	✓	✓	✓	✓	x	The Ouse Washes are extremely vulnerable to changes in hydrology and the site is currently suffering from nitrification 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

Site	Vulnerability (✓ means site is vulnerable)							Summary of Pressures/Threats
	Physical Habitat Loss	Physical Damage	Disturbance Recreational	Water Quantity	Water Pollution	Atmospheric Pollution		
								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. High winter water levels also reduce grazing area for wigeon.
Breckland (outside of district)	✓	✓	✓	✓	✓	✓		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.

- 6.19 In order to establish whether or not a proposal might have an effect on one of the above designations, then Natural England's Impact Risk Zones (IRZs) should be consulted in the first instance.
- 6.20 IRZs are a GIS tool developed by Natural England to make rapid initial assessment of the potential risks posed by development proposals to: Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites. They define zones around each site which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs can be used by local planning authorities (LPAs) to consider whether a proposed development is likely to affect a SSSI, SAC, SPA or Ramsar site and determine whether they will need to consult Natural England to seek advice on the nature of any potential impacts and how they might be avoided or mitigated.
- 6.21 The following weblink provides considerable more detail and guidance on the interpretation and use of the IRZs dataset:
<https://naturalengland-defra.opendata.arcgis.com/datasets/sssi-impact-risk-zones-england> .
- 6.22 The IRZs data can also be viewed on government's MAGIC website:
<https://magic.defra.gov.uk/>
- 6.23 More specific information on how developers can get advice from Natural England on planning applications can be viewed at <https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals> .
- 6.24 In respect of East Cambridgeshire, the vast majority of the district is 'washed over' with at least one IRZ, reflecting the volume and sensitivities of designated sites in the district.
- 6.25 Applying the IRZs is not, however, the most straight forward process. IRZs are typically split into several 'layers' stretching away from the designated site, and within each layer are differing advice as to when there may be an impact and when Natural England will need consulting on proposals. To add to the difficulty, one particular designated site can have two or more different IRZs stretching out from it, with differing impacts potentially arising. Whilst this is unusual, such a scenario applies in East Cambridgeshire with the Ouse Washes designation. Also, an IRZ stretching out from one designated site, may overlap with an IRZ stretching out from another designated site.
- 6.26 Further, once a proposal has been determined to fall within an IRZ (or potentially more than one IRZ), and also within the threshold for the potential of having harm on the designated site, it does not identify what that harm might be or what might need to be investigated. Thus, identification of a site within an IRZ is merely a 'flag' that further work and investigation needs to be undertaken.
- 6.27 It can, therefore, especially in these situations of overlapping IRZs, be very difficult to know whether a parcel of land is within one or more IRZs, and for what reason, and what the implications of development might be. This is why your development proposal will need specialist ecological advice.
- 6.28 To help applicants (and decision makers of planning applications), it is apparent that one particular IRZ within East Cambridgeshire is worthy of highlighting and providing guidance within this SPD.

'Goose and Swan' IRZ

- 6.29 Following discussions in 2018 with Natural England, it was agreed between ECDC and Natural England that land within this particular IRZ (which was established following a British Trust for Ornithology (BTO) research project) is considered to be potentially functionally linked to the Ouse Washes European designated site and therefore any development which may take place within this IRZ has the prospect of needing to be considered under the Conservation (of Habitats and Species) Regulations 2010 (as amended) and, therefore, potentially undergo the HRA process, starting with a HRA screening to be undertaken to determine if there will be a likely significant effect.

- 6.30 The map on the following page illustrates the extent of this particular IRZ (though the ‘Magic’ website should be consulted if there is any doubt as to whether a particular parcel of land falls within it). As can be seen, it covers a large part of East Cambridgeshire.
- 6.31 The following policy applies to proposals within that IRZ:

Policy SPD.NE2: Proposals within the Swan and Goose Impact Risk Zone

Land within the ‘Swan and Goose’ Impact Risk Zone, as identified on the ‘MAGIC’ website and indicatively illustrated in the map on page 25 of this SPD, may provide important functional habitat for qualifying bird species associated with the Ouse Washes Special Protection Area (SPA) and Ramsar site, particularly swans, for foraging and roosting.

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’** (as defined by legislation) within the IRZ must undertake a project-level Habitats Regulation Assessment (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.

Such a project level HRA should initially commence with a robust HRA Screening, prepared by the applicant, 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 (or the effect is unknown), 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 the Ouse Washes designated site.

For the avoidance of doubt, proposals which are **not greenfield ‘major development’** are not automatically excluded from the need to undergo the HRA process, because such a process may need to be undertaken for reasons not referred to in this policy (for example, for smaller scale development very close to the designated site). However, such proposals are excluded from the provisions of this particular policy.

- 6.32 Should a development proposal be captured by the above policy then it does not mean that development is likely to be refused as a consequence. It is likely that most land will not, following due investigation, be regularly used by qualify species (such as swans). However, as a precautionary measure, it will be necessary for this to be tested and confirmed at the project level HRA stage, in line with the above policy.
- 6.33 For the avoidance of doubt, it should be noted that the above policy applies even if the proposed development is allocated within a development plan (i.e. within the Local Plan or a Neighbourhood Plan) for development.

Specific advice and policy in respect to recreational pressure on designated sites arising from development

- 6.34 As identified in the summary table (Table 2), all four European designated sites in East Cambridgeshire are vulnerable to recreational pressure, as well as Breckland. In simple terms, this means that harm to the integrity of such sites could arise because people are using such sites for recreational purposes (such as dog walking). Consequently, if development was to likely increase the quantity of recreational use, that development could potential result in harm.
- 6.35 Only residential development has the potential to increase recreational pressure. The potential increase in pressure will depend on the location of the development and quantity of new homes (and hence people) it will deliver.

- 6.36 By applying Policy GROWTH3 of the Local Plan (which requires new infrastructure provision via development, including open space), most development is likely to not result in a significant increase in recreational pressure on designated sites.
- 6.37 In addition, whilst all four East Cambridgeshire sites plus the Breckland site are listed as being vulnerable to recreational pressure, it was agreed in 2018 with Natural England that only Devil's Dyke and Breckland sites need to be identified for specific additional guidance and policy (rather than all designated sites) because the Site Improvement Plan for Breckland lists public access and recreational pressure as a threat, and (whilst not specifically mentioned in its Site Improvement Plan) Natural England has stated that recreational pressure is an issue for the Devil's Dyke site. All other designated sites do not list public access and recreational pressure as a vulnerability. It has been agreed with Natural England, therefore, that it would be unreasonable to apply additional guidance and policy in relation to development near to one of the other designated sites because they are not recognised as having a recreational pressure problem. It is worth noting that, for example, at Ouse Washes and Wicken Fen, visitors are actively managed (with Wicken Fen in particular actively encouraging visitors, and has, for example, recently substantially expanded its car park to facilitate further visitors).

Policy SPD.NE3: Recreational pressure on the designated sites of Devil's Dyke and Breckland

For major housing related development (as defined by legislation), and especially any such proposal within an assumed 8km zone of influence of Devil's Dyke SAC and Breckland SPA (see indicative map on page 25), it may be necessary to provide open space, outdoor sport and recreational facilities in excess of what would ordinarily be expected to be provided under GROWTH5 and the associated Developer Contributions SPD.

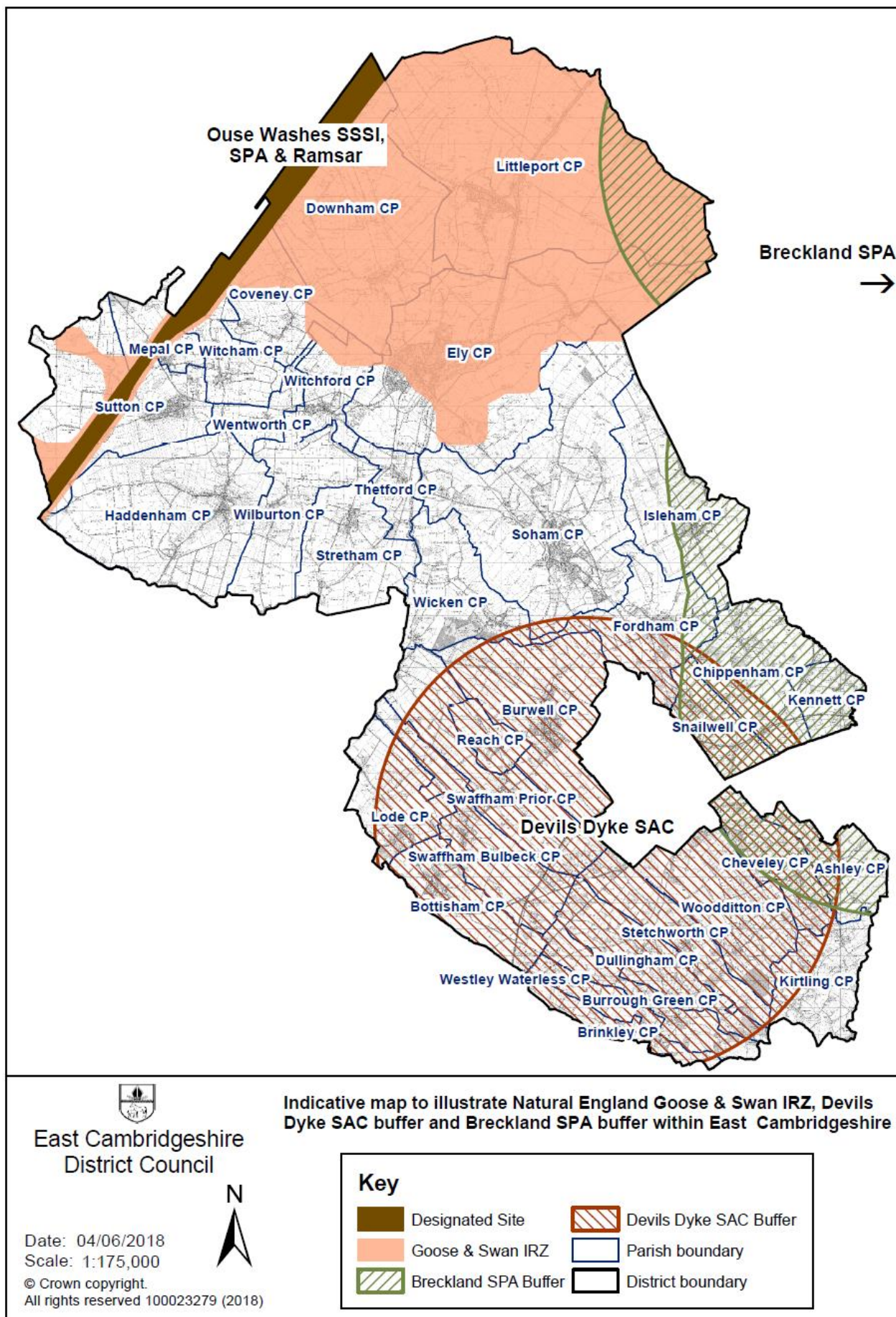
Such 'in excess' provision would be necessary in those instances where it is identified it is needed to mitigate the effects of increased recreational pressure on nationally or internationally designated biodiversity sites.

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).

In order for the decision maker to consider the potential recreational effects of a proposal, the following bullet points apply:

- For residential major development (as defined in the NPPF and legislation) within the 8km zones of influence, it will be for the applicant to provide sufficient evidence in order to demonstrate what excess, if any, above the minimum open space provision will be provided as a consequence of the development, and an explanation as to why the applicant believes such excess to be sufficient to enable the decision maker to conclude that there would be no significant adverse effect arising from the development, via recreational pressure, on Devil's Dyke or Breckland SAC (as applicable).
- For development within or adjacent to Reach, Swaffham Prior, Stechworth and Burwell (or at any other location in close proximity to wider Devil's Dyke SSSI), the above bullet point will be particularly relevant, due to the footpath link along the Devil's Dyke SSSI to the SAC element of Devil's Dyke.
- For development outside the 8km zones of influence (i.e. the rest of the district), only strategic scale development of 100 dwellings or more would need to need to comply with the first bullet point above.

Diagram 1: Indicative Map of relevant zones and buffer areas



7 Protecting the Most Valuable Sites: Nationally Designated Sites

Introduction

7.1 The previous chapter was focussed on internationally important designated sites. The next tier down the hierarchy is nationally designated sites, under two headings:

- National Nature Reserves (NNRs)
- Sites of Special Scientific Interest (SSSI).

7.2 East Cambridgeshire is blessed by a large number of nationally designated sites, as the following list demonstrates:

National Nature Reserves (NNRs)

- *Wicken Fen*
- *Chippenham Fen*

Sites of Special Scientific Interest (SSSI)

- *Ouse Washes*
- *Wicken Fen*
- *Devil's Dyke*
- *Chippenham Fen and Snailwell Poor's Fen*
- *Newmarket Heath*
- *Park Wood*
- *Out and Plunder Woods*
- *Ten Wood*
- *Snailwell Meadows*
- *Brackland Rough*
- *Soham Wet Horse Fen*
- *Stow-cum-Quay Fen*
- *Upware Bridge Pit North*
- *Upware South Pit*
- *Upware North Pit*
- *Cam Washes*
- *Delph Bridge Drain*
- *Ely Pitts and Meadows*
- *Shippea Hill*

7.3 As can be seen from above, in italics, the four internationally designated sites are also designated as nationally important sites. The boundaries of such sites are either the same, or very similar to the international designation. Consequently, for those four sites, for planning decision making purposes it is highly likely that any impact upon them will be considered in respect of any harm arising as an internationally important site.

7.4 For the remaining SSSIs sites, the Local Plan states as follows (extract of Policy ENV7):

“Proposals which have an adverse impact on a site of national importance will not normally be permitted unless the benefits of development at the site significantly outweigh the impacts”

7.5 The NPPF (2019) is similar in sentiments, and states as follows (para175(b)):

“Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest.”

- 7.6 On the basis that the two policy positions are very similar, but that the NPPF is more up to date and provides slightly greater policy detail, decision makers should apply greater weight to the NPPF wording.
- 7.7 The NPPF wording also usefully clarifies that its policy position applies equally to development 'outside' an SSSI in addition to development within such sites.
- 7.8 In order to help determine what the impact might be, IRZs have been prepared for each SSSI, and are available through the MAGIC website. See chapter 6 for further details on IRZs. Such IRZs will form a starting point for determine what evidence should be provided in support of an application.
- 7.9 In some instances, where a SSSI is vulnerable to recreational pressure, the sentiments of policy SPD.NE3 may need to be applied to development proposals, in order to comply with national and local policy.

8 Protecting the Most Valuable Sites: Locally Designated Sites

Introduction

- 8.1 Below nationally designated sites, many local areas have a variety of local biodiversity related designations.
- 8.2 In East Cambridgeshire, the Local Plan (2015) highlights the following (with Ancient Woodlands considered in more detail in section 11 of this SPD):

Type	Number of sites within East Cambridgeshire
County Wildlife Site (CWS)	81
Local Nature Reserve (LNR)	2 (Isleham and Little Downham)
Protected Roadside Verge (PRV)	12
Ancient Woodland	24

- 8.3 The Local Plan provides specific policy for such sites within the following paragraph (Policy ENV7):

“Proposals which would cause harm to County Wildlife Sites, Ancient Woodland, aged and veteran trees, Local Nature Reserves, Protected Roadside Verges, any other irreplaceable habitats, and green corridors or important species will not be permitted unless the need for, and benefits of development in that location outweigh the potential harm to nature conservation interests.”

- 8.4 The NPPF is largely silent in terms of policy position on these matters, except in a specific reference to ancient woodlands in the following policy position (para 175(c)):

“development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists”

- 8.5 The phrase ‘exceptional reasons’ in that paragraph is clarified in the NPPF (footnote 58) as follows: *“For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat”*.

- 8.6 The NPPF also defines what is meant by ‘irreplaceable habitats’ in its glossary, as follows:

“Irreplaceable habitat: *Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen.”*

- 8.7 Para 175(c) is a very firm national policy position. And, it is entirely possible that, in addition to Ancient Woodland (which the NPPF expressly identifies), some of the locally designated CWS, LNR or PRV could qualify as an ‘irreplaceable habitat’, and consequently para 175(c) would apply.

- 8.8 Separately, the NPPG has the following advice for locally designated sites (such advice covering geological sites as well):

“Locally designated ‘Local Wildlife Sites’ and ‘Local Geological Sites’ are areas of substantive nature conservation value and make an important contribution to ecological networks and nature’s recovery. They can also provide wider benefits including public access (where agreed), climate mitigation and helping to tackle air pollution. They can be in

in rural, urban or coastal locations, can vary considerably in size, and may comprise a number of separate sites.

National planning policy expects plans to identify and map these sites, and to include policies that not only secure their protection from harm or loss but also help to enhance them and their connection to wider ecological networks.

Local planning authorities can take a lead in establishing and maintaining partnerships and systems to identify, manage, enhance and safeguard local sites. The positive engagement and co-operation of land owners and their representative bodies can contribute significantly to the success of these partnerships.

All local sites partnerships need to use clear and locally defined site selection criteria with measurable thresholds. For example, where a particular habitat is especially scarce, it may be appropriate to adopt a lower threshold for selection than would be appropriate for other natural areas so that a suitable range of sites is protected. Selection criteria need to be developed with reference to the standard criteria in the following question, with all sites that meet the relevant criteria (informed by detailed ecological surveys and expertise) then being selected.

Paragraph: 013 Reference ID: 8-013-20190721"

- 8.9 The above advice is therefore recommending a detailed site selection process for local wildlife sites. Whilst the above advice is recent (2019), East Cambridgeshire District Council, working with partners across Cambridgeshire, has been involved in designating 'County Wildlife Sites'. In 2010, the Council adopted the 'East Cambridgeshire County Wildlife SPD'. That SPD sets out information and a map for all the CWS in the district, and also explains the methodology and selection process for designating them. The Council therefore believes the SPD remains consistent with the latest national advice.
- 8.10 Bring all of this together, it is apparent that existing Local Plan policy together with the East Cambridgeshire County Wildlife SPD provides appropriate policy coverage, with one exception, that being any such site which is deemed to be an 'irreplaceable habitat'. The following additional policy is therefore necessary:

Policy SPD.NE4: Development resulting in the loss or deterioration of a County Wildlife Site (CWS), Local Nature Reserve (LNR) or Protected Roadside Verge (PRV)

In addition to legislation and national and local policy in relation to such sites, development which will result in the loss or deterioration of a CWS, LNR or PVR which is deemed to be an irreplaceable habitat (as defined by the NPPF) will be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.

For CWS, LNR or PVR sites which are not deemed to be an irreplaceable habitat, then existing Local Plan policy will continue to apply to such sites.

9 Protected Species

Introduction

- 9.1 Whilst certain land areas are designated for nature conservation purposes, often for multiple reasons, certain species are also protected irrespective of where such species are found. Thus, it can often be the case that a parcel of land proposed for development is not designated in any way for nature conservation purposes, BUT may still have protected species present on site.
- 9.2 It is vitally important that both applicants and decision takers follow due process in assessing the potential presence of such species and, if such species are present (or could be present), that consideration of a development proposal takes account of such issues.
- 9.3 Many wildlife species benefit from statutory protection under a range of legislative provisions. Section 41 (S41) of the Natural Environment and Communities Act 2006 contains a list of habitats and species of principal importance. The current list (August 2010) contains 56 habitats of principal importance and 943 species of principal importance. The Council has a duty to promote the protection and recovery of these species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity.
- 9.4 Developers are advised to make use of government guidance (see below) and speak to their own ecologist at an early stage to determine if their proposal would affect any habitat or species of principal importance. The Cambridgeshire and Peterborough Biodiversity Partnership has published lists of priority species and additional species of interest that are locally important. The Cambridgeshire and Peterborough Environmental Records Centre also holds records of locally recorded species and is therefore a useful source of biodiversity information.
- 9.5 Within East Cambridgeshire, such protected species which can arise on a fairly frequent basis includes bats, great crested newts and badgers. In certain parts of the district, protected species which are related to wetland habitats may occur. However, it is possible for other protected species to be present on a site.

Process to follow

- 9.6 Having reviewed guidance, it has been decided that this SPD need not set out bespoke species advice for the East Cambridgeshire area.
- 9.7 As such, both applicants and decision makers should refer in the first instance to government advice on this matter, as available on this page:
www.gov.uk/guidance/protected-species-how-to-review-planning-applications
- 9.8 However, the following policy is necessary to explain, in generic terms, how the Council will review planning applications for their potential impact on protected species.

Policy SPD.NE5: Reviewing planning applications for Protected Species

The Council will place great care in assessing development proposals in relation to the potential impact on protected species, and will follow the advice as available on the government website:

www.gov.uk/guidance/protected-species-how-to-review-planning-applications

When a proposal is likely to affect a protected species, the Council will only grant planning permission if:

- an appropriate survey was carried out by a qualified ecologist at the time of year specified in Natural England's standing advice;
- a wildlife licence is likely to be granted by Natural England if one is needed;
- mitigation plans are considered acceptable;
- compensation plans are acceptable when mitigation isn't possible; and
- review and monitoring plans are in place, where appropriate.

Achieving the above may require an applicant to enter into a suitable form of developer contributions agreement.

Where a proposal is not likely to affect a protected species, but the proposal provides measures (such as an appropriate habitats in an appropriate location) which are likely to be beneficial to protected species, then weight in favour of such a proposal will apply.

10 Reversing the Decline – A ‘net gain’ in Biodiversity

Introduction

- 10.1 In simple terms, biodiversity has been in serious decline in the UK, and Cambridgeshire is no exception.
- 10.2 The State of Nature 2016 report⁷ shows that over half (56%) of the UK’s wild species have declined in the past 50 years and continue to do so, and that more than one in ten species faces extinction.
- 10.3 Farmland birds in the UK declined by 56 per cent between 1970 and 2015. Hedgehogs have declined by a half, whilst almost one in five of British mammal species face a high risk of extinction, according to a comprehensive review published in 2018 by The Mammal Society and Natural England.
- 10.4 Locally, across Cambridgeshire, we only have 8.5% of land which is of rich wildlife habitat, one of the lowest in the country.
- 10.5 Of course, East Cambridgeshire is dominated by some of the finest agricultural land in the country, a vital food resource for the country, but the intensification of farming has had an impact on local biodiversity. Significant parts of East Cambridgeshire is also of national importance to the equine industry, but again such use can impact on biodiversity.
- 10.6 Led by government, there is a growing momentum that public policy (whether Local Plan or through other means) should be seeking not only to halt further decline and protect what we have, but to proactively deliver ‘gains’ in order to start to make up for the considerable losses over the decades. The phrase ‘net gains for biodiversity’ is therefore becoming more common, as a policy or target.

Local Policy

- 10.7 The Local Plan (2015) is written largely around protecting what we have and mitigating for harm, which reflected national policy at its time of preparation. However, it does ‘require’ all development proposals to:

“Maximise opportunities for creation, restoration, enhancement and connection of natural habitats as an integral part of development proposals.”

National Policy

- 10.8 The NPPF (2019) goes further than the Local Plan, by specifically requiring a net gain for biodiversity (rather than just ‘maximise opportunities’):

*“170 Planning policies and decisions should contribute to and enhance the natural and local environment by... minimising impacts on and **providing net gains for biodiversity**, including by establishing coherent ecological networks that are more resilient to current and future pressures;”*

*“175 When determining planning applications, local planning authorities should apply the following principles... opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable **net gains for biodiversity**.”*

- 10.9 The NPPG provides considerable guidance on what is intended by ‘net gains’. This is very useful advice and for ease of access is included on the following page.

⁷ See <https://www.rspb.org.uk/globalassets/downloads/documents/conservation-projects/state-of-nature/state-of-nature-uk-report-2016.pdf>

Extract from the National Planning Practice Guide

(sourced 6.12.19, and is subject to change. Please check for any updates at <https://www.gov.uk/government/collections/planning-practice-guidance>)

What is net gain?

Net gain in planning describes an approach to development that leaves the natural environment in a measurably better state than it was beforehand. Net gain is an umbrella term for both biodiversity net gain and wider environmental net gain.

Paragraph: 020 Reference ID: 8-020-20190721

Revision date: 21 07 2019

How can plans encourage net gain?

Plans, and particularly those containing strategic policies, can be used to set out a suitable approach to both biodiversity and wider environmental net gain, how it will be achieved, and which areas present the best opportunities to deliver gains. Such areas could include those identified in: natural capital plans; local biodiversity opportunity or ecological network maps; local green infrastructure strategies; strategic flood risk assessments; water cycle studies; air quality management plans; river basin management plans; and strategic protected species licensing areas. Consideration may also be given to local sites including where communities could benefit from improved access to nature.

Paragraph: 021 Reference ID: 8-021-20190721

Revision date: 21 07 2019

What is biodiversity net gain?

The National Planning Policy Framework encourages net gains for biodiversity to be sought through planning policies and decisions. Biodiversity net gain delivers measurable improvements for biodiversity by creating or enhancing habitats in association with development. Biodiversity net gain can be achieved on-site, off-site or through a combination of on-site and off-site measures. It may help local authorities to meet their duty under Section 40 of the Natural Environment and Rural Communities Act 2006.

Paragraph: 022 Reference ID: 8-022-20190721

Revision date: 21 07 2019

How can biodiversity net gain be achieved?

Planning conditions or obligations can, in appropriate circumstances, be used to require that a planning permission provides for works that will measurably increase biodiversity. An applicant may also propose measures to achieve biodiversity net gain through a unilateral undertaking. The work involved may, for example, involve creating new habitats, enhancing existing habitats, providing green roofs, green walls, street trees or sustainable drainage systems. Relatively small features can often achieve important benefits for wildlife, such as incorporating 'swift bricks' and bat boxes in developments and providing safe routes for hedgehogs between different areas of habitat.

Benefits could be achieved entirely on-site or by using off-site gains where necessary. Off-site measures can sometimes be secured from 'habitat banks', which comprise areas of enhanced or created habitats which generate biodiversity unit 'credits'.

Care needs to be taken to ensure that any benefits promised will lead to genuine and demonstrable gains for biodiversity. Discussions with local wildlife organisations can help to identify appropriate solutions, and tools such as the Defra [biodiversity metric](#) can be used to assess whether a biodiversity net gain outcome is expected to be achieved. Planning authorities need to make sure that any evidence and rationale supplied by applicants are supported by the appropriate scientific expertise and local wildlife knowledge.

When assessing opportunities and proposals to secure biodiversity net gain, the local planning authority will need to have regard to all relevant policies, especially those on open space, health,

green infrastructure, Green Belt and landscape. It will also be important to consider whether provisions for biodiversity net gain will be resilient to future pressures from further development or climate change, and supported by appropriate maintenance arrangements.

Paragraph: 023 Reference ID: 8-023-20190721

Revision date: 21 07 2019

How does biodiversity net gain fit with the mitigation hierarchy?

Biodiversity net gain complements and works with the biodiversity mitigation hierarchy set out in NPPF paragraph 175a. It does not override the protection for designated sites, protected or priority species and irreplaceable or priority habitats set out in the NPPF. Local planning authorities need to ensure that habitat improvement will be a genuine additional benefit, and go further than measures already required to implement a compensation strategy.

Paragraph: 024 Reference ID: 8-024-20190721

Revision date: 21 07 2019

How can biodiversity net gain be calculated?

Using a metric is a pragmatic way to calculate the impact of a development and the net gain that can be achieved.

The biodiversity metric can be used to demonstrate whether or not biodiversity net gain will be achieved. It enables calculation of losses and gains by assessing habitat:

- distinctiveness: whether the type of habitat is of high, medium or low value to wildlife.
- condition: whether the habitat is a good example of its type.
- extent: the area that the habitat occupies.

The information needed to populate this metric is taken from habitat surveys of the site before development and any related habitat clearance or management, and for the habitats proposed within the development as well as any additional habitat improvement off-site. The metric translates habitat distinctiveness, condition and extent into a score which is presented in biodiversity units. It also uses multipliers to account for risks in delivering habitat creation or enhancement. To achieve net gain, a development must have a sufficiently higher biodiversity unit score after development than before development.

Paragraph: 025 Reference ID: 8-025-20190721

Revision date: 21 07 2019

What is the baseline for assessing biodiversity net gain?

The existing biodiversity value of a development site will need to be assessed at the point that planning permission is applied for. It may also be relevant to consider whether any deliberate harm to this biodiversity value has taken place in the recent past, and if so whether there are grounds for this to be discounted in assessing the underlying value of the site (and so whether a proposal would achieve a genuine gain).

There are laws to protect important sites and species from harm, for which Natural England have enforcement powers. In addition, the felling of trees requires a Forestry Commission licence in most cases before felling can commence. There may be a penalty or requirement to restock if felling occurs without this. There are some exemptions relating to the location, volume and diameter of a tree, and an exemption for felling which is immediately required for the purpose of development authorised by a planning permission.

Paragraph: 026 Reference ID: 8-026-20190721

Revision date: 21 07 2019

How can biodiversity net gain be of lasting value?

New or improved habitat needs to be located where it can best contribute to local, national and international biodiversity restoration, including the Nature Recovery Network proposed in the 25

Year Environment Plan, locally identified ecological or green infrastructure networks and biodiversity opportunity areas. Providing biodiversity net gain close to where people live can improve access to nature and bring health and wellbeing benefits.

It is good practice to establish a detailed management plan to ensure appropriate management of the habitat in the long term, and to arrange for regular but proportionate monitoring on how the habitat creation or enhancement is progressing, indicating any remedial action necessary. Planning authorities may consider recording where habitat compensation has been established, and how relevant survey and monitoring data can best be utilised to strengthen the local biodiversity evidence base; for example by working with Local Environmental Record Centres.

Paragraph: 027 Reference ID: 8-027-20190721

Revision date: 21 07 2019

What is wider environmental net gain and how can it be achieved?

The aim of wider environmental net gain is to reduce pressure on and achieve overall improvements in natural capital, ecosystem services and the benefits they deliver. For example, habitat improvements can provide a range of benefits such as improvements to soil, water and air quality, flood risk management and opportunities for recreation.

In planning strategically for the enhancement of natural capital, planning authorities can draw upon evidence on natural capital assets, the supply and demand of ecosystem services flowing from them, and existing and future risks and opportunities for these services.

A number of metrics to measure and monitor aspects of wider environmental net gain are under development.

Paragraph: 028 Reference ID: 8-028-20190721

Revision date: 21 07 2019

The 25 Year Environment Plan

- 10.10 Despite the firm words of the NPPF, Government has committed to go further to secure net gain. It's very first action, of the first chapter, of the 25 Year Environment Plan (2018) states:

"We will embed an 'environmental net gain' principle for development, including housing and infrastructure"

- 10.11 Thus, not only is government seeking biodiversity net gains, but also wider net gain. The Environment Plan set out a number of proposals to progress this, including the option of mandating the delivery of a net gain in biodiversity.

The Environment Bill (expected early 2020)

- 10.12 Due to the 2019 General Election, an emerging (October 2019) Environment Bill did not receive Royal Assent. However, the December 2019 Queen's Speech confirmed that the Bill will be re-presented in the new parliament session. At the time of writing, it is not known what parliamentary timetable it will follow. Nevertheless, the October 2019 Bill provides a reasonable starting point for understanding how government is likely to progress a number of environmental matters. In respect of 'net gain', government provided the following summary of the October 2019 Bill:

Extract from the (October 2019) 'Environment Bill Policy Statement'⁸

"The Environment Bill introduces mandatory biodiversity net gain, to ensure that new developments enhance biodiversity and help deliver thriving natural spaces for communities. Integrating biodiversity net gain into the planning system will provide a step change in how planning and development is delivered. The Bill will provide new opportunities for innovation as well as stimulating new economic markets. This is expected to result in the creation and the avoidance of loss of several thousands of hectares of

⁸ See <https://www.gov.uk/government/publications/environment-bill-2019/environment-bill-policy-statement>

habitat for wildlife each year, which represents annual natural capital benefits of around £1.4 billion. This will increase the public benefits of ecosystems, such as improvements in air quality, water flow control, outdoor recreation and physical activity.

Net gain requirements do not undermine existing protections for protected sites or irreplaceable habitats. In relation to protected sites, net gain will only be enforceable following a planning decision which will consider the existing legal and planning policy requirements for protected sites in the usual way. Net gain requirements will not undermine the existing range of protections, in planning policy and legislation, for irreplaceable habitats and protected sites.”

- 10.13 The Bill itself set out more precisely what is intended⁹, namely the compulsory requirement for the preparation of a ‘biodiversity gain plan’, which must be approved as part of a development proposal before development can proceed.
- 10.14 With some uncertainty over the Environment Bill, the final version of this SPD will need to be updated to reflect the latest position.
- 10.15 The following policy is therefore subject to change:

Policy SPD.NE6 Biodiversity Net Gain

In addition to the provisions set out in the Local Plan, all development proposals should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity.

If and when a nationally mandated mechanism to secure ‘net gains’ is introduced, then the following policy will not be implemented.

In the absence of any nationally mandated mechanism to secure such ‘net gains’, the following policy applies:

All development proposals (except householder applications – see below) must provide clear and robust evidence setting out:

- (a) information about the steps taken, or to be taken, to minimise the adverse effect of the development on the biodiversity of the onsite habitat and any other habitat,
- (b) the pre-development biodiversity value of the onsite habitat,
- (c) the post-development biodiversity value of the onsite habitat; and
- (d) the ongoing management strategy for any proposals.

Proposals which do not demonstrate that the post-development biodiversity value of the onsite habitat will not significantly* exceed the pre-development biodiversity value of the onsite habitat will be refused.

Demonstrating the value of the habitat (pre and post development) will be the responsibility of the applicant, and the information to be supplied will depend on the scale and degree of proposals being submitted. The Council strongly recommends the use of available toolkits (see section 14 of this SPD) and/or ecology surveys.

Where insufficient, incomplete or inaccurate information is submitted, meaning the Council is not able to determine whether a proposal is likely to lead to a net gain in biodiversity, a proposal will be deemed to fail the policy requirements (as set out in the Local Plan, the NPPF and this SPD) to take biodiversity opportunities and providing a biodiversity net gain.

Only in exceptional circumstance, the Council may (but is not obliged to) accept off-site biodiversity gains in exchange for on-site biodiversity net gain, but only in instances whereby:

- (i) it is not possible to provide significant net gains on site;
- (ii) the overall net outcome is a significant net gain in biodiversity; and

⁹ See Schedule 15 for full details: https://publications.parliament.uk/pa/bills/cbill/2019-2019/0003/cbill_2019-20200003_en_22.htm#sch15

- (iii) a robust agreement is in place to deliver and maintain such off-site gains.

For householder applications, the detailed provisions of this policy do not apply, but there is still an expectation in most instances that an element of biodiversity gain should be incorporated into the proposal, such as bird boxes, insect ‘hotels’, bee blocks, bat boxes and/or hibernation holes. More detailed biodiversity gain would be welcomed.

** whilst ‘significantly’ is not defined precisely in this SPD, it should be taken to read that very minor net gains (such as a new bird box) would not constitute a significant gain. The gain should be more considerable, preferably creating habitat gains which support a larger variety of biodiversity. Where space is tight, integrating a variety of measures within the development may be appropriate, such as targeted bird boxes, insect ‘hotels’, bee blocks, bat boxes, hibernation holes and ‘green’ roofs.*

Doubling Nature

- 10.16 Via its role in Nature Cambridgeshire (the Local Nature Partnership for Cambridgeshire and Peterborough), the Council has already endorsed the following Natural Cambridgeshire vision (2019):

“Our Vision is that by doubling the area of rich wildlife habitats and natural green-space, Cambridgeshire and Peterborough will become a world-class environment where nature and people thrive, and businesses prosper.”¹⁰

- 10.17 The Council is committed where it can to help make the above vision a reality, and implementing this SPD is an important contribution to do so.
- 10.18 Whilst the vast majority of planning applications received by the Council have the potential to deliver a ‘net gain’ for biodiversity on site, it is accepted that the vast majority will not be able to directly contribute to meeting the above vision. However, some will have potential to do so, and there is a realistic chance that in the near future (via legislation, such as the Environment Bill or equivalent) that some development will contribute a financial sum to an appropriate body which could be used by that appropriate body on initiatives which will assist in delivering the vision.
- 10.19 The following policy sets out the Council’s planning policy position in respect of assisting the vision to ‘doubling nature’, which also aligns with the adopted Local Plan policy (ENV7) requiring all development to ‘*Maximise opportunities for creation, restoration, enhancement and connection of natural habitats as an integral part of development proposals*’:

Policy SPD.NE7: Contributing to the strategic target of doubling land for nature

All strategic scale development proposals* must either achieve (A) or (B) as part of the development’s contribution to assist in making the Local Nature Partnership’s vision to ‘doubling nature’ a reality:

- (A) set aside a minimum of 20% of the application site area as land for rich wildlife habitat. Such set aside land must have clear proposals for its creation and maintenance. Where the application site already contains rich wildlife habitat which is to be protected as part of the development proposals, then the 20% requirement applies to the land which is not presently rich wildlife habitat.

In the unlikely scenario whereby the application site already contains rich wildlife habitat which is to be lost as part of the development proposals, then not only must the area lost be replaced, but the 20% requirement also added.

Or;

- (B) via an appropriate legal agreement, create (or provide a financial contribution in order to create) new rich wildlife habitat off-site, on land broadly equivalent in size to the land area of the application site. Such off-site land must not presently be rich wildlife habitat, and such land must have clear proposals for its creation and maintenance,

¹⁰ See - <https://naturalcambridgeshire.org.uk/news/natural-cambridgeshire-ambition-to-double-nature-across-peterborough-and-cambridgeshire/>

and details of future public access (if any). The land must be within the district of East Cambridgeshire. Extensions to existing nature rich sites may form an appropriate site. The Council will endeavour to maintain a list on its website of candidate off-site sites** which may be suitable to meet this clause via a financial contribution, but an applicant is not obliged to use one of these such sites.

For all of the above scenarios, the provision of such land can be counted towards the requirement to deliver a net gain for biodiversity.

For all other development proposals not covered by above, the council will give considerable weight in favour of proposals which create new rich wildlife habitat, but only if such provision forms part of delivering a wider net gain for biodiversity.

**defined as 100 dwellings or more, or 5ha or more for non-dwelling proposals.*

*** NOTE: at this draft SPD stage, we do not yet have a list of suitable candidate sites, but would welcome suggestions from you. For example, if you are a parish council, do you have any land which you would welcome be converted, at nil cost to you, to rich wildlife habitat? Or, if you are a charity or similar, do you have any projects which, with funding, could help create new rich wildlife habitats? Or you could simply be a private individual with land you may be willing to release provided it is converted to rich wildlife habitat, and protected as such in perpetuity.*

11 Trees and Woodlands

Introduction

- 11.1 The Council has a statutory duty (s197 of the Town and Country Planning Act 1990) to consider and ensure whenever it is appropriate the protection and planting of trees when granting planning permission for proposed development. The potential effect of development on trees, whether statutorily protected (e.g. by a tree preservation order or by their inclusion within a conservation area) or not, is a material consideration that must be taken into account in dealing with planning applications.
- 11.2 Trees provide a broad range of benefits, from providing wildlife habitat, adding maturity to new sites, screening, shade, storm water attenuation, visual amenity, improving air quality and the ability to soften and complement the built form.
- 11.3 In terms of existing trees and woodlands, where trees are present on a development site a British Standard 5837 Tree Survey ‘Trees in relation to construction survey’, and any related survey information, should be submitted along with an application for planning permission. This will ensure it is clear that a proper consideration of trees and woodlands has taken place and been taken into account in the preparation of proposals for a site.
- 11.4 In addition, an Arboricultural Method Statement, Impact Assessment and Tree Protection Plan will also be required where there is a likely adverse impact on the health and wellbeing of the trees, either through the pressure to prune or fell or through excavation works which could harm the root systems. The Statement should set out the measures that will need to be taken to protect the health of the trees during the construction period and afterwards.
- 11.5 If the development site (or land within 12 times of the stem diameter of trees located beyond the site boundaries) includes Ancient Woodland, an Ancient Tree and/or a Veteran Tree then any proposal that may result in the loss or damage of such trees will be particularly scrutinised, and only exceptionally approved. Proposals within 500m of an Ancient Woodland will also be tested (and, as appropriate, advice sought from the Forestry Commission) for any potential impact on the Ancient Woodland. Similarly, any loss of a tree which is protected by virtue of a Tree Preservation Order (TPO) will be resisted and unlikely be approved if it resulted in a net loss of amenity. In all instances, clear demonstration of overriding public interest in the loss of a tree(s) or woodland would need to be provided.
- 11.6 Any unprotected trees (especially those as defined as Category A or B trees within the aforementioned BS5837) will be expected to be retained if possible.
- 11.7 In terms of mitigation where loss of trees and woodland is proposed (and where it is deemed acceptable for such tree(s) to be lost, taking account of the status of the tree), then suitable proposals for mitigation, via compensation, should be provided. The tree compensation standard set out in this policy provides a suitable mechanism to determine the appropriate level of mitigation. The council’s first preference is for on-site replacement at suitable locations within the curtilage of the development. In exceptional circumstances, where planting cannot be achieved on-site without compromising the achievement of good design, new tree planting proposals may be considered off site (including on public land) to mitigate. Where trees are to be provided off-site, planning obligations will be sought to cover replacement trees, their planting and their future maintenance.
- 11.8 The council is committed to increasing the overall tree canopy cover, and therefore opportunities for new tree planting should be explored as part of all development proposals.
- 11.9 Where new tree planting is proposed (irrespective of whether this is to compensate for losses on site), then the quantity, location and species selection of new trees will be expected to take practicable opportunities to meet the following five Tree Planting Principles.
- Create habitat and, if possible, connect the development site to the Strategic Green Infrastructure Network, and
 - Assist in reducing or mitigating run-off and flood risk on the development site; and

- Assist in providing shade and shelter to address urban cooling, and in turn assist in mitigating against the effects of climate change; and
- Create a strong landscaping framework to either (a) enclose or mitigate the visual impact of a development or (b) create new and enhanced landscape; and
- Be of an appropriate species for the site.

Policy SPD.NE8: Trees and Woodland

Development proposals should be prepared based on the overriding principle that:

- the existing tree and woodland cover is maintained, improved and expanded; and
- opportunities for expanding woodland are actively considered, and implemented where practical and appropriate to do so.

Existing Trees and Woodland

Planning permission will only be granted if the proposal provides evidence that it has been subject to adequate consideration of the impact of the development on any existing trees and woodland found on-site (and off-site, if there are any trees near the site, with 'near' defined as the distance comprising 12 times the stem diameter of the off-site tree). If any trees exist on or near the development site, 'adequate consideration' is likely to mean:

- (a) the completion of a British Standard 5837 Tree Survey and, if applicable,
- (b) an Arboricultural Method Statement, Impact Assessment and Tree Protection Plan.

Where the proposal will result in the loss or deterioration of these irreplaceable assets (as defined by the NPPF):

- (c) ancient woodland; and/or
- (d) the loss of aged or veteran trees found outside ancient woodland

permission will be refused, unless, and on a wholly exceptional basis, the need for and benefits of the development in that location clearly outweigh the loss and a suitable compensation strategy exists.

Where the proposal will result in the loss or deterioration of a tree protected by a Tree Preservation Order or a tree within a Conservation Area, then permission will be refused unless:

- (e) there is no net loss of amenity value which arises as a result of the development; or
- (f) the need for, and benefits of, the development in that location clearly outweigh the loss.

Where the proposal will result in the loss of any other tree or woodland not covered by above, then the council will expect the proposal to retain those trees that make a significant contribution to the landscape or biodiversity value of the area, provided this can be done without compromising the achievement of good design for the site.

Mitigating for loss of Trees and Woodland

Where it is appropriate for higher value tree(s) (category A or B trees (BS5837)) and/or woodland to be lost as part of a development proposal, then appropriate mitigation, via compensatory tree planting, will be required. Such tree planting should:

- (g) take all opportunities to meet the five Tree Planting Principles (see supporting text); and
- (h) unless demonstrably impractical or inappropriate, provide the following specific quantity of compensatory trees:

Trunk diameter (mm) at 1.5m above ground of tree lost to development	Number of replacement trees required, per tree lost*
75-200	1
210-400	4
410-600	6
610-800	9
810-1000	10
1000+	11

* replacement based on selected standards 10/12 cm girth at 1m

New Trees and Woodland

Where appropriate and practical, opportunities for new tree planting should be explored as part of all development proposals (in addition to, if applicable, any necessary compensatory tree provision). Where new trees are proposed, they should be done so on the basis of the five Tree Planting Principles. Proposals which fail to provide practical opportunities for new tree planting will be refused. Planting schemes should include provision to replace any plant failures within five years after the date of planting.

Management and Maintenance

In instances where new trees and/or woodlands are proposed, it may be necessary for the Council to require a tree/woodland management plan and/or appropriate developer contributions to be provided, to ensure provision is made for appropriate management and maintenance of the new trees and/or woodland.

Carbon Sequestration Implications of Proposals

The net increase or decrease in tree cover as a consequence of a development will be a material consideration in the decision making process in terms of the carbon sequestration consequences of the proposal. Considerable weight in favour of a proposal will be given where the net situation is a considerable increase in tree cover (and hence the positive and significant contribution to carbon sequestration). Where the net situation is a loss of trees, weight against a proposal will be given as a consequence of the loss of carbon sequestration, with the degree of weight dependent on the scale of net loss.

12 Landscaping and Biodiversity

Introduction

- 12.1 This section of the SPD does not provide policy guidance on all aspects of ‘landscaping’, but focusses on the biodiversity aspects of landscaping proposals. Policy provision on other aspects of landscaping, such as providing visually attractive development or making sure development assimilates into the local landscape character, can be found in national policy and guidance, and other local policy and guidance.
- 12.2 Good quality landscape schemes can, in addition to wider benefits, help relieve the pressure on existing habitats by providing links, enhancing existing wildlife resources and providing additional space and landscape features for animals and plants to colonise, and overall help to increase biodiversity on the development site.
- 12.3 Large developments will likely feature a range of green space, from domestic gardens to public areas such as parks, greenways or sports fields. In preparing the landscape design, applicants should consider the existing and proposed transport routes, ‘green corridors’ and watercourses within and around the development site as opportunities to increase biodiversity. When well designed, these features can be multi-functional, offering access routes and habitats for badgers, bats, birds and other wildlife, as well as human uses.
- 12.4 Where the space is available, schemes should include native tree, shrub or herbaceous planting, particularly if this can form physical or visual links to existing areas of similar planting, the countryside and the wider landscape. If space is limited many non-native varieties of plant are ‘wildlife friendly’ and can increase the wildlife value of the domestic landscape.
- 12.5 Many new build developments will also offer the opportunity to provide ‘green’ roofs or walls, constructed using a variety of plant material. A wide range of buildings can benefit from greening, from domestic sheds and dwellings to factories and office buildings. Green walls and roofs are particularly useful in providing habitat links where green space at ground level may be limited.
- 12.6 In all developments, large or small, the detailed layout and construction of the landscape scheme can also be important. Decisions regarding aspect, slopes, degree of exposure, sun and shade can greatly affect the microclimate and the range and quality of the habitat provided. Most new development could also likely make provision for nest boxes, insect hotels, wildlife shelters and improved access routes and links - leaving gaps beneath garden fences for small mammals for example.
- 12.7 The following policy therefore applies:

Policy SPD.NE9: Landscaping and Biodiversity

New planting must be an integral part of the design of a development rather than as an afterthought. It should be used in appropriate locations and must consider its function, context, scale, texture along with colour and seasonal qualities. At the same time, new planting should be chosen (in terms of species and location) to maximise biodiversity gains.

When preparing the detailed design of layouts, the implications of the future function will need to be taken into account, ensuring that the design does not cause problems for future maintenance and management.

In order to ensure the successful establishment of landscaping for biodiversity gain, the following provisions apply:

- Landscape schemes should aim to be in the form of corridors, linking up areas of greenery, rather than isolated pockets of landscaping;
- Remedial treatment should take place where the soils in planting areas are unsatisfactory, such as incorporation of soil amendments or decompaction. These should be applied to the whole planting area, not just to planting holes;

- Native new planting should be provided that reflects the local character, except where landscape character considerations suggest otherwise (for example, planting that is in keeping with areas of historic character, or within ‘on-plot’ residential planting in urban areas);
- Sufficient space should be provided to allow retained and new planting to continue growing healthily and for future management to be carried out;
- A suitable species mix should be provided that helps to promote a wide range of biodiversity and contribute to enhancing green infrastructure;
- Incorporate within the landscape scheme features that will support the establishment of biodiversity, such as wetland areas, ‘insect hotels’ and log piles (if trees are lost elsewhere on site);
- Apply the guidance as set out in the Cambridgeshire Flood and Water SPD which relates to good SUDS design and biodiversity;
- Try to avoid conflict between areas attractive for biodiversity and (i) non-native predators (such as domestic cats) and (ii) anti-social behaviour; and
- Sufficient space for soft landscaping within the layout. The space needs to be sufficient for suitable species and numbers of trees to be provided and reach maturity without creating conflicts with buildings and infrastructure.

12.8 To illustrate, in part, how the above policy can be successfully used, the following text box illustrates the advantages of incorporating willow trees within a SUDS landscape scheme:

Willow trees and attenuation ponds

Why willow trees?

Guidance for the design of SUDS states that SUDS including attenuation ponds should look to create new habitats enhancing nature conservation and amenity space. The use of native Willow trees should be considered as part of the design as they have an important ecological role that relates to their affiliation with wetlands such as found in fenland areas.

Willows have a high wildlife value, providing rich habitat and food for a diverse range of organisms. There is evidence of up to 450 species of insect associated with Willows.

Willows aid fast stabilization of chemically degraded land surfaces and the re-establishment of a biologically active soil can be achieved using Willow species, which possess the major requirements for plant survival in environmentally disrupted areas such as development sites.

Tolerance of soil chemical contamination is an important requirement for survival in many situations and Willow trees potential can be emphasized by the fact that, of the seven most important metal contaminants in soil, Willow has been reported to have tolerance to at least four (cadmium, copper, zinc, lead).

Willows’ ability to sequester heavy metals and other contaminants in their root systems, halting their circulation within the environment, can be of great practical use when dealing with water runoff. Willows dense root system and high transpiration rates provide efficient control of soil water and high filtering capacity for pollutants, along with continuous growth of some species during the whole growing season, create an efficient dehydration plant that locks up the pollutants.

The fast growth of willow can sequester more carbon than softwoods within a single growing season which could prove invaluable in the pursuit of being carbon neutral.

Management/Cost

The size of the tree can be easily managed by pollarding or coppicing. The cutting rotation cycle depends on species and growing conditions, and ranges from 3–5 years.

Pollarding/Coppicing, minimizes wind damage, enhances branching appearance of willows and supports a higher density of breeding birds.

Possible restrictions

The constraints of Willow planting in urban areas include potential for damage of drainage pipes due to roots exploring for water, damage to foundations, or road and path base layers due to pressure exerted by roots when trees are planted too closely, and lack of ample space for growth of the tree. These problems can be avoided by planting them in attenuation ponds.

13 Taking the most appropriate opportunities

Introduction

- 13.1 For many matters which are considered as part of determining a planning application, it is not just a matter of **whether** something is provided (such as affordable housing, play areas, community facilities) but also **where** it is provided and **how** it will be looked after in the long term. These issues equally apply to the provision of natural environment infrastructure.
- 13.2 For example, provision of natural environment infrastructure in the wrong location could result in:
- Long term management problems
 - Encroachment into people's property, causing a nuisance
 - Facilitate anti-social behaviour
 - Be contrary to designing out crime principles
 - Have highway safety issues
 - Impact on generation of renewable energy
- 13.3 In addition, even if provision does not result in one of the above negative issues, some locations within a site offer a much better solution to maximise the benefits. For example, the provision of new natural environment infrastructure which helps connect two existing habitat-rich areas would result in far more overall gains than the same infrastructure provided in an isolated, unconnected location.
- 13.4 The following policy therefore applies:

Policy SPD.NE10: Taking the most appropriate natural environment opportunities

In meeting wider national and local policies relating to the natural environment, developers should demonstrate that the provision of new natural environment infrastructure has taken the most appropriate opportunities for delivering such infrastructure.

Whilst the following list is not prescriptive, the most appropriate opportunities could be:

- Provision which assists in connecting existing habitats
- Provision which reduces risk of future nuisance (such nuisance could be property encroachment, opportunities to facilitate anti-social behaviour or highway safety)
- Provision which is easy to maintain (via accessibility and low maintenance costs)
- Provision which is likely to assist in supporting priority or protected species known to be present in the local area

For strategic scale developments* the applicant must consider the opportunity mapping data as available on our website**, and, if an opportunity area is highlighted which is on or near the application area, demonstrate how the proposal has considered such an opportunity, to the degree it is reasonably able to do so.

** defined as 100 dwellings or more or 5ha or more for non-dwelling related proposals.*

*** such mapping data to be added to the website shortly, and prior to this SPD being adopted.*

14 Information to be submitted and making use of Toolkits

Introduction

- 14.1 This chapter sets out what is expected in order for the council (or other decision maker) to make a decision on a planning application in terms of its implications for the natural environment.

Submitting a planning application

- 14.2 At paragraph 6.8.2 of the Local Plan, it explains that:

“Development proposals should be accompanied by sufficient information to enable effects to be assessed, such as a Phase 1 habitat survey or other appropriate ecological report. The Natural Environment and Rural Communities Act 2006 imposes a legal duty on local authorities to protect and enhance biodiversity”

- 14.3 Separately, the NPPF (footnote 56) refers the reader to Circular 06/2005 which provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system. For example, that circular (Paragraph 99) states:

“it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted”.

- 14.4 The NPPF itself does not explicitly refer to a requirement for an ecology report to be submitted. The NPPG however, does state:

“An ecological survey will be necessary in advance of a planning application if the type and location of development could have a significant impact on biodiversity and existing information is lacking or inadequate.”

- 14.5 It also advises that:

“Assessments should be proportionate to the nature and scale of development proposed and the likely impact on biodiversity.”

- 14.6 Elsewhere, there is a wealth of national advice which should be taken into account prior to submitting a planning application, and then appropriate information included with the planning application. For example:

- Ecosystem services www.gov.uk/guidance/ecosystems-services
- Protected species (including Standing Advice): www.gov.uk/guidance/protected-species-how-to-review-planning-applications

- 14.7 Overall, it is worth remembering that ECDC, as a public body, has a legal duty¹¹ to have regard to conserving biodiversity as part of its policy or decision making. Thus, in order to fulfil this duty, an applicant must provide the appropriate information in order for the Council to have such ‘regard’.

Policy SPD.NE11: Provision of sufficient, suitable and robust information

Development proposals must be accompanied by sufficient, suitable and robust information to enable the effects on biodiversity to be assessed, such as a Phase 1 habitat survey, a completed toolkit or other appropriate ecological report.

Proposals which have insufficient information in order for the council to make an informed decision will be refused. Before a refusal is considered, however, the Council will endeavour to seek, within a reasonable timeframe, such information from the applicant.

¹¹ S40 of Natural Environment and Rural Communities Act 2006

Toolkits

14.8 An easy and consistent way of helping to assess the impacts of a proposal is through the use of toolkits.

14.9 The submission of a completed toolkit is not compulsory in either national or Local Plan policy, though they can be extremely helpful in order to help comply with the policy requirement to provide 'sufficient information' (Policy ENV7 and the above Policy x) to assess proposals.

14.10 A number of toolkits are available, and we recommend the use of the following:

Cambridgeshire Biodiversity Checklist

14.11 The County Council has produced both a checklist and a guidance note, available via our website (www.eastcambs.gov.uk/planning/ecology-and-biodiversity) or (for a Word version) via the County Council website: www.cambridgeshire.gov.uk/business/planning-and-development/planning-applications/submitting-a-planning-application/

Developing with Nature Toolkit

14.12 This recent toolkit has been prepared by Natural Cambridgeshire Local Nature Partnership (LNP). The Toolkit is primarily intended for major developments requiring an Environmental Impact Assessment (new settlements, major urban extensions, housing developments above 100 dwellings, commercial developments greater than 1 Ha or 1,000m² floor space, mixed use developments greater than 2 Ha, or major transport infrastructure projects). It should be used at the very outset of planning new developments, and ideally at the time of selecting sites to acquire for development. It is available here:

naturalcambridgeshire.org.uk/projects/developing-with-nature-toolkit/

Wildlife Assessment Check

14.13 Whilst the above two checklists are locally based and produced, a useful new national checklist has been developed by the Partnership for Biodiversity in Planning. This checklist is aimed at smaller scale development schemes:

www.biodiversityinplanning.org/wildlife-assessment-check/

Appendix 1: 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](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 herb-rich 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 (*Molinia caerulea*),
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: <file:///H:/Downloads/SIP141006FINALv1.0%20Fenland%20SAC.pdf>

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 (Excluding Woodwalton Fen)

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 willow 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>

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 *Phodomachus 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. platyrhynchos*, pintail *A. acuta*, garganey *Anas. querquedula* shoveler *A. clypeata*, pochard *Aythya ferina*, 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.

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 clypeata*, 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 qualifying 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.

SSSI Condition Summary for Ouse Washes 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)	480.79	391.13	89.67	2,032.76			
Percentage	19.13	15.56	3.57	80.87	0	0	0

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

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

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 oedicephalus* - 60.1% of the GB breeding population, Nightjar *Caprimulgus europaeus* - 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): ¹²

- 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.
- 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.

¹² Site Improvement Plan Breckland (Natural England, January 2015)