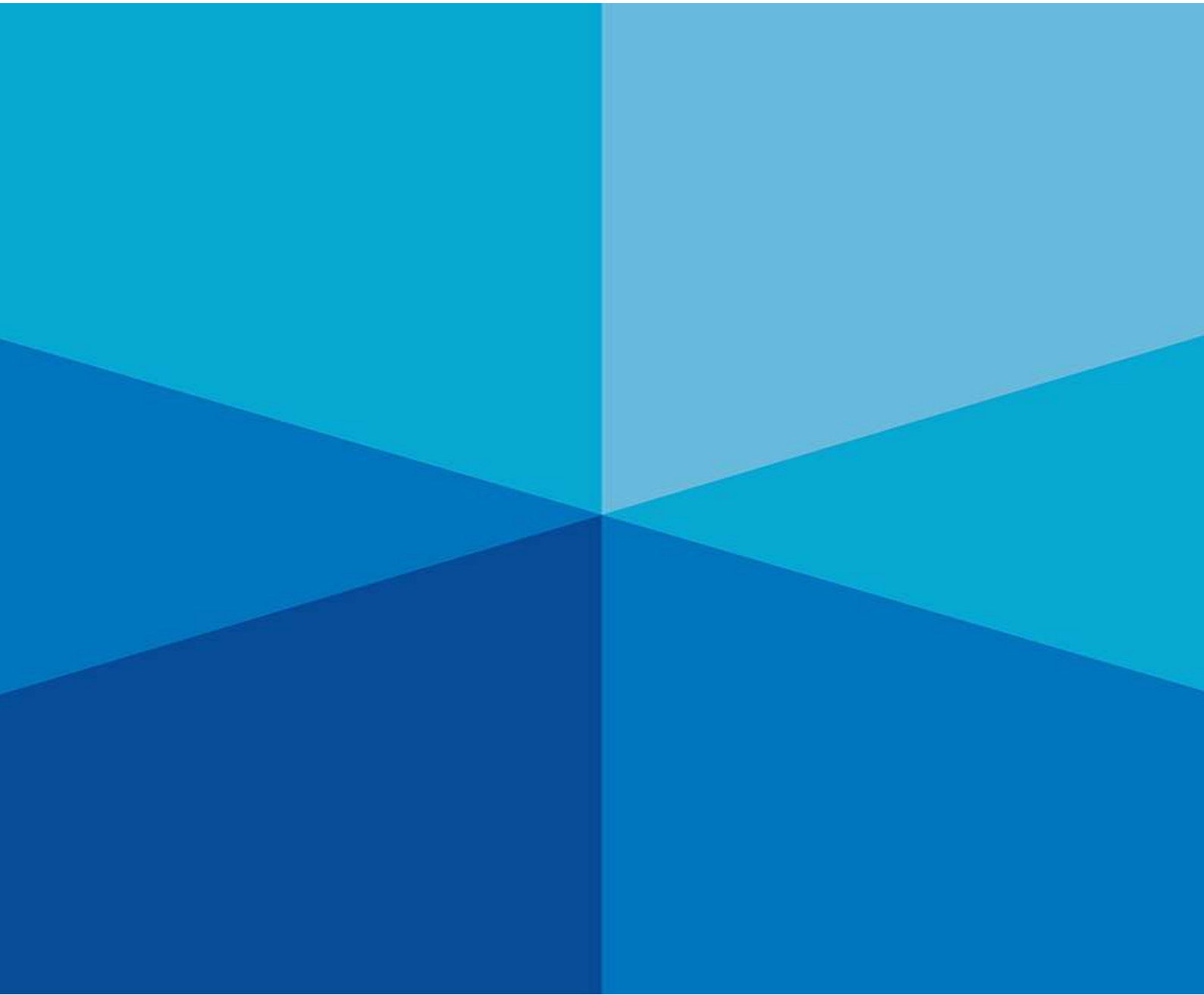
Norfolk Green Infrastructure and Recreational impact Avoidance and Mitigation Strategy

Habitats Regulations Assessment Strategy Document

March 2021



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Acknowledgement

We would like to acknowledge the work of our colleague Natasha Moreno-Roberts who sadly passed away before the report was finalised. She was integral to the study at the early stages and would still be now if she were alive.

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Why is this Strategy needed?

This strategy has been produced to support Local Planning Authorities (LPAs) in Norfolk in their statutory requirement to produce 'sound' i.e. legally compliant Local Plans for their administrative or Plan making areas.

The potential for recreational activities to disrupt the protection objectives of Habitats Sites in and around Norfolk is related to the level of growth in each Local Plan 'in combination'; specifically an increase in population resulting from identified new housing requirements across the County that will in turn ensure more people visit Habitats Sites for recreation. This residential growth, combined with an increase in tourism accommodation, will result in more people visiting and possibly harming Habitats Sites.

There is an opportunity to address mitigation strategically, in this instance at the County level. The provision of green infrastructure (GI) at both a development site and at the Plan making level will be key to diverting and deflecting new residents from visiting Habitats Sites on a daily basis. As it is not possible to rule out residual effects, strategic mitigation is proposed within this document in the form of a Recreational impact Avoidance and Mitigation Strategy (RAMS). This is in order to ensure that Local Plans can be adopted and to enable planned growth through the implementation of measures to avoid adverse effects on the integrity of Habitats Sites.

Natural England's interim advice to the Norfolk LPAs welcomes the preparation of a Norfolk GI and RAMS Strategy, as a large scale strategic project involving all of the Norfolk authorities working together, to help mitigate the recreational effects likely to arise as a result of increased housing over the respective Local Plan periods on sensitive designated sites. This approach will build on the existing evidence included within the Norfolk Visitor Survey Report, which provides a comprehensive analysis of current and projected visitor patterns to Habitats Sites across Norfolk. It delivers Natural England's advice that provision of enhanced Green Infrastructure (GI) is needed within all new residential developments with year round connections to the local countryside.

This Strategy will form part of the evidence base for Local Plans to ensure that residential planning applications which have the potential to impact on Habitats Sites are compliant with the Habitats Regulations. Its delivery aims to support growth and meet the GI & nature need for residents and visitors to Norfolk.

What is proposed regarding Green Infrastructure?

Green infrastructure (GI) provision is essential to divert and deflect the daily recreational visits away from the sensitive Habitats Sites, and their rare species, in order to avoid adverse effects on the integrity of these sites from all the individual developments alone. This Strategy identifies that there is currently no justified need for a 'county-wide' or 'county-level' solution regarding GI provision in addition to those measures already in place at the strategic and localised / individual development level, to enable Local Plan growth. The RAMS section of this Strategy has explored mitigation options in Norfolk related to avoiding recreational impacts on Habitats Sites 'in-combination' with other plans and projects and concluded that these can be ensured through

a suite of mitigation measures at the Habitats Sites. This conclusion can be made only if GI provision is delivered on or near housing and tourist accommodation development sites in the first instance.

Although this Strategy does not identify the need for any new County-wide GI provision to mitigate recreational impacts, it is essential that LPAs secure the provision of GI at both a development site and a Plan making level. Further, an opportunity exists to enhance the GI network to 'future proof' the County against any effects that may emerge beyond Local Plan periods, should residential growth requirements continue to rise. This Strategy also looks at existing open space opportunities within the County to see whether they could be procured or otherwise developed to meet a certain standard to provide a genuine alternative recreational offer to the Habitats Sites and rectify deficiencies and future-proof growth in future Local Plan periods. These are mapped within this Strategy as 'Strategic Opportunities'.

As mentioned previously, in order to avoid the majority of the potential impacts from recreational pressure, adequate provision will need to be made at a local level for green infrastructure / open space provision related to development. Such provision should add to the level, quality and type of GI that is currently available and be proportionate to the scale of development that it is to address. In assessing this requirement, regard should be had to information such as audits of what is currently available and opportunities for enhancing Green Infrastructure, Green Infrastructure Strategies, and models such as Natural England's ANGst model.

In addition to exploring opportunities for alternative recreational across Norfolk, this Strategy recommends other GI mechanisms that can be incorporated into the planning process. These are listed below:

- The integration of an 'Enhanced Green Infrastructure (EGI)' Policy wording into any emerging Local Plans, to ensure that developers are aware of their responsibilities regarding the quality of GI provision.
- LPAs could undertake an 'EGI audit', exploring whether GI provision could be improved moving forward, to offer an additional recreational offer close to where people live. This audit would use a set of 'EGI Quality Criteria' to ensure social, economic and environmental benefits.

The Strategy delivers Natural England's advice that provision of enhanced Green Infrastructure (GI) is needed within all new residential developments with year round connections to the local countryside. It now seeks a commitment from the LPAs to deliver enhanced GI with multiple benefits which is accessible locally to all Norfolk residents & tourists and work towards an aspirational target for enhanced GI within large scale developments.

What exactly is a RAMS?

The RAMS identifies a detailed programme of County-wide mitigation measures aimed at delivering the mitigation necessary to avoid adverse effects on integrity of the Habitats Sites from the 'in-combination' impacts of recreational impacts at Habitats Sites from residential development including tourist accommodation that is predicted across Norfolk. Once finalised and adopted, the RAMS will comprise of strategic mitigation measures to avoid and mitigate adverse effects predicted for the Habitats Sites, which will be costed and funded through developer contributions. There is in-built flexibility for each Habitats site as there is no "one size

fits all" fix; the solution will need the LPAs to work with conservation organisations to identify which combination of package measures is appropriate and likely to be effective.

It is important to acknowledge that the RAMS exists specifically to mitigate these 'in-combination' effects. It is not a mechanism to deliver mitigation for recreational impacts from individual residential developments alone or individually; this must be provided on/near the development site in the form of Green Infrastructure provision, for the purposes of avoidance in the first instance. The RAMS mitigation measures are also not designed to deal with existing issues at Habitats Sites, as these are not directly related to planned housing growth or future tourist accommodation development.

What is the RAMS proposing?

Additional housing growth is predicted to lead to more people visiting the countryside of Norfolk, much of it important for wildlife. This has the potential to cause more disturbance to sensitive wildlife and habitats. The RAMS is proposing bespoke and evidence based actions to prevent that disturbance, funded by developer contributions from house builders.

In addition to ensuring sufficient greenspace within and near to residential developments, this Strategy recommends a package of avoidance and mitigation measures to be delivered at the Habitats Sites that includes, but to ensure flexibility, is not limited to:

- The provision of a 'Delivery Co-ordinator' with the role of managing the delivery of the mitigation measures and acting on the results of monitoring;
- Securing provision of a Ranger team to provide a presence at the Habitats Sites particularly of the Broads, all three parts of the Coast and, when monitoring shows that this is a priority, also in the Norfolk Brecks (which could be extended to West Suffolk in the future). The role of the Ranger team includes informing visitors of the importance of the Habitats Sites, and directing them to appropriate areas, giving walks, talks & supporting partner events; providing promotional materials designed in conjunction with existing partners to make best use of their knowledge and experience;
- Undertaking an Audit of Signage is proposed regarding appropriate access points to each Habitats Sites; car park rationalisation may then be considered necessary in the future to manage the carrying capacity of these sensitive sites.
- Monitoring of commencement of residential developments especially locations e.g. within which LPA and individual Habitat site ZOI;
- Recording the implementation of mitigation for recreational impacts and track locations and costs;
- Collating and mapping key roosts and feeding areas outside the Habitats Sites i.e. functionally linked land;
- Sharing a new website dedicated to the Norfolk RAMS, providing information on the Habitats Sites, the need for mitigation and measures to alleviate recreational disturbance;
- Setting up a county-wide 'dog project' to engage with dog walkers, promoting sites

for dog walking, providing information on other areas available for dog walking and highlighting issues at Habitats Sites; build on existing use of dog bans & dogs on lead areas plus dog friendly beaches;

- Filling in gaps in data for Habitats Sites to calculate individual ZOIs and continuous updating of 'Visitor Surveys' at selected locations to monitor effects and update the need for a Ranger team and any additional measures;
- The provision of literature regarding codes of conduct and pilots for zonation for those undertaking water sports at Habitats Sites, including bait digging, power hang gliders, kayakers and kite surfers and the use of drones;
- Work identifying and providing strategic mitigation projects which are based on evidence and supported by data gathering undertaken in the Strategy and where there is a deliverable and identified need. Working with landowners and partners to support existing or identify new fencing to protect breeding sites for SPA bird populations;
- Working with landowners and partners to collate bird monitoring surveys to identify land outside SPAs which support qualifying features;
- Monitoring of sensitive vegetation & species to inform mitigation needs ; and
- Working with the Public Rights of Way team on projects regarding route diversions and site buffering.

What will this mitigation cost and how could it be paid for?

A per dwelling tariff for the Norfolk-wide RAMS has been calculated by dividing the total cost of the RAMS mitigation package by the total number of houses still to be delivered over Local Plan periods. Any dwellings already consented in full are not included in this calculation. Contributions cannot be collected from developers to pay for mitigation necessary to avoid impacts from these residential developments alone, nor from other users. Where any reserved matters applications for residential development are submitted, the LPA will need to comply with Natural England's advice to undertake 'HRA screening' if this has not already been undertaken and developer contributions may still be required.

The tariff is an exact monetary value to ensure the full costs of the mitigation package can be collected relevant to the impacts predicted from Local Plan growth, in order for them to be HRA compliant.

Further to this, the costed package also includes a 10% contingency which has been included to ensure that there is no shortfall in the delivery of necessary mitigation measures. With annual reviews of the tariff in line with the Retail Price Index (RPI) and considerations of the RAMS for each Local Plan review, each Local Plan period will secure developer contributions to fund ongoing delivery of mitigation which amounts to 'in perpetuity'. The provision of the mitigation package is sufficient to address the 'in perpetuity' issue as measures will be funded by the LPAs on a rolling programme.

The RAMS package of mitigation measures has been identified to cost in the region of £7.9 million. This tariff is payable on each net new dwelling that currently does not have full planning consent. There will therefore be a required cost to be paid by developers on each new dwelling

that does not currently have planning permission. This approach seeks to mitigate the additional recreational pressure in a way that ensures that those responsible for it pay to mitigate it at a level consistent with the level of potential harm. Fairly, this represents a planning contribution that must be paid for each net new dwelling delivered in the County. This cost is identified as **£185.93 per dwelling** and per bedspace for tourist accommodation or student accommodation unit equivalents.

Summary of Norfolk GI and RAMS Strategy recommendations

The Norfolk wide GI and RAMS Strategy aims to support Local Plan growth & meet the GI and Nature need for residents and visitors. It recommends each Authority:

- Commits to deliver enhanced GI with multiple benefits which is accessible locally to all Norfolk residents & tourists;
- Works flexibly and look beyond boundaries for strategic delivery of GI and RAMS measures at a range of levels;
- Commits to consulting conservation bodies regarding Rangers, seeking creative management options and acting on the results of monitoring;
- Delivers strategic and Local Plan policies in relation to new residential and tourist accommodation and work towards an aspirational target for enhanced GI within large scale developments;
- Secures developer contributions from all new residential development across Norfolk based on the evidenced tariff based approach, to make a substantial contribution to mitigating adverse impacts arising from planned housing growth at Habitats sites
- Implements the key projects and priorities to encourage appropriate recreational behaviour in line with the RAMS Action Plan.

1. INTRODUCTION

1.1 Project Background

The Councils of Broadland District Council, Breckland District Council, Great Yarmouth Borough Council, The Borough Council of King's Lynn & West Norfolk, North Norfolk District Council, Norwich City Council, South Norfolk Council and the Broads Authority (working together to address cross-boundary issues and offer a strategic solution through a Norfolk Strategic Planning Framework (NSPF)), commissioned Place Services in April 2019 to prepare a Green Infrastructure (GI) and Recreational Impact Avoidance and Mitigation Strategy (RAMS).

This study will form part of the evidence base for each of the above authorities' Local Plans and provides the basis for future agreements through the NSPF. The Authorities appointed consultants to undertake this work covering the six districts, one city and the Broads Authority area within the county of Norfolk. The Project Steering Group was formed of all LPAs, along with Natural England and Forestry Commission. Together they worked with Place Services in the production of this Strategy.

The Councils listed above are the Local Planning Authorities (LPAs) for their respective areas but excluding those parts in the designated Broads area, where the Broads Authority is the LPA. Below is a map of the study area, representing the entirety of the County of Norfolk.

Figure 1: Map of Norfolk including LPA boundaries

Source: Place Services, 2020

1.2 Why is the Strategy needed?

This strategy has been produced to support Local Planning Authorities (LPAs) in Norfolk in their statutory requirement to produce 'sound' i.e. legally compliant Local Plans for their administrative areas. Local Plans set the framework for growth for the LPA area over a set 'Plan period', typically 15 years.

Local Plans outline the level of growth needed in an administrative area, identify where strategic housing and employment growth can be sustainably delivered, and set a framework of policies that will be used to determine planning applications and ensure sustainable development.

Work toward LPA Local Plans in Norfolk includes assessing whether growth, in terms of both overall housing requirements and specific allocations for development, would have any likely adverse effects on the integrity of 'Habitats Sites.' This assessment, known as a 'Habitats Regulations Assessment' (HRA) is required through EU law (the EU Habitats Directive)[1] and as such is a key determinant of the 'soundness' of a Local Plan and their legal compliance.

Habitats Sites, also known as Natura 2000 sites, include Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites (wetland sites designated to be of international importance under the Ramsar Convention). These represent those areas with the highest level of designation for wildlife interest in Europe and ensuring that their protection objectives are not compromised is of paramount importance.

Consultants 'Footprint Ecology' undertook surveys in 2015-16, the results of which provided local authorities in Norfolk with information to underpin reviews of their Local Plans, Habitats Regulations Assessments and this Strategic solution for avoidance and mitigation. The results highlight how an increase in recreational pressure (particularly at the North Coast, the Broads and the Valley Fens) is predicted to be linked with residential development across multiple local authorities and that solutions are likely to be most effective if delivered and funded in partnership.

In other parts of the country, strategic mitigation schemes have been established involving partnerships of local authorities delivering mitigation funded through developer contribution schemes. Such approaches would provide Norfolk authorities with an effective way of delivering mitigation and some recommendations for mitigation approaches are given.

The HRA work undertaken for the individual Local Plans in Norfolk has identified a common theme regarding the potential for recreational activities to disrupt the protection objectives of Habitats Sites in and around Norfolk. This is related to the level of growth in each Local Plan, specifically an increase in population resulting from identified new housing requirements that are within the 'Zone of Influence' (ZOI) for likely significant effects regarding recreational disturbance at Habitats Sites.

ZOIs represent the extent of land around Habitats Sites within which residents travel to them for recreational activities, as evidenced by extensive survey work. Local Plan allocated growth will result in more people visiting and possibly harming Habitats Sites. Effects can occur from activities as varied as dog walking to water sports.

[1] This law still applies until further notice.

In response to the potential of an increased population to cause harm to Habitats Sites across all of Norfolk, from individual developments alone and also when considered with effects from other plans and projects (known as 'in-combination effects'), there is an opportunity to address mitigation strategically, in this instance at the County level. The role of Green Infrastructure at both development site and Local Plan levels is key to diverting and deflecting new residents from visiting Habitats Sites for their daily recreational needs; however as residual effects cannot be ruled out, strategic mitigation is also proposed within this document for mitigation measures to be delivered at the Habitats Sites to deal with residual effects following avoidance measures on development sites.

Within this Strategy, strategic GI opportunity areas are explored to complement diversionary GI provision that is already established, based on supporting information and evidence that has been provided by the LPAs. Residual effects are proposed to be mitigated through a Recreational impact Avoidance Mitigation Strategy (RAMS) in order to ensure that Local Plans can be adopted and to enable planned growth through the implementation of measures to avoid likely adverse effects on the integrity of the Habitats Sites.

COVID-19

As we approached the publication of this Strategy, Coronavirus (COVID-19) reached the country. At the time, the majority of the text had been agreed with Local Planning Authorities and Natural England. However, the virus then highlighted the importance of designing for active travel and access to green space. This strategy contains recommendations to enhance green infrastructure to avoid potential impacts on recreational pressures, mitigate climate change, and improve wildlife corridors and connectivity. Yet, it was decided it was vital that we should also be actively encouraging people to walk or ride a bicycle, enjoy local green infrastructure opportunities to support a sense of wellbeing. This study has therefore taken this into consideration before being finalised.

2. GREEN INFRASTRUCTURE STRATEGY

2.1 What is Green Infrastructure (GI)?

Green infrastructure can be defined as a carefully planned network of high quality natural and semi-natural assets and habitat types, of green and blue spaces, and other strategically planned environmental features that maintain and deliver our ecosystem services. It provides multi-functional benefits integral to the health and wellbeing of our communities and to the ecology and economy of the county. Green infrastructure is often referred to as a network of these natural and semi-natural assets and spaces, which are joined together connecting urban and rural areas and are habitually strategically planned. Green infrastructure provision is therefore an important solution to delivering the Lawton principles[2] of "more, bigger, better and joined".

In creating this strategy:

- Local and national green infrastructure policy and Local Planning Authorities Green Infrastructure Strategies were reviewed;
- Existing Green infrastructure mapping was reviewed, and cross referenced with other GI data to form the evidence base for the strategy; and
- Continued engagement with key stakeholders was undertaken.

2.2 Legislative Background and GI Drivers

2.2.1 National

The national policy approach to delivering green infrastructure is set out in the National Planning Policy Framework and supporting Planning Practice Guidance. National Planning Policy Framework (NPPF): Strategic Policies states:

> 'Strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for…conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure…'

The NPPF also encourages planning policies and decisions to consider natural and local environment enhancements. Paragraph 171 states that:

- Plans should: ….take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and
- LPA should seek opportunities to provide better facilities for users, for example by adding links to existing rights of way network including

[2] Lawton Principles advocates a landscape-scale approach to conservation, to create "a coherent and resilient ecological network", guided by 4 key principles, summarised as "more, bigger, better and joined".

national trails.

The 'National Planning Practice Guidance: What is a strategic approach to green infrastructure?' states that,

> "To assist in planning positively for green infrastructure local planning authorities may wish to prepare an authority-wide green infrastructure framework or strategy. This should be evidence-based by, for example, including an assessment of current green infrastructure provision that identifies gaps in the network and the components and opportunities for improvement. The assessment can inform the role of green infrastructure in local and neighbourhood plans, infrastructure delivery plans and Community Infrastructure Levy (CIL) schedules."
>
> "Local Plans should identify the strategic location of existing and proposed green infrastructure networks. Where appropriate, supplementary planning documents can set out how the planning, design and management components of the green infrastructure strategy for the area will be delivered."

The Natural Environment White Paper, 'The Natural Choice: Securing the value of nature' (2011) highlighted 'the importance of green spaces to the health and happiness of local communities'. The White Paper sets out a framework to protect and enhance the natural environment and to support coherent and resilient ecological networks that reflect the value of ecosystems.

It refers to the role of planning and the role of urban green infrastructure as providing linkages to the ecological network and as an effective tool to managing environmental risks such as flooding and heat waves. It also advocates that green spaces should be factored into the development of all communities, with guidance from local knowledge and statutory powers of local authorities, to work in a more integrated way to achieve multiple benefits (Defra, 2011).

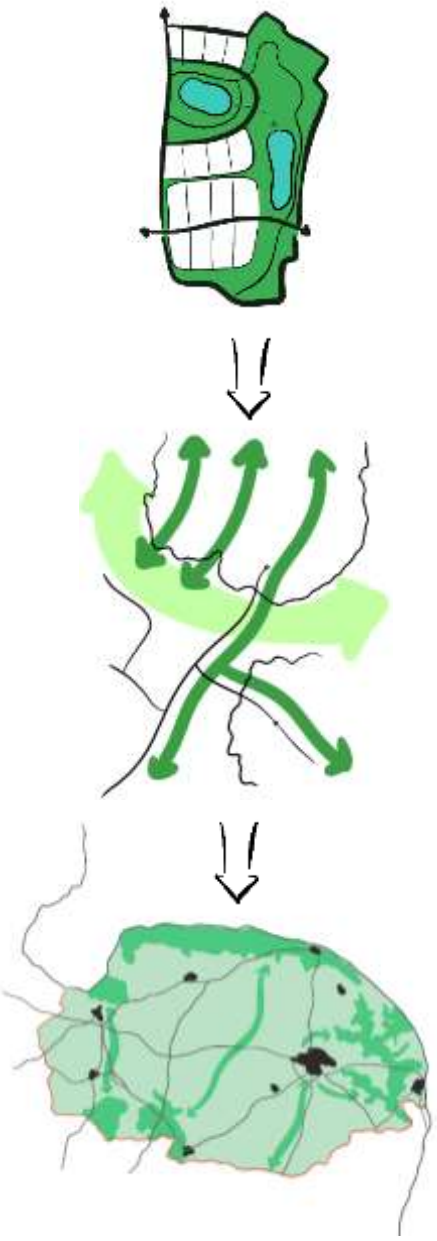
The 25 Year Environment Plan 'A Green Future: Our 25 Year Plan to Improve the Environment' (2018) sets out a framework to maintain and improve the environment for the next generation. The following six key areas were identified:

- Clean air
- Clean and plentiful water
- Thriving plants and wildlife
- A reduced risk of harm from environmental hazards such as drought and flooding
- Using resources from nature more sustainably and efficiently
- Enhanced beauty, heritage and engagement with the natural environment

2.3 Types of Green Infrastructure (GI)

This Strategy will refer to different types of GI and how they all play a role in enhancing the overall GI network. These are as follows:

Figure 2: Scale of GI (Illustrative only)



2.3.1 Local GI

Local GI is at the development scale. Part of this includes ensuring GI forms part of development design and the planning process. This means recognising the character and distinctiveness of different locations and ensuring that policies and programmes respond accordingly. GI can play a key role in this process, from formulating design principles and drawing up masterplans, to identifying opportunities for community involvement.

2.3.2 Strategic GI

Strategic GI is at a District/Borough or Plan making level. This means, larger scale projects that enhance the GI network and provide new or improved outdoor spaces that benefit the wider community. For instance, this could include new green spaces and parks, public realm projects, and sustainable transport and connectivity improvements. A coordinated, strategic approach such as this is integral to the planning and delivery of green infrastructure.

2.3.3 County-wide GI

These are county-wide/cross-boundary approaches that provide GI opportunities that are of scale and size that benefit a wider pool of people and help combat in-combination effects on Habitats Sites for planned growth across the county. It is this type of GI to which much of this Strategy relates.

2.3.4 Enhanced GI (EGI)

Enhanced Green Infrastructure (EGI) represents accessible 'Green Infrastructure' that can in part perform the role of a Suitable Accessible Natural Green Space (SANGS). SANGS themselves represent 'strategic' GI provision but have to meet a list of criteria to be named as such. Some of these criteria can be met through enhancements to existing GI to assist in the provision of areas attractive enough for local recreational use on or near where new homes are built. EGI can therefore also take the strain away from people visiting Habitats Sites for recreation.

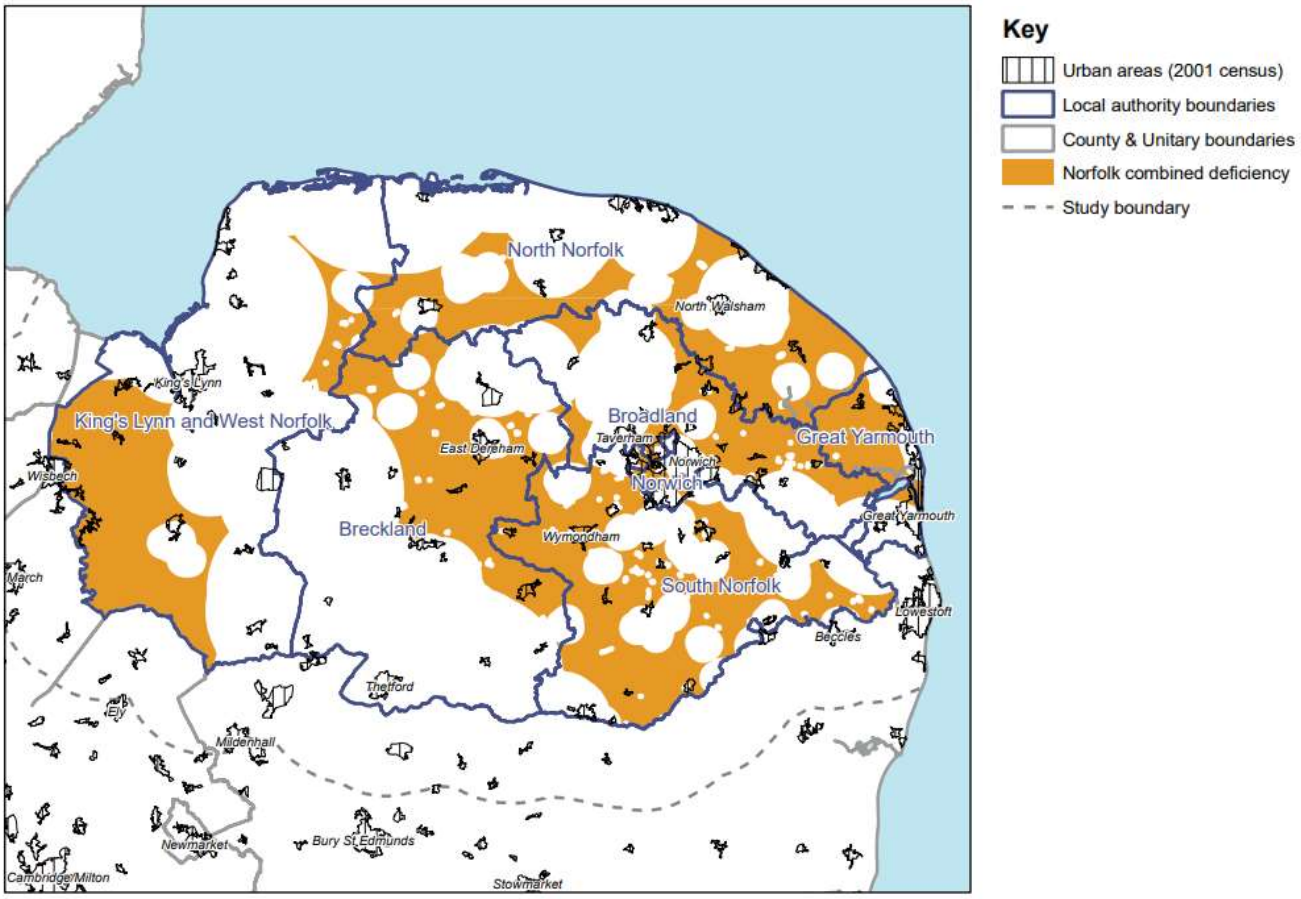
2.4 Norfolk GI Baseline

2.4.1 County level studies

2.4.1.1 Analysis of Accessible Natural Greenspace Provision for Norfolk (2010)

In 2010 an analysis of Accessible Natural Greenspace (ANG) Provision for Norfolk was carried out by Natural England (NE). The methodology followed was based on the Accessible Natural Greenspace Standards (ANGSt) analysis toolkit (Handley et al, 2003b) using an inventory of ANG data compiled on Geographic Information System (GIS) to show areas of adequate provision or deficiency. The Plan below shows all the accessible natural greenspace within the study area and the 10km buffer zone, displayed by ANGSt model size classes (20ha+ ANG, 100ha+ ANG and 500ha+ ANG).

Figure 3: Those areas with no accessible natural greenspace provision at all levels of ANGSt analysis



Source: Natural England, 2010

2.4.1.2 The Norfolk Green Infrastructure Mapping Project (GIMP) (2018)

Further analysis was carried out in 2018 by Norfolk County Council as part of the GIMP. The project aimed to:

- Make the 'connections' between GI and growth, providing LPAs with a deliverable approach to addressing Green Infrastructure matters to enable and support growth;
- Map the Green Infrastructure Network of Norfolk, maximising the benefits it brings to the communities of Norfolk;
- Identify deficiency in GI provision; and
- Identify opportunities for enhancement.

In regard to deficits, the project assessed current settlement deficiencies in ANG and Public Rights of Way access. All the urban areas within the county were assessed against the ANGSt guidelines and the Woodland Trust Woodland Access Standard (although all GI was assessed and not just woodlands).

This allowed the production of maps that indicate urban areas and settlements that appear to be deficient in GI and could be targeted for work as part of any GI planning.

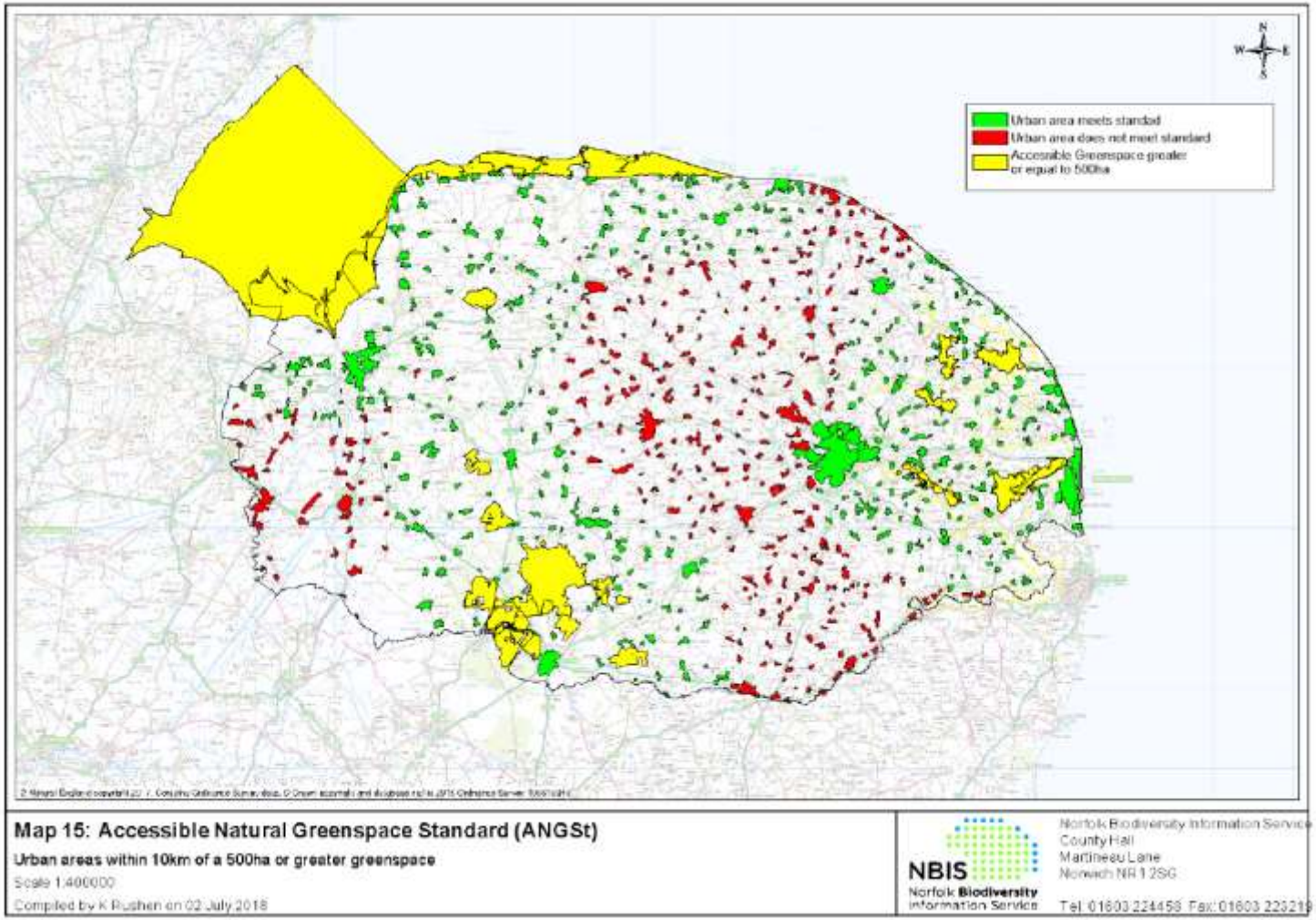
In terms of the ANGSt, urban areas were assessed against three levels of accessibility:

- Urban areas within 2km of 20ha or greater greenspace
- Urban areas within 5km of a 100ha or greater greenspace
- Urban areas within 10km of a 500ha or greater greenspace

The findings were similar to those of the 2010 report in that they showed the main areas of deficiency were in the west of King's Lynn and West Norfolk, South Norfolk through to Breckland and North Norfolk.

Figure 4 below shows the Urban areas within 10km of a 500ha or greater greenspace plan. This data was used for this study as the size and scale of the ANG assessed is not dissimilar to County-wide level opportunities such as Country Parks and/or SANGs.

Figure 4: Urban areas within 10km of a 500ha or greater greenspace

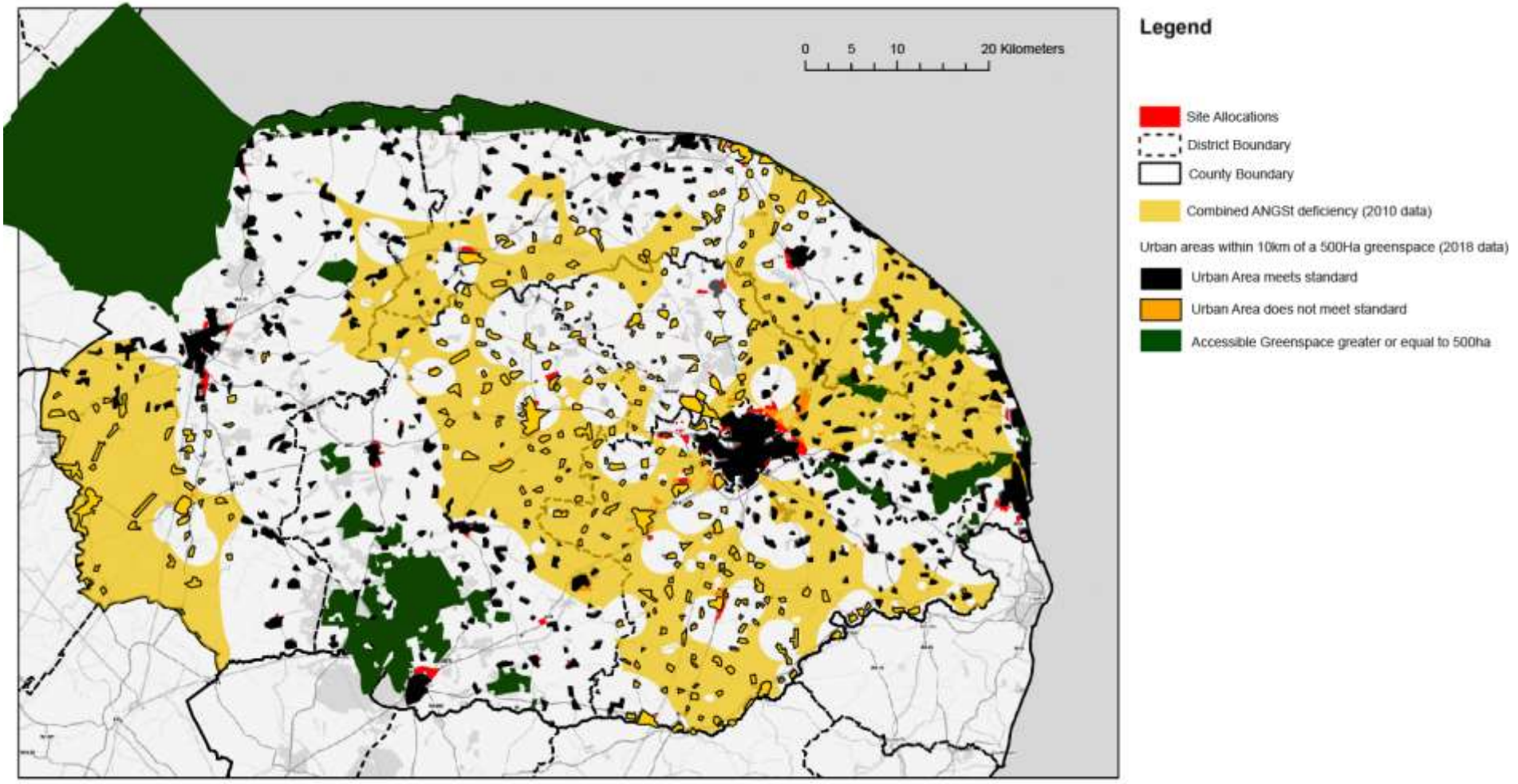


Source: Norfolk County Council, 2018

For comparison, the two deficit data sets have been overlaid alongside the Local Plan site allocations on Figure 5 to give an overall indication of the available local accessible natural greenspace to new residents in Norfolk. As you can see from this figure, the majority of the predicted housing growth across the county is located in areas that meet the ANGST requirements. However, there are areas within Broadland and South Norfolk on the Norwich Fringe that do not meet the standards and therefore GI enhancements would be beneficial.

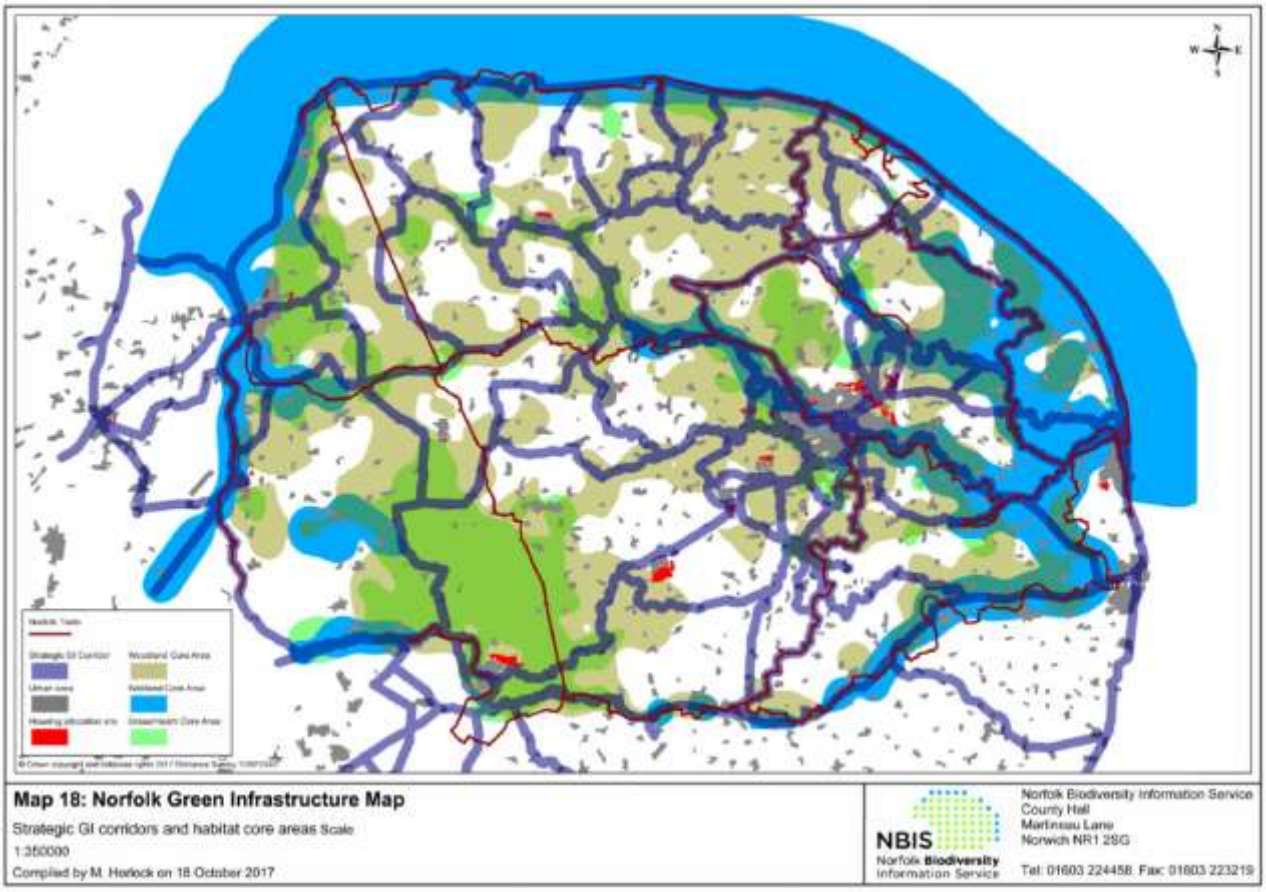
It is also worth noting that the ANGSt data from the 2010 and 2018 studies are based on all 'Accessible Natural Greenspace', which includes Habitats Sites. For many areas, such as the urban areas of southern Breckland and the northern coastline this is why no deficiency in accessible nature greenspace was found. Thus, although useful, the findings from this report cannot be purely based on these deficits and additional factors and priorities will need to be considered such as housing growth, existing GI projects and ecological enhancements.

Figure 5: Norfolk ANGSt Deficiencies



As well as the deficiency data provided. The GIMP also provides a county-wide GI network made up of identified primary and secondary Green Infrastructure Corridors throughout the county, along with a prioritisation of opportunities (using ecological network modelling and the identified GI corridors).

Figure 6: Strategic GI corridors and habit core areas map



Source: Green Infrastructure Mapping Project, 2018

The Norfolk Green Infrastructure mapping also provides users with the location of native habitat corridors/core areas, as shown in Figure 6. These are; grassland-heathland, woodland and wetland corridors. These are based on ecological network maps, kernel density analysis and existing survey data. It is important that areas of native habitat are joined together into an overarching network as this can ensure they are more resilient to changing climates and stresses, but it can also improve the levels of ecosystem services provided such as; nutrient cycling (supporting services), biomass (provisioning services), pollination (regulating services) and ecotourism (cultural services). Larger and better-connected areas of natural habitats are also now recognised as a key strategy for maintaining biodiversity. Many organisations are now promoting the creation of ecological networks and the use of landscape-scale approaches to conservation. Such initiatives include The Wildlife Trusts' Living Landscapes.

2.4.1.3 Report of Ecological Network Mapping Project for Norfolk (2016)

This report was produced for the Norfolk Biodiversity Partnership in order to help secure the

long-term future of wildlife and ensure ecological networks are established and restored. The report provides a series of maps showing an indicative ecological network for Norfolk along with the core areas that were used in the production of the GIMP. They also identify where new habitats can be created and where these can be connected. A number of potential projects are also presented that if implemented could help develop various aspects of the network.

2.4.2 Current projects at a County-wide Level

At the county wide level a number of projects exist that incorporate GI network improvements at different scales and levels. This includes, but is not limited to:

- Norfolk Trails: maps.norfolk.gov.uk/trails/
- Living Landscape Projects: www.norfolkwildlifetrust.org.uk/wildlife-in-norfolk/a-living-landscape
- Norfolk Tree Planting and Resilience Strategy (Draft)
- Norfolk Infrastructure Delivery Plan (2019): www.norfolk.gov.uk/-/media/norfolk/downloads/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/business/norfolk-infrastructure-delivery-plan-2017-2027.pdf
- Community Biodiversity Projects: www.norfolkbiodiversity.org/community-2/community-directory/
- Habitat and Species Action Plans: www.norfolkbiodiversity.org/habitats-and-species/

2.4.3 Strategic level data

On a Strategic Level, all LPAs have GI initiatives in place, whether that is a Green Infrastructure Policy, Strategy and/or Projects that are either adopted, or are in the process of being adopted by the LPA. These have been reviewed to see whether they are sufficient for the purposed of responding to GI pressures, opportunities, enhancements and management across Norfolk

Breckland
Breckland's Local Plan (BLP) (Adopted 2019) GI Policy: ENV01 Green Infrastructure. • Ensures that all new development incorporates GI and enhances the existing network Additional Policies include: • ENV02 Biodiversity Protection and Enhancement • ENV05 Protection and Enhancement of the Landscape • ENV06 Trees, Hedgerows and Development Reference is made to the GIMP Strategic GI corridors and habit core areas, as well as Norfolk Trails **Thetford Area Action Plan (AAP) (Adopted 2012)**

Breckland

Local Level GI Policies and project initiatives that look to restore and enhance the GI network

Policy TH11: Joe Blunt's Lane – "*the existing route of Joe's Blunt Lane will be protected and enhanced as a green route to the North of Thetford*"

Policy TH 12: The Thetford Loops.

This policy aims to provide multi-purpose, high quality routes for pedestrians and cyclists for leisure and utility trips. However, the policy recognises that it may result in intensification of recreational use of the Breckland SPA and mitigation measures would be required to alleviate this by careful consideration of routes and signage

> "*The Thetford Loops will enhance and encourage access into the surrounding forest and countryside for recreation.*
>
> *However, encouraging people into the Forest (which is part of the Breckland SPA) has the potential to result in increased disturbance to protected Annex I birds (Woodlark and Nightjar) from the intensification of recreational use of sites.*
>
> *12.41 Therefore, it is recognised that there are potential conflicts relating to promoting access and the nature conservation interest of the surrounding area (i.e. Thetford Forest and Barnham Cross Common). As such, a number of mitigation measures will be required as part of the implementation of the Loops to avoid any adverse impacts arising from them. Such mitigation is likely to require routes through the forest to change to reflect the Forestry Commission's felling cycle, not only for safety of users, but also to reflect that some bird species use areas of the forest at different stages of growth to nest and fledge. It is also likely that changes will be required to the Loops signage to direct users away from sensitive areas at particular times. Further work is therefore required to determine the level of use of the Loops, the types of activity they will provide for and the extent to which the Loops may increase access to sensitive areas. The exact mitigation measures will be informed by such work."*

As well as the strategic studies that have been completed, there are also a number of localised plans and strategic policies that are emerging, or in place, that also strengthen the county's GI. Table 1 below provides all of the local studies that provide reference to GI. This includes reference to recreation and connectivity enhancements, habitat protection and enhancements, new development open space, and GI inclusion. Figure 8 also shows all localised initiative areas overlaid on the GI map.

Greater Norwich

Greater Norwich Development Partnership (GNDP) Green Infrastructure Strategy (2007)

The GNDP GI Strategy sets out a vision for green infrastructure in the Greater Norwich Area for a "*multifunctional network of green spaces and green links, providing an environmental life support system for communities and wildlife".*

The Strategy sets out six core principles for GI planning and management to underpin relevant policies, plans and decisions with the Greater Norwich area

The document proposes and identifies a multi-functional GI network for the Greater Norwich area.

The network also connects a diverse range of wildlife habitats and provides important ecological corridors for species dispersal and migration.

Green infrastructure should be delivered, protected and managed through the commitment and involvement of the public, private and voluntary sectors across the Greater Norwich Area working in partnership.

GNDP Green Infrastructure Delivery Plan (2009)

Greater Norwich

The GNDP GI Delivery Plan uses the GI Strategy as a basis to review spatial information, identify opportunities for GI in the area and produce an action plan to take GI ambitions forward. The delivery plan identifies a number of GI Priority areas (Green Infrastructure Priority Areas supporting Key Growth Areas shown on plan below), which refines the corridors identified in the GI Strategy.

The Green Infrastructure Delivery Plan reviews existing management arrangements for open space and discusses options for the future including local authority, private management companies and trusts.

Greater Norwich Joint Core Strategy (JCS) (Updated 2014)

The JCS provides strategic policies that cover the Greater Norwich area. GI is embedded throughout the document. However, the one policy that highlights it most is Policy 1: Addressing climate change and protecting environmental assets.

Greater Norwich Infrastructure Plan (GNIP) (2020)

The GNIP was produced to co- ordinate and manage the delivery of strategic infrastructure to support growth, improve quality of life and enhance natural environment.

GI is one of the GNIP main priorities and are based on the need to mitigate the potential impacts on Habitats Sites under the Habitat Regulations. The document sets out over 100 projects of different scales across the Greater Norwich region, falling within different GI Priority Areas.

Habitats Regulations Assessment of Greater Norwich Regulation 18 Draft Plan

The document concludes that the Greater Norwich Local Plan Strategy would have no adverse effect upon the integrity of any European site acting alone if there is "satisfactory completion of the Green Infrastructure and Recreational impact Avoidance Mitigation Strategy (Section 5) that provides:

- "a tariff-based payment taken from residential, and other relevant accommodation e.g. tourist accommodation, that will be used to fund a mixture of mitigation measures, most likely consisting of soft and hard mitigation measures at the designated natural sites themselves to increase their resilience to greater visitor numbers.
- the provision of suitable alternative natural green space (SANGs), which would be large enough to meet a range of needs and sufficiently well publicised for effective mitigation. The current Broadland District Council Development Management DPD policy EN3 may be considered as a precedent for housing growth in the emerging Greater Norwich Local Plan, although consideration will need to be given to new evidence emerging as part of plan production.
- Implementation of a wider programme of Green Infrastructure Improvements in accordance with current and emerging project plans so that residents of existing and proposed housing have an alternative to European sites for regular routine activities such as dog walking.

Broadland

As well as the strategic GI evidence base provided in the Greater Norwich documents, there are also fundamental strategic and localised work being carried out at a District level with Broadland that are fundamental to enhancing the GI network. These include the following:

Development Management DPD (2015)

The Development Management DPD (DMDPD) has its own GI policy - *Policy EN3 – Green Infrastructure*.

Broadland

This policy is important as it refers to 'informal' open space, rather than 'formal' open space. It also states that improving the provision, quality and accessibility of informal open space will "mitigate the potential impacts of visitor pressure upon sensitivity international designated sites" (Habitats Sites).

In accordance with Policy EN3, all development of 5 or more dwellings within Broadland are expected to make a GI contribution.

Recreational Provision in Residential Development SPD (2016)

To build on the DMDPD, Broadland also produced a Recreational Provision in Residential Development SPD that sets out standards for formal and informal recreation space. In terms of Informal Recreational Space, it states that:

The Growth Triangle Area Action Plan (GTAAP) (Adopted 2016)

The GTAAP builds upon the JCS and specifically applies to areas of Old Catton, Rackheath, Sprowston, Thorpe St Andrew and other parishes.

The GTAAP has a strategic policy in place for GI. Primarily it is regarding an area of green space (landscape buffer) that has been identified as a landscape setting to the edge of Norwich

These green infrastructure corridors will be delivered through a series of projects and proposals.

East Broadland Green Infrastructure Project Plan (EBGIPP) (2015)

The EBGIPP is a project plan that focuses on delivery of potential GI projects for the short-, medium- and long-term within the area of Great Plumstead and Acle.

Projects include; the Witton Run GI Project, Link from Blofield to Blofield Heath and A47 Safe Foot and Cycle Crossing.

The details of each project are set out, along with the opportunities, risks and justification. As well as enhancing the GI network, great importance within this study is given to the protection of highly sensitive wildlife sites such as SSSIs and CWS.

West Broadland Green Infrastructure Project Plan (WBGIPP) (2018)

A similar approach was taken to the WBGIPP as the EBGIPP with a focus on delivery of potential GI projects within the West Broadland area. Projects include; the Thorpe Marriott Greenway, South Drayton Greenway and Marriott's Way Circular Walks. The details of each project are set out, along with the opportunities, risks and justification within the report.

The projects within the GTAAP, EBGIPP and WEBGIPP are transposed into the Greater Norwich Infrastructure Plan. Enhancement schemes themselves are then delivered: directly by development, through investment of commuted S106 payments and investment of pooled CIL. In doing this Broadland provides mitigation for predicted impacts on N2K sites in a manner agreed through the independent examination of its local plan documents.

Kings Lynn and West Norfolk

GI has been highlighted and assessed on a borough-wide and localised scale within KLWN. The following document extracts provide detail of these:

Site Allocations and Development Management Policies Plan (Adopted 2016)

Given the importance of retaining and enhancing the boroughs GI network, along with the recreational pressures on Habitats Sites, it was identified that there is a need for monitoring and mitigation measures. For this reason, the Policy DM 19 - Green Infrastructure/Habitats Monitoring and Mitigation was adopted. The GI element of this policy refers to opportunities to link to wider networks, working with partners both within and beyond the Borough.

Kings Lynn and West Norfolk

In relation to Habitats Regulations Assessment monitoring and mitigation the Council has also endorsed a Monitoring and Mitigation Strategy.

This section is important as it acknowledges the need for "enhanced informal recreational provision", rather than just amenity space. By making this commitment, there is a guarantee that GI enhancements will be provided on site that will improve the borough and county GI network, rather than just green space.

Borough Council of Kings Lynn and West Norfolk Green Infrastructure Study: Stage Two (GISS2) (2010)

The GISS2 was completed in 2010 and provides a borough wide analysis of; existing provision, deficits, potential improvements, policies to deliver GI and high, medium and low priority projects.

This study highlights GI plans for the borough, and more specifically, three main towns; Hunstanton, Kings Lynn and Downham Market. Together they act as a spatial framework of how the GI vision will be delivered. The plans have been developed to demonstrate existing GI assets and potential new projects.

North Norfolk

North Norfolk have been reviewing their GI provision on a strategic level through planning policy and supporting documents. These are as follows:

North Norfolk Green Infrastructure Background Paper 5 (2019)

This GI Background Paper is a non-technical guide explaining the approach to Green Infrastructure and further guiding principles to inform planning proposals and the site allocations in the emerging North Norfolk Local Plan 2016-2036. The following are the interim overarching strategic objectives for the delivery of green infrastructure in North Norfolk.

This Background Paper provides a high level outline of green infrastructure and environmental considerations in North Norfolk. The final published Green Infrastructure Strategy will provide the detail on the district wide approach – highlighting the district wide corridors and how green infrastructure in the district can be enhanced and where new green infrastructure should be provided.

First Draft Local Plan (Part 1)

The Draft Local Plan provides the overarching strategic approach to development and how it should be delivered (through suitable development policies). The Plan ensures that good quality, sustainable development takes place in suitable locations which respects the landscape, environment and heritage of North Norfolk.

As part of the comprehensive suite of environmental policies, the First Draft Local Plan also contains a specific proposed policy on Green Infrastructure in order to safeguard, retain and enhance the network of green infrastructure. The proposed policy is **Policy ENV 5 Green Infrastructure**.

This policy ensures that all new development incorporates GI into its layout and design. This will help mitigate recreational pressures on Habitats Sites and improve the wider GI network.

Great Yarmouth

Great Yarmouth Local Plan – Core Strategy (December 2015)

Great Yarmouth

It is clear that GI plays an important role in the strategy for the district. Policy CS15 of the Local Plan relates to providing and protecting community assets and green infrastructure. It states that *"Everyone should have access to services and opportunities that allow them to fulfil their potential and enjoy healthier, happier lives."*

Great Yarmouth Borough Council Infrastructure Plan (IP) (2014)

The IP identifies the green infrastructure needed to support the borough's growth ambitions set out in the emerging Local Plan over the plan period (2014 - 2029). It includes details of enhancements to existing GI provision, along with there long-term management. Estimated costs, funding sources and delivery leads have been set out within the document with the aim to progress the projects within the Local Plan period.

South Norfolk

Falling within the Greater Norwich region, South Norfolk has developed fundamental strategic and localised policies that help support the GI work being done on a county-wide level. This includes:

South Norfolk Local Plan Development Management Policies Document (LPDMPD) (2015)

As well as the Policies, Projects and Strategies promoted through the Greater Norwich Joint Core Strategy. South Norfolk also currently has an adopted LPDMPD. Within this document, there are policies that refer to GI such as: Policy DM 1.4 and Policy DM 4.4. These policies are as follows:

Policy DM 1.4 Environmental quality and local distinctiveness

Policy DM 4.4 Natural environmental assets - designated and locally important open space

Long Stratton Area Action Plan (AAP) (2016)

On a local level, implementation of the policies stated above will be supported by consideration of more detailed local green infrastructure strategies such as those created for Long Stratton and Wymondham within their AAP's. Both these towns sit along a County-wide Strategic Green Infrastructure corridor, therefore the provision of high quality GI within future development is important.

The Long Stratton AAP provides an Indicative Green Infrastructure Plan that identifies the green infrastructure necessary to deliver the requirements of the AAP. The area includes a network of public access routes and existing common land, linking across to the long distance Norfolk Trails. The document states that "Development will be instrumental in integrating locally characteristic greens, hedgerows, woodlands and ponds in to development east and west of Long Stratton." In turn, the AAP also incorporates GI within its local policies. Such as:

- Policy LNGS1 Land East, South-East And North-West Of Long Stratton
- Policy LNGS5 General Green Infrastructure Requirements For New Developments Within Long Stratton AAP Area

Local Policies such as these are integral to development management and ensuring we provide high quality green infrastructure for new communities, as well as enhance the wider network.

Wymondham AAP (2016)

Similarly to Long Stratton, the Wymondham AAP provides an Indicative Green Infrastructure Plan that identifies the green infrastructure necessary to deliver the requirements of the AAP.

South Norfolk

Elsewhere in the AAP document, some allocations for development have specific policies which will address green infrastructure issues particular to those sites.

Specifically, the policy that relates to GI strategically is *Policy WYM 8: General Green Infrastructure Requirements For New Developments Within Wymondham AAP Area.*

The Broads

The Broads Authority have its own policies in place to ensure the conservation and enhancement of the natural beauty, wildlife and cultural heritage of the Broads is retained.

Local Plan for The Broads (Adopted 2019)

Policy DM8: Green infrastructure

There is an expectation that new development proposals will enhance, and integrate with, the local green infrastructure network. Development shall contribute to the delivery and management of green infrastructure that meets the needs of communities and biodiversity, both within and beyond the proposal's boundaries, including establishment of new and enhancement of existing green infrastructure.

The Broads Plan (2017)

The Broads Plan sets out a long-term vision and guiding actions to protect and enhance the area's special qualities. While the Broads Authority were responsible for its production, it is a partnership plan, and its success is dependent on a common vision, joint working and shared resources. Themes include but are not limited too; Managing water resource and flood risk, conserving landscape character and the historic environment and offering distinctive recreational experiences.

Norwich

Development Management Policies Local Plan (DM policies plan)

Within this document, there are policies that refer to GI, such as Policy DM3: Design Principles and Policy DM6: Natural Environmental Assets.

The River Wensum Strategy (2018)

The River Wensum Strategy is a long-term strategy aimed at enabling change and regeneration in the river corridor by improving public access, providing high quality public realm and, enhancing the city's environmental, cultural and historic offer in a manner that contributes to Norwich's regeneration. The strategy covers the river corridor from the city council boundary at Hellesdon to the west, through to Whitlingham Country Park in the east. It was established by the River Wensum Strategy Partnership (RWSP), which is led by Norwich City Council, alongside the Broads Authority, Norfolk County Council, the Environmental Agency and the Wensum River Parkway Partnership.

Other documents that cover the Norwich area and have been reviewed under the Greater Norwich section of this chapter include:

- Greater Norwich Development Partnership (GNDP) Green Infrastructure Strategy (2007)
- GNDP Green Infrastructure Delivery Plan (2009)
- Greater Norwich Joint Core Strategy (JCS) (Updated 2014)
- Greater Norwich Infrastructure Plan (GNIP) (2020)

2.4.4 Stakeholder Feedback from Workshop

An initial workshop was held for key stakeholders in May 2019 to gather local and specialised knowledge from LPAs, organisations and individuals regarding Green Infrastructure. Appendix 5 provides details of the feedback that was gathered from the workshop.

A second workshop in July provided an opportunity to capture and discuss strategic opportunities to create new green infrastructure provision based on planned housing growth. Stakeholder/LPA Officer input helped to identify deficiencies/gaps in Green Infrastructure provision, enhancement opportunities, potential constraints to protection/enhancement and strategic opportunities to create new GI provision based on predicted housing growth at the LPA level. The details from this workshop have been detailed in Appendix 6.

It is important to understand that there are inconsistencies in the level of information provided for each LPA area depending on attendance at the workshops. However, some of the key points raised include, but are not limited to:

Constraints

- Lack of feasibility funding to properly develop projects
- Lack of funding for ongoing maintenance
- Conflict between user groups
- Saturation levels in terms of users demands on Green Space
- User expectations - facilitates types of users e.g. Dogs vs children

Opportunities

- Restoration opportunities at minerals extraction sites for nature and people
- Link into opportunities within the new ELMS (Environmental Land Management Scheme) to consider land margin corridors and access
- Provision of accessibility in/around hot spots of housing to countryside
- Country Parks in key locations

2.4.5 Data Analysis

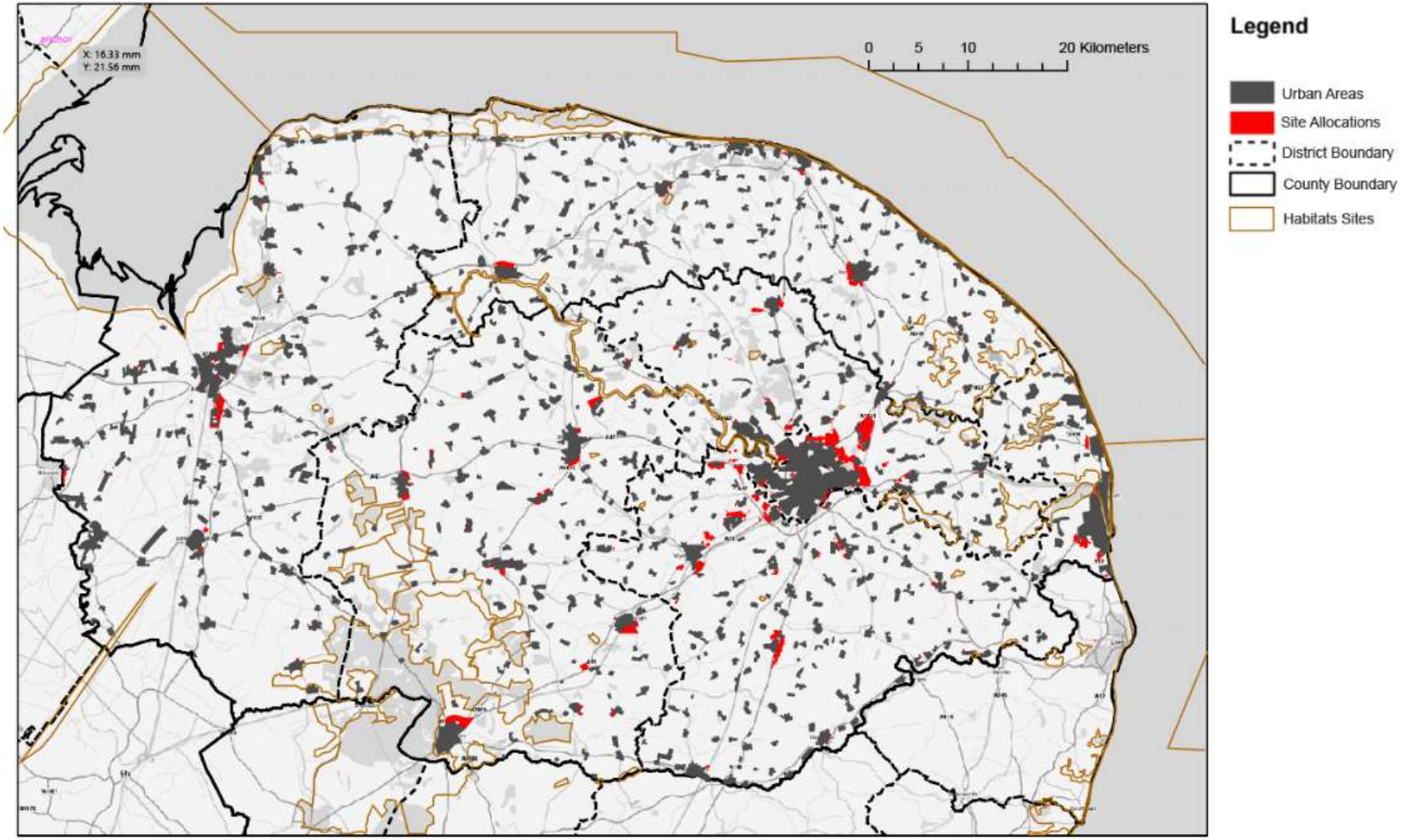
Our review of strategic level data has been collated into Table 1 below. As you can see, all LPAs have standalone GI policies, as well as GI integrated within Strategic Policies in adopted or emerging Local Plans. Furthermore, many of the LPAs also have strategic projects, strategies and/or initiatives such as Infrastructure Plans and GI Strategies in place, which set out a vision, potential projects and implementation programmes. Those LPAs that do not have these in place, such as the Broads and South Norfolk, fall within the region of other wider strategies. For instance, South Norfolk is part of Greater Norwich and therefore projects and initiatives for South Norfolk have been accounted for with the Greater Norwich GI Strategy.

Table 1: GI included at a Strategic Level across Norfolk LPAs

LPA	GI Policy	Strategic Policies with GI integrated	Strategic GI Projects, Strategy and/or Initiatives	Localised GI Policies and Initiatives (i.e. Neighbourhood Plans and AAPs)
Breckland	✓	✓	-	✓
Broadland	✓	✓	✓	✓
Broads	✓	✓	✓	✓
Great Yarmouth	✓	✓	✓	✓
Greater Norwich	✓	✓	✓	✓
Kings Lynn and West Norfolk	✓	✓	✓	✓
North Norfolk	✓	✓	✓	✓
Norwich	✓	✓	✓	✓
South Norfolk	✓	✓	-	✓

To gain a greater understanding of the scale and complexity of the potential GI network, most of the existing data has also been overlaid on to one map to show the breadth of the work that is being undertaken. The baseline map used included the existing OS map showing District boundaries, Local Plan site allocations and Habitats Sites locations.

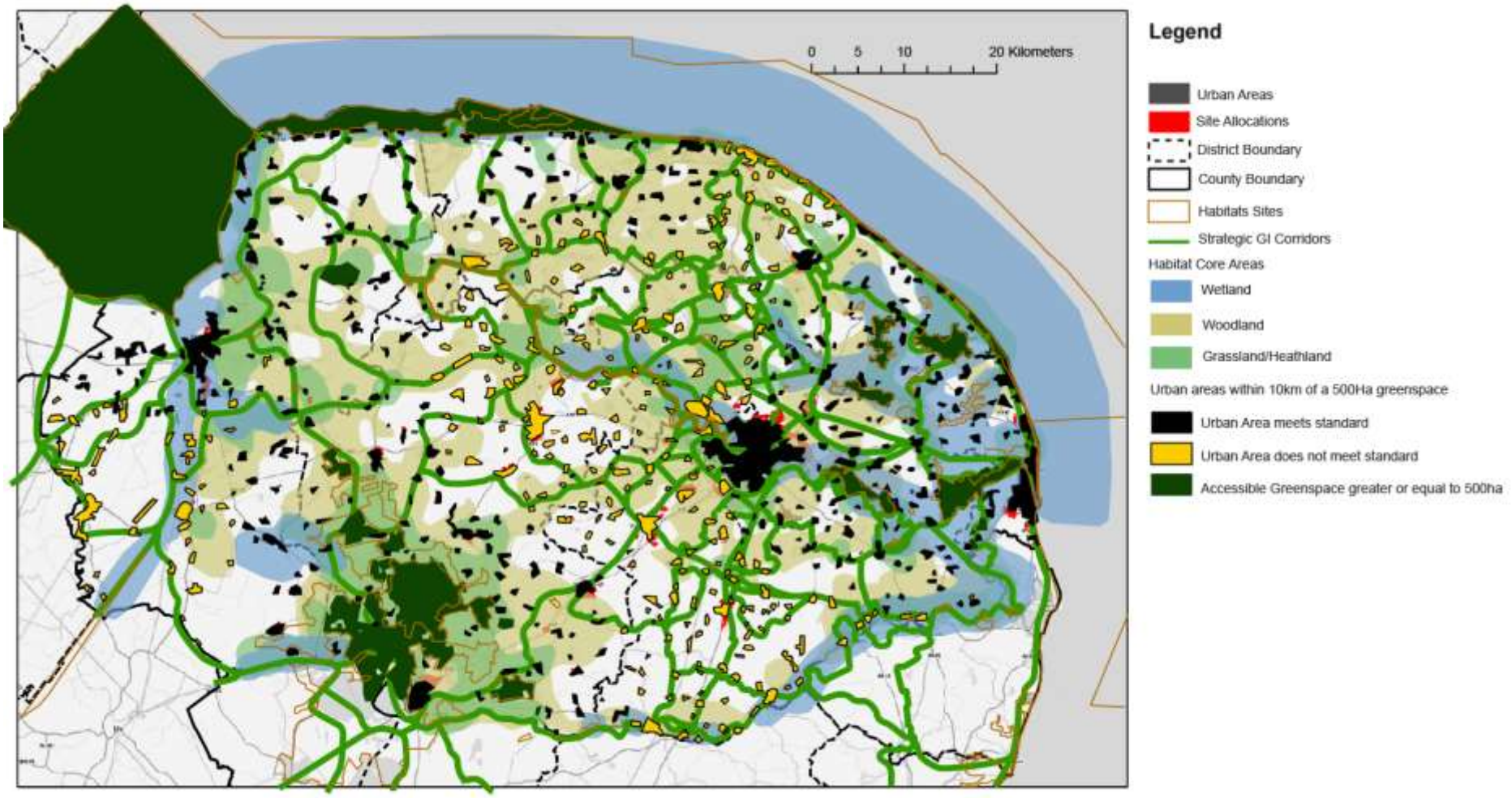
Figure 7: Base Map



Source: Place Services, 2020

This was then overlaid with the 2018 ANGSt data (urban areas within 5km of a 100Ha greenspace) and County-wide GI data; Strategic GI Corridors and Habitat Core Areas. This gives us a greater understanding of the county-wide aspirations for retention and enhancement, versus the SANGs need.

Figure 8: Strategic GI corridors and habitat core areas overlay

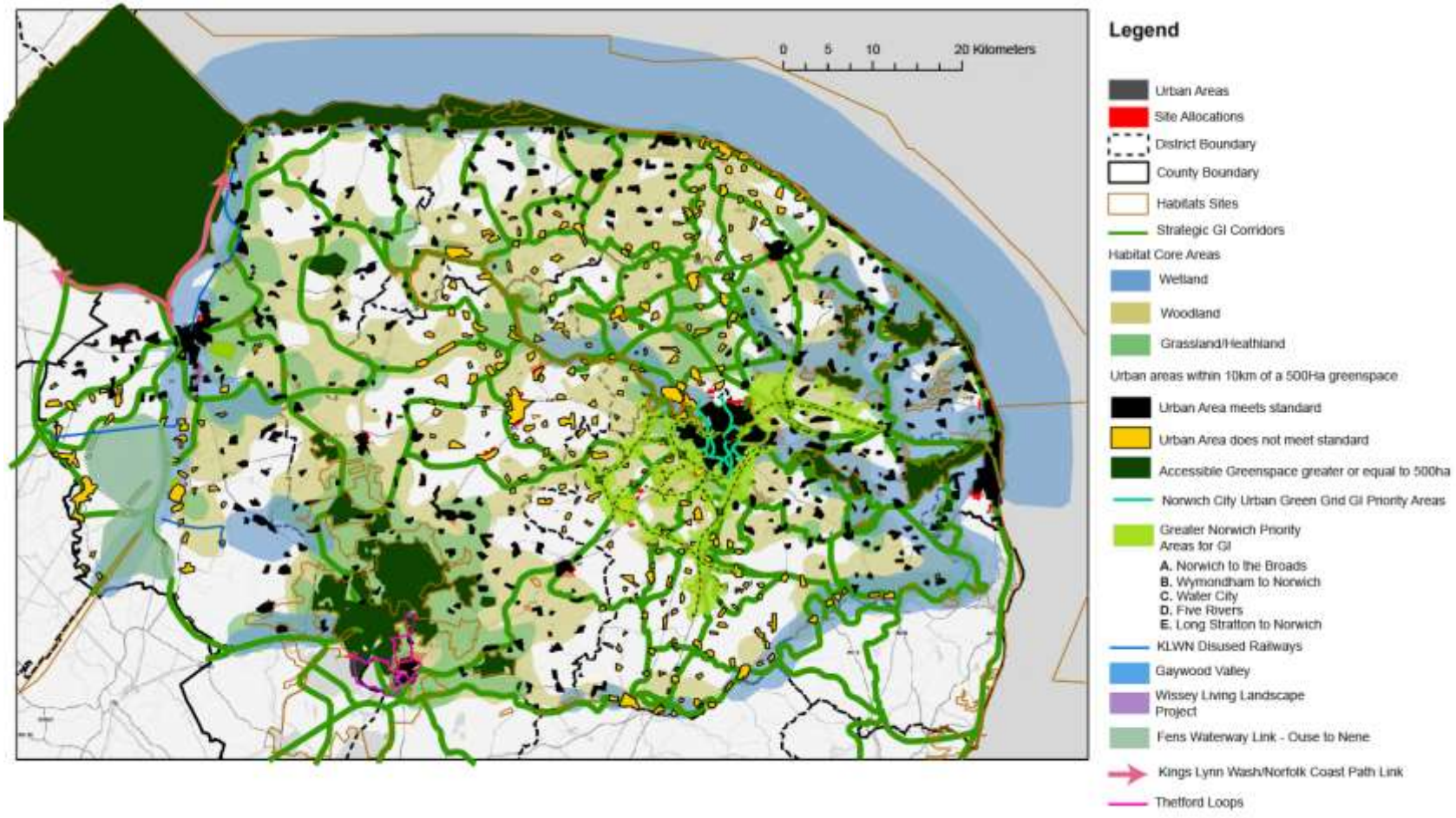


Source: Place Services, 2020

The data shown in Figure 8 provides a more holistic approach to county-wide GI potential, whereas Figure 9 below includes the Strategic projects and initiatives in place such as the Greater Norwich Priority Areas and Thetford Loops.

Although it may seem that there are GI project deficits in some areas such as North Norfolk, the maps do not include the Policies and LPA-wide Strategies highlighted in Table 2. For instance, the North Norfolk Emerging Local Plan and North Norfolk Green Infrastructure Background Paper 5 provide a detailed understanding of the district's GI, strategic initiatives and opportunities that will also help accommodate the pressures associated with impacts on Habitats Sites emanating from the level of growth planned in individual Local Plans.

Figure 9: Plan making level (Strategic) GI Projects and Initiatives



Source: Place Services, 2020

As well as the strategic studies that have been completed, there are also a number of localised plans and strategic policies that are emerging, or in place, that also strengthen the county's GI. Table 2 below provides all of the local studies that provide reference to GI. This includes reference to recreation and connectivity enhancements, habitat protection and enhancements, new development open space, and GI inclusion. Figure 9 also shows all localised initiative areas overlaid on the GI map.

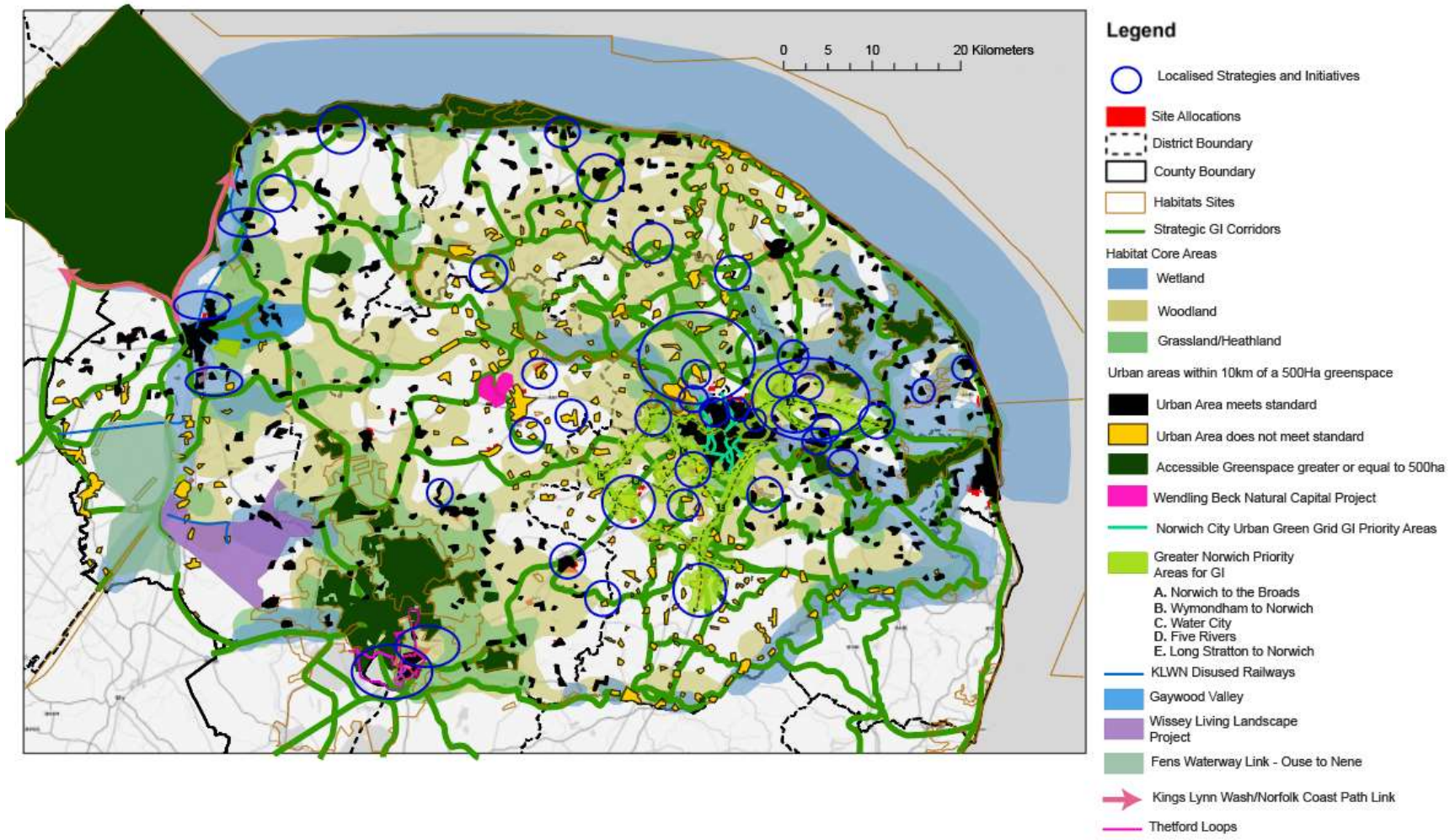
Table 2: Local studies and plans that reference GI

Local initiatives and plans that include references to GI	
Breckland	**Broadland**
Attleborough NP – Objective ESD 1	East Broadland GI Plan
New Buckenham NP (Emerging) – Policy CE1	West Broadland GI Plan
Saham Toney NP (Emerging) – Policy 7E	Acle NP
Swanton Morley NP	Aylsham NP
Yaxham NP – Policy ENV3	Blofield NP
The River Valley Park Concept (RVP Concept)- which is not a policy but one which the Thetford Area Action Plan can contribute to as some policies fall under the River Valley Park project.	Brundall NP
	Drayton NP
	Great and Little Plumstead NP
"T*he RVP concept includes river and wetland habitat restoration and landscape enhancement projects and multifunctional routes connecting within Thetford and out to the wider GI of the region."*	Hellesdon NP
	Horsford NP
	Old Catton NP
The Great Ouse Wetland Vision - *"which is a vision to restore and enhance river and flood plain habitat to benefit biodiversity. It is a joint Environment Agency and Natural England initiative to deliver an enhanced environment for fish and other wildlife."*	Rackheath NP
	Salhouse NP
	Sprowston NP
	Strumpshaw NP
The Wendling Beck Exemplar Partnership Nature restoration project (2020) - This nature restoration project covers approximately 2000 acres north of Dereham, bringing together the key stakeholders and landowners in the river catchment to deliver a catchment focused story of river restoration, natural capital improvement, ecological enhancement and ecosystem services improvements.	Wroxham NP
Kings Lynn and West Norfolk	**South Norfolk**
Brancaster NP	Cringleford NP
Sedgeford NP	Easton NP

Local initiatives and plans that include references to GI	
Snettisham NP South Wooton NP North Runcton and West Winch NP	Mulbarton NP Poringland NP (Emerging) Wymondham AAP Long Stratton AAP
North Norfolk Blakeney NP Corpusty and Saxthorpe NP Holt NP Ryburgh NP	**Great Yarmouth** Rollesby NP (Emerging) Hemsby NP (Emerging)
Norwich River Wensum Strategy (adopted 2018) Development Management Policies Local Plan (2014) - Policy DM3 – Delivering High Quality Design Policy DM6 – Protecting and enhancing the natural environment	**The Broads** The Broads Plan

As can be seen from the figure below, GI initiatives, projects and strategies are located county-wide, with local enhancement opportunities at the forefront of local planning. This will in turn help enhance the county GI network, but also accommodate the pressures associated with impacts on Habitats Sites.

Figure 10: Compiled GI layers Map



2.4.6 Baseline Conclusions

To conclude, on a Strategic level all LPAs have initiatives in place that accommodate the pressures associated with impacts on Habitats Sites emanating from the level of growth planned in individual Local Plans. For many this is in the form of GI Policies, Strategy documents and/or Projects, and local initiatives that will not only enhance the GI network, but in turn also provide improvements to recreation, biodiversity and wellbeing, and action regarding climate change. Strategic development policies relevant to allocations within Local Plans also include requirements for Green Infrastructure provision, which will meet the daily demands for new residents, as well as contribute to the county GI network and strategic green corridors.

Therefore, to meet county-wide GI needs there needs to be a reliance on current county sites, the national initiatives and current emerging Local Plan facilities. In consideration of the mitigation measures explored and proposed within the RAMS section of this Strategy document, we consider (based on the data collected and assessed from all LPAs and Annexes I and II of the Natural England Confirmation of Approach Taken letter (see Appendix 1)) that there is no specific need for a 'County-wide / level' GI scheme solution to mitigate recreational effects on Habitats Sites. This is because the strategic GI policies, objectives and initiatives LPAs have in place or emerging, are appropriate given the level of growth expected across the County.

2.5 Opportunity Areas for Improving the GI Network at the Strategic level

2.5.1 Relationship with the RAMS

On review, there are several local, district and county-wide strategies and projects in place across Norfolk that are appropriate to avoid the impacts on Habitats Sites emanating from the level of growth planned for in the individual LPA Local Plans. For this reason, and in consideration of the mitigation measures explored and proposed within the RAMS section of this Strategy document, there is no specific need for a 'County-wide / level' solution to mitigate recreational effects on Habitats Sites and LPAs should continue to work towards strategic GI policies, aims and objectives that are already in place or emerging at the plan making level, and local initiatives.

2.5.2 Strategic Opportunity Areas (SOA)

Although there is no specific need for County-wide projects, given the NE recommendation for the provision of well-designed open space/GI on-site of residential developments within the identified Norfolk RAMS ZOI (or contributions towards strategic GI within LPA areas (see Appendix 1 – Annex I and II)), Strategic Opportunity Areas (SOA) for GI enhancements have been identified across the County. No significant studies have been completed to decide their location; instead, the location of these SOAs are based on workshop feedback, current projects and initiatives, ANGSt deficits, existing GI provision, Habitats Sites and predicted housing growth. Site opportunities include existing open spaces that could be enhanced, new EGI provision and recreational route improvements that will create a significant draw and 'day out' qualities similar to that of Country Parks/SANGs.

It is important to note that these SOAs do not need to be brought forward by LPAs to meet the strategic need, nor are they directly required in regard to current recreational pressures. The SOAs are purely recommended as additional opportunities that could be explored as part of further studies in the future. If LPAs wanted to investigate the opportunities further, we would advise the SOAs and any OS

within them are audited against SANG quality criteria (see Appendix 6) to assess the site-specific delivery projects that need to be delivered to meet these requirements and in turn deflect residents from visiting Habitats Sites.

2.5.2.1 Methodology

As stated above, the SOAs were not derived from a significant study and therefore no site surveys were undertaken. As a substitute, the following steps were taken:

1. Baseline Review

This was purely a desk-based study to identify and map existing data available by LPAs and the County Environment Team. This includes existing green spaces, corridors and links, potential projects that have been included in existing planning and GI-related documents, such as Area Action Plans. As this review was based on existing information, there are inconsistencies in the level of information available from each LPA area, which impacts the detail available in this strategy.

2. Stakeholder Workshops

These involved talking to key stakeholders to identify what GI enhancements, deficits and project opportunities are available across the Norfolk area. Maps were printed and brought along to the workshops to allow stakeholders to mark on the location of potential GI projects (See Appendix 5).

The key stakeholders included the majority of LPAs as well other interested parties such as Natural England, Norfolk County Council's Environment Team, Norfolk Wildlife Trust and Royal Society for the Protection of Birds (RSPB). As with the Baseline Review, the data collected from these workshops varied per LPA and therefore there are inconsistencies in the data presented in Appendix 5.

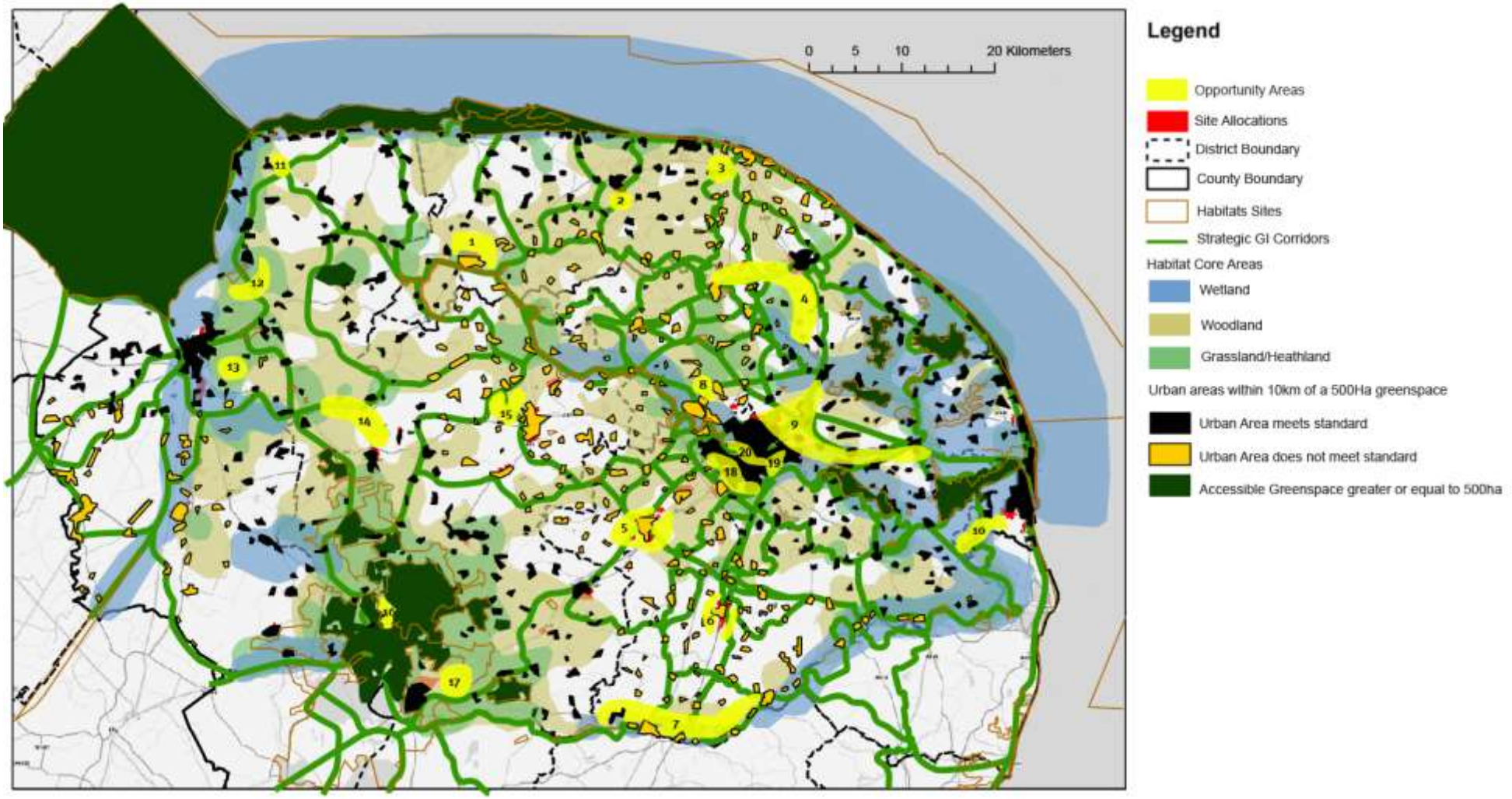
3. Selection and Review

The opportunity areas were sent to all the stakeholders involved in this Strategy for consultation. Post review, Opportunity Areas were amended and added to form the completed Strategy document.

2.5.2.2 Strategic Opportunity Area Locations

The figure below shows the location of these Opportunity Areas and the following sub-sections offer further information regarding each of these per LPA area where relevant.

Figure 11: Norfolk GI Strategic Opportunity Areas

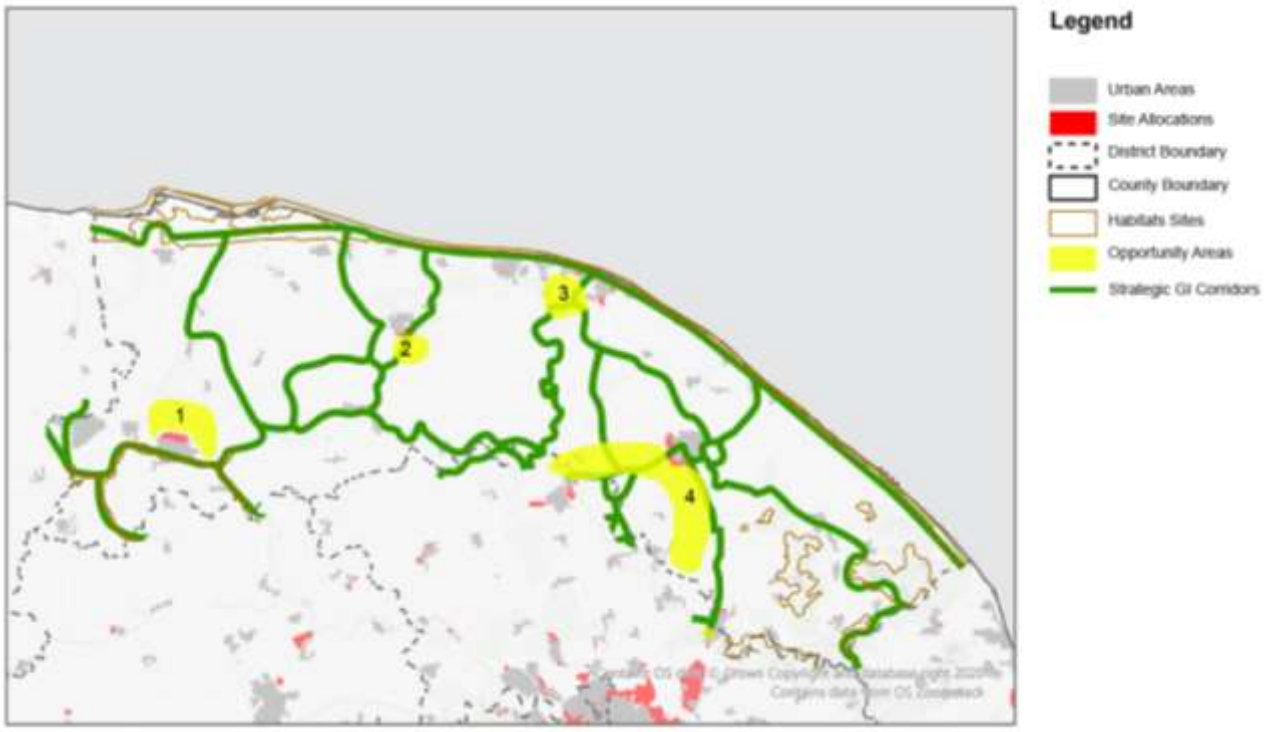


Source: Place Services, 2020

2.5.2.1 North Norfolk

In North Norfolk, the GI network is diverse, with a mosaic of fields, hedgerows and woodlands as well as a long stretch of AONB coastline. It is home to the Norfolk Coast Path (National Trail) as well a number of national cycle routes. In terms of development, Cromer, Fakenham and North Walsham are defined as 'Large Growth Towns' and have been identified as the areas where the majority of new commercial, residential and other types of development will take place. On this basis, five SOAs are proposed:

Figure 12: Strategic Opportunity Areas for North Norfolk



Source: Place Services, 2020

SOA 1 - Fakenham is due to have a large influx of development, with approximately 800-900 dwellings proposed north of the town, on the land north of Rudham Stile Lane. Currently there are no publicly accessible natural or semi-natural green spaces on the site, or within 1 km of the site, and all of the nearest semi-natural or natural greenspace sites are within (or abut) the sensitive SAC/SSSI Wensum River Valley corridor.

Furthermore, Fakenham is relatively poorly served by its public rights of way network and therefore there is little connectivity to the wider countryside. None of the Norfolk Trails pass close to Fakenham and it would be a significant challenge to try to walk to the National Trail routes (14km to the Norfolk Coast path and 15km to the Peddars Way) from there. For these reasons, significant Enhanced GI would be desirable north of the A148 Fakenham bypass. This would help to relieve pressure on sensitive routes to the south of the town and along the River Wensum corridor. This would also likely attract residents and visitors that would otherwise continue travelling north to the coast.

The SOA falls within the Woodland Core Area and lies north of the Strategic GI corridor. Suitable

Accessible Natural Greenspace within this area should include:

- Parking for visitors
- Minimum of a 2.7km Walking Route
- Inclusive and accessible – meet disability needs and provide for varied groups
- Wayfinding in the form of signposts and advertisements.
- Naturalistic Space that should include:
    - Woodland
    - Open (non-wooded) areas
- Play facilities

SOA 2 - Holt Country Park is owned and managed by North Norfolk District Council and lies on the edge of the Norfolk Coast Area of Outstanding Natural Beauty (AONB). It consists of heathland and woodland landscapes that can be explored by walking and cycling. Dogs are allowed on site and it is open all year round. Improvements such as a café and upgraded playground have already taken place, which make it a great attraction within the local area. However, further enhancements could be implemented to attract a wider audience. Given its sensitive proximity to the AONB and SSSI, careful consideration also needs to be given to habitat and biodiversity creation and enhancements to benefit the GI network. Other enhancements that could be considered include:

- Art and Sculpture
- Facilities for less able visitors, such as easy trails, seats and information available in accessible formats
- Educational events
- An outreach programme promoting your site to less represented sectors of the community

SOA 3 - Enhancements to Weaver's Way and circular routes around Great Wood and Felbrigg would provide an attractive walking and cycling route for residents and visitors that deter people from visiting the coast. Initiatives could include:

- Clearly sign-posted or advertised in some way
- Various walking routes for different capabilities
- Well maintained footpaths, preferably unsurfaced where possible to avoid an urban feel.

SOA 4 - North Walsham is well served by the Norfolk Trail network with 2 Trails providing three routes out of town. The 61-mile Weavers Way is a long-distance route that connects Cromer to Great Yarmouth via North Walsham. The Weavers Way also connects with The Norfolk Coast Path, Angles Way, Wherryman's Way and the Paston Way. There is also a connection to the Bure Valley Way and Marriot's Way at Aylsham.

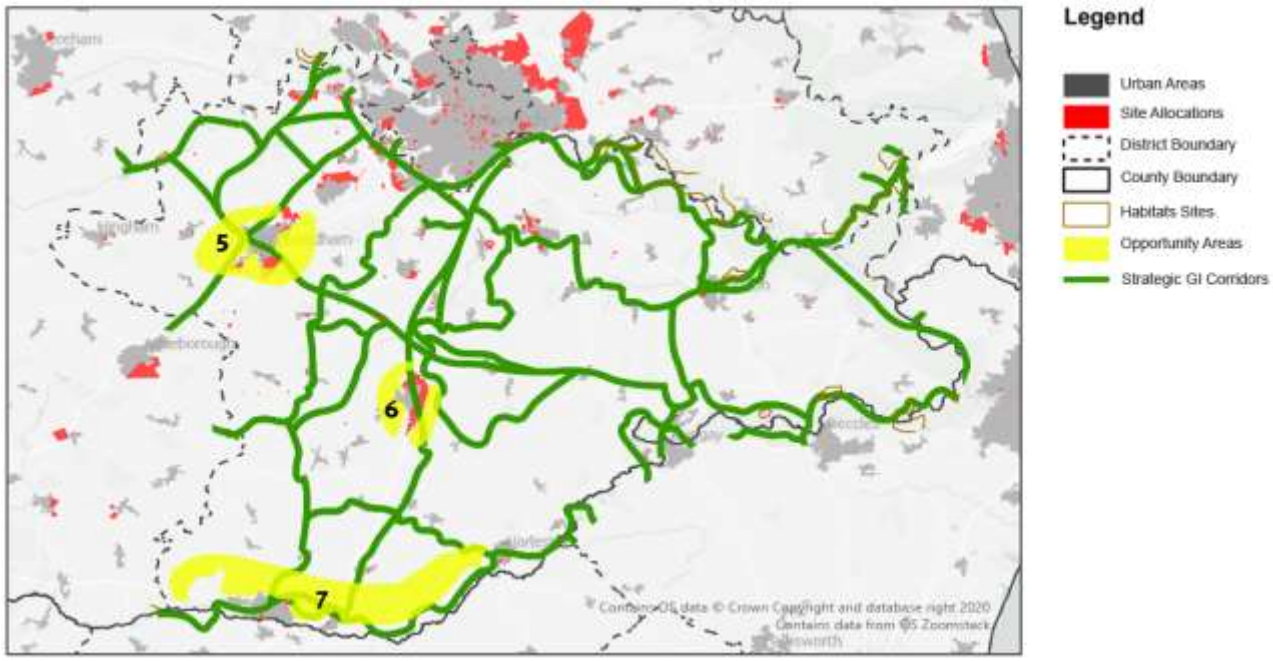
Additionally, North Walsham is proposed to have the largest influx of development across North Norfolk in the form of a Sustainable Urban Extension (SUE) known as 'The North Walsham Western Extension'. The site is expected to deliver a range of infrastructure and community facilities including a new western link road, employment land, a primary school and other key infrastructure. The site covers some 95ha of open countryside on the west of the town and would envelop a number of public rights of way and The Weavers Way. Towns and Village to the west and south west of North Walsham currently

do not meet the 'within 5km of a 100Ha greenspace' ANGSt. Therefore, with this large expansion expected, enhancements are needed to existing Public Rights of Way (PRoW) access, such as Weaver's Way and Paston Way, as well as enhancements to recreational opportunities in the local area to attract residents and local visitors. For this reason, the land south-west of North Walsham has been determined as an Opportunity Area; specifically, North Walsham Wood, Lord Anson's Wood, Bacton Wood and Perch Lake Plantation and the surrounding area. Collectively these areas could become a new Country Park/SANG (or equivalent) and enable access into surrounding PRoW and long-distance trails. Currently Lord Anson's Wood is an allocated site in Norfolk Waste and Minerals Local Plan for sand and gravel extraction. However, it is recommended it be restored to heathland with public access, which could be incorporated into any future project.

2.5.2.2 South Norfolk

South Norfolk is a landscape of arable farmland intersected by river valleys. As with Broadland, South Norfolk is working to produce the Greater Norwich Local Plan (GNLP) through the Greater Norwich Development Partnership (GNDP). Although locally there a multiple GI projects taking place, three SOAs have been recommended.

Figure 13: Strategic Opportunity Areas of South Norfolk



Source: Place Services, 2020

SOA 5 - It is predicted that Wymondham will grow between now and 2026 with a minimum of 2,200 new homes and a further 20 hectares of employment land. Furthermore, The GNDP Green Infrastructure (GI) Strategy (2007) identifies Wymondham as a point where two strategic (and one local) Green Infrastructure corridors meet. The Wymondham Area Action Plan has set a vision for 'Kett's Country – a virtual Country Park'; a pastoral landscape of grassland, woodland, farmland, hedgerow and wetland habitats. Other enhancements include:

- Minimum of a 2.7km Walking Route (preferably circular)
- Links to long distance footpaths

- Woodland planting
- Management plans for biodiversity, geodiversity and preservation of the historic environment

SOA 6 - Long Stratton has been identified in the Joint Core Strategy for at least 1,800 new dwellings and employment opportunities. This is also required to deliver a new bypass for the village, alongside other infrastructure. Long Stratton has also been identified as containing core woodland areas. Within the area there are also a number of key sites including Fritton Common and Tyrells Wood SSSIs, Wood Green and Tyrells Wood/New Plantation County Wildlife Sites, ancient replanted woodland at The Grove and smaller non-designated sites such as Morningthorpe Green. As development takes place, it is important that the GI network in and around Long Stratton is enhanced and developed to ensure suitable levels of GI quality and quantity are available in the local area, especially given many of the towns and villages in the surrounding area do not meet the ANGSt for being within 5km of a 100Ha AGS. For these reasons, initiatives such as the following could be developed:

- Minimum of a 2.7km Walking Route (preferably circular)
- Links to long distance footpaths
- Enhancements to natural green space, such as woodlands and grass and heathlands
- Unrestricted spaces for dogs to be off lead
- Signposts and other forms of wayfinding

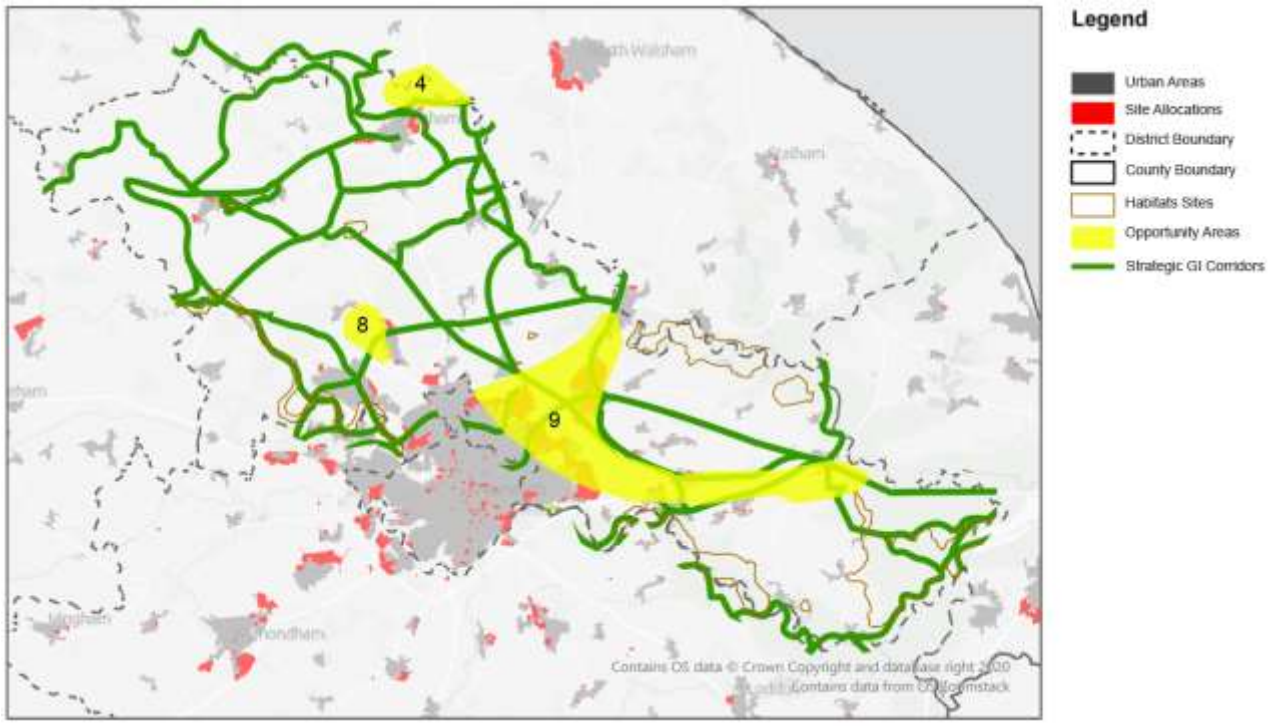
SOA 7 - Housing growth planned in Diss suggests that enhancements could be made to the surrounding walking and cycling network. Although the area has plentiful PRoW, assurance that these are connected with a range of circular routes of different lengths, would be desirable. There are also opportunities to connect and enhance the Boudicca Way (Norwich to Diss) with a link onto Angles Way which follows the River Waveney. Furthermore, with the Common Land Creation Scheme, a programme of improving access to and creating new areas of Common Land for public recreation, further enhancements to the land surrounding the recreation routes could be achieved to provide attractions for those with other interests. This could include:

- Various walking routes for different capabilities
- An outreach programme promoting your site to less represented sectors of the community
- A programme of events and guided walks, promoting healthy living and environmental awareness
- Brown and white tourist directional signs

2.5.2.3 Broadland

Broadland District is predominantly rural, covering an area of 213 square miles to the north of the City of Norwich, Norfolk. It embraces large areas of low-lying arable land, and to a lesser extent, pasture farmland. It also contains numerous woodlands and plantations along with areas of historic parkland. Broadland District Council is working together with Norwich City Council and South Norfolk District Council to produce the Greater Norwich Local Plan (GNLP) through the Greater Norwich Development Partnership (GNDP). Although locally there a multiple GI projects taking place, on a county-wide level two SOAs fall within the district, with North Norfolk SOA 4 overlapping into Broadland, north of Aylsham.

Figure 14: Strategic Opportunity Areas for Broadland



Source: Place Services, 2020

SOA 8 - The North West Woodland is situated north west of Norwich and has already been identified as a project area in the West Broadland GI Strategy (GNIP Project GIP8.1 - North west Forest & Heaths), which seeks to develop a primary corridor connecting woodlands and heaths to the north-west of Norwich. An area of land known as the Houghen Plantation that falls within this Opportunity Area and is surrounded by common land has also already been purchased by Broadland District Council with plans to turn it into a Country Park. Project opportunities include:

- Minimum of a 2.7km Walking Route (preferably circular)
- Links to long distance footpaths
- A variety of habitats for user experience
- Visually sensitive way-markers
- Volunteering programmes
- Play facilities

SOA 9 – This area encompasses the Broadland Way, which is the 'missing link' of the 'green loop' between Wroxham and Norwich (Thorpe St. Andrew). If developed and enhanced, it would link up with Marriott's Way and the Bure Valley Path to create an almost circular route across the Broadland District. This would not only provide additional recreational routes, but also enable new residential developments, such as the proposed 300 home mixed use development in North Rackheath, to embed itself into the wider GI network. In addition to this, the southern corridor lies along two major arterial routes; the A1151 and the A47 which lead directly to the Habitats Sites; therefore GI enhancements could provide a direct interception. This route is also referred to in the East Broadland GI plan and the Burlingham Estate (identified in the GNIP) is also situated within the Opportunity Area. New facilities

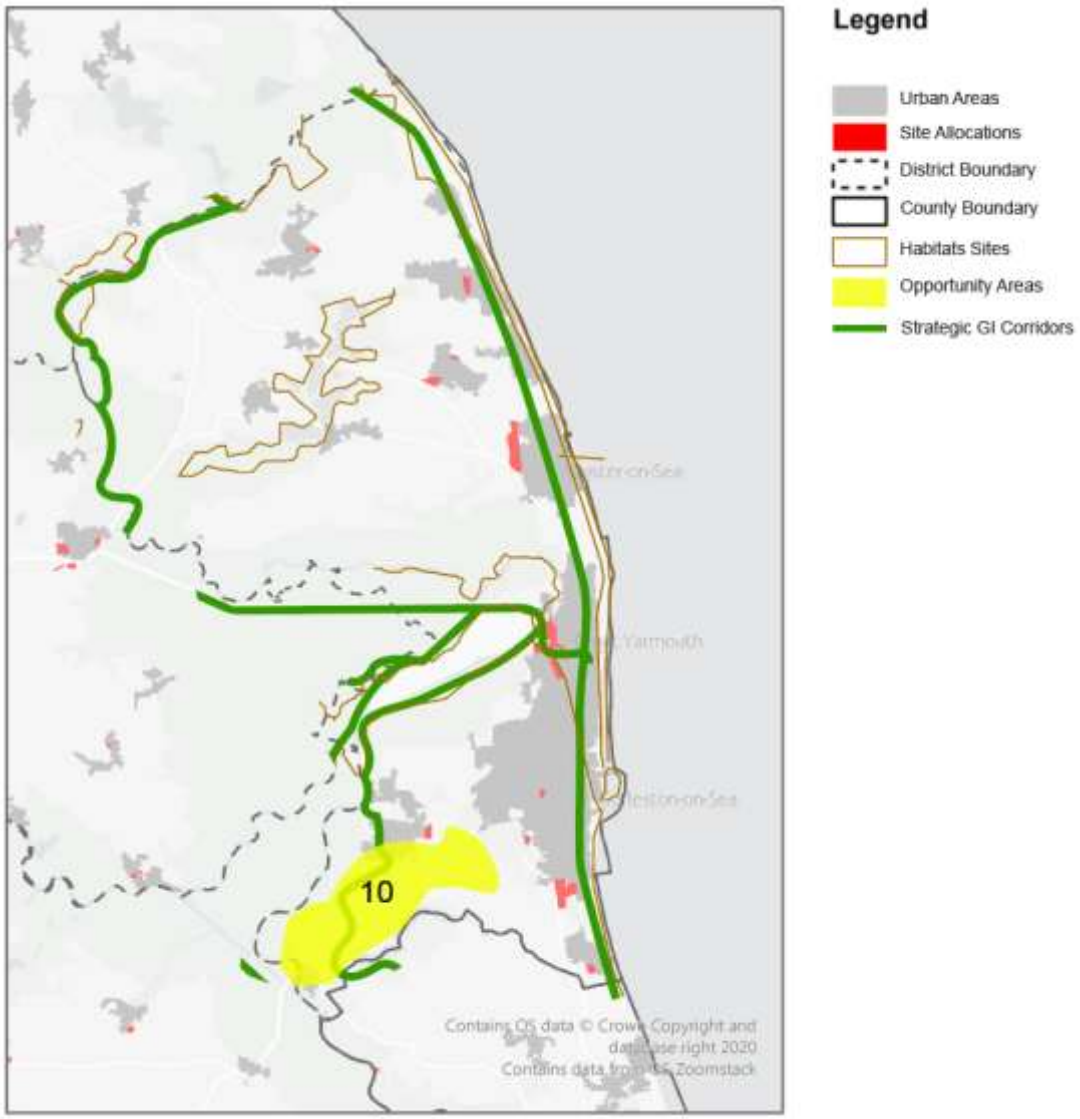
referred to in the East Broadland GI plan include:

- New volunteer group and events
- Accessible routes for all user groups
- New woodland planting
- Improved car parking provision
- Art and Sculptures

2.5.2.4 Great Yarmouth

The Borough's natural environment is rich in biodiversity with a total of 223.5 ha of open space provision. This includes a variety of public parks, ornamental gardens and general amenity spaces which are managed by Great Yarmouth Borough Council. The current population is approximately 98,700 and growing, with it predicted to reach 105,400 by 2021. For this reason, the Great Yarmouth Local Plan has defined two strategic locations for major residential and employment development, at Beacon Park and the Waterfront Area.

Figure 15: Strategic Opportunity Areas for Great Yarmouth



Source: Place Services, 2020

SOA 10 - The Beacon Park SUE (Core Strategy - Policy CS18g) is for approximately 1,000 new homes, and construction is already underway. To help meet the demands of this growth along with other emerging growth areas such as 'Land south of Links Road, Gorleston-on-Sea' for 500 dwellings (Final Draft Local Plan Part 2 - Policy GN1), it is proposed that consideration could be given to options to open up routes from the railway lines for recreation could be explored, along with the creation of a potential for a new 'Country Park' environment to reduce or prevent the likely increase in visitor numbers on Habitats Sites. If considered, to maximise its purpose to redirect recreational visitors the following initiatives should be considered could be provided:

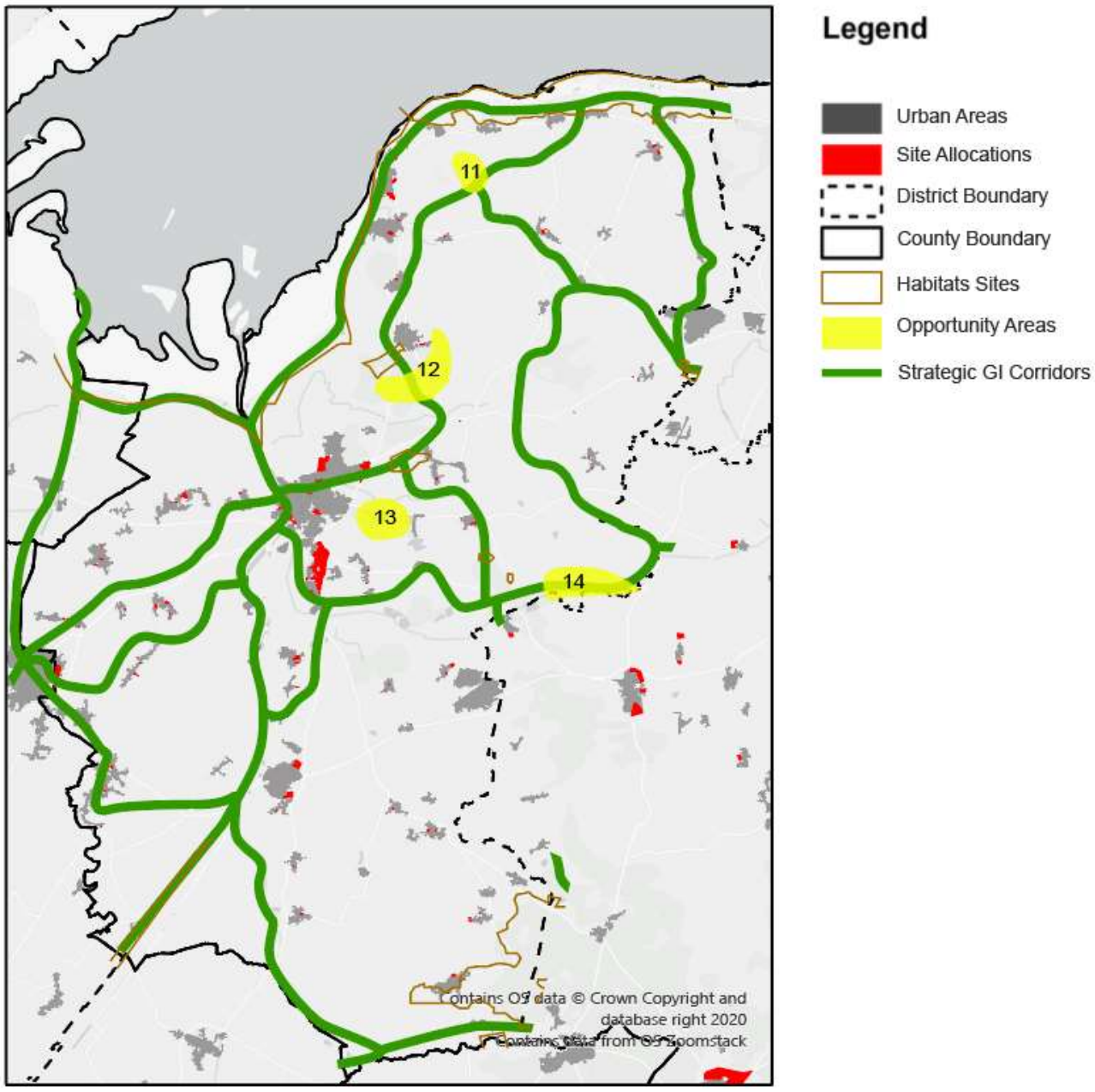
- Parking for visitors
- Minimum of a 2.7km Walking Route
- Links to long distance footpaths
- Inclusive and accessible – meet disability needs and provide for varied groups

- Wayfinding in the form of signposts and advertisements.
- Unrestricted areas for dogs to be off lead.
- Naturalistic Space that should include:
    - Woodland
    - Open (non-wooded) areas
    - Wetlands

2.5.2.5 King's Lynn and West Norfolk

King's Lynn and West Norfolk is predominantly rural in character and has a very diverse and varied landscape. In addition to the Borough's three main towns of King's Lynn, Downham Market and Hunstanton, there are more than one hundred villages of varying sizes. On this basis, three SOAs have been identified.

Figure 16: Strategic Opportunity Areas for King's Lynn and West Norfolk



Source: Place Services, 2020

SOA 11 - The home of conservationist Lord Melchett, Courtyard Farm has provided circular walks around the farm, showing the work that they do and the specially created wildlife habitats on site. There are two way-marked circular walks of 2 miles and one 6 mile walk around the farm, on public footpaths, as well as several miles of permissive paths. This provides an opportunity to enhance the area further and provide activities that can make the site a destination for all. Furthermore, there are opportunities to connect into the Ringstead Loop, a 23-mile circular walk and also Peddars Way National Trail. Other potential enhancements include:

- Wayfinding and interpretation signage

- Inclusive and accessible – meet disability needs and provide for varied groups

SOA 12 – A total of 142 hectares of the Queen's private estate at Sandringham was designated as a Country Park in 1968. Since then it has been enlarged to include nearly 243 hectares of parkland. The Country Park is an ideal destination for local residents and visitors from afar with nature trails, a café and shop. For these reasons, there are many opportunities to work with the Sandringham Estate to enhance the Country Park further and create key connections into the wider GI network by:

- Linking to long distance footpaths
- Varied habitat improvements (woodland, heathland and wetland)

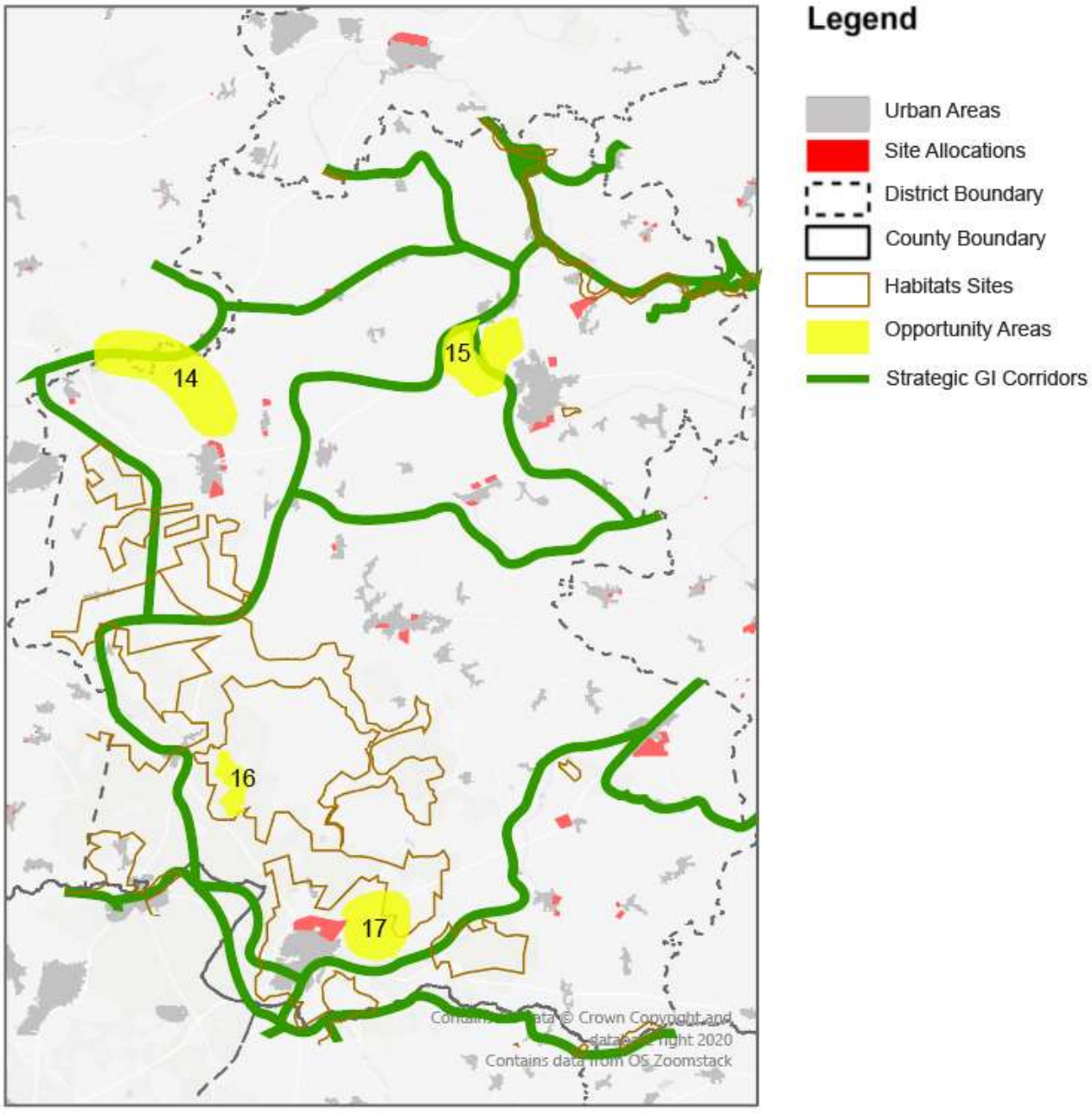
SOA 13 - King's Lynn housing growth means the demand for infrastructure has grown. It is already proposed that new Green Infrastructure will be provided in connection with the strategic housing developments at a location around the fringe of the town, with further opportunities sought to enhance provision in or around the Gaywood Valley and in the Bawsey/Leziate Countryside Sports and Recreation Zone. Therefore, it is suggested that a site outside the settlement would be beneficial. Bawsey Pits, a former quarry, has been restored back to grassland with associated lakes. As recommended by stakeholders, it makes a key location for GI enhancements and has the potential to become a larger Country Park if enhancements such as the following are made:

- Parking for visitors
- Minimum of a 2.7km Walking Route
- Inclusive and accessible – meet disability needs and provide for varied groups
- Wayfinding in the form of signposts and advertisements.
- Naturalistic Space that should include:
    - Woodland
    - Open (non-wooded) areas
- Play facilities

2.5.2.6 Breckland

In the Breckland emerging Local Plan new developments will be expected to provide opportunities to incorporate Green Infrastructure and enhance existing connectivity, recognising the intrinsic value of the Green Infrastructure network and ensuring that the functionality of the network is not undermined as a result of development. To coincide with this, four SOAs are proposed to enhance the GI network.

Figure 17: Strategic Opportunity Areas for Breckland



Source: Place Services, 2020

SOA 14 - It is currently proposed that Swaffham will provide an additional 1,612 new dwellings over the period of the emerging Local Plan. Of these 1,612 dwellings, 1007 have either already been completed or are committed, with further 605 dwellings proposed up to 2036. The River Nar is a chalk stream and like many rivers it has been highly modified with mill and priory diversions, culverts, fords, water meadows and land-drainage dredging. Currently there is a restoration project sponsored by the Norfolk Rivers Trust via the Catchment Restoration Fund to 're-wild' the river. Alongside this project there are opportunities to implement enhanced suitability GI to improve connectivity, provide circular routes for cycling and walking and countryside activities, along with:

- Inclusive and accessible-meet disability needs and provide for varied groups
- Wayfinding in the form of signposts and advertisements
- Improvements to wetland areas

SOA 15 - The Wendling Beck Exemplar Partnership is a landscape scale nature restoration project covering approximately 2,000 acres north of Dereham. The project brings together the key stakeholders and landowners in the river catchment, including; Norfolk Rivers Trust, Breckland District Council and NWT to deliver a catchment focused story of river restoration natural capital improvement, ecological enhancement and ecosystem services improvements.

The ambition is to use Biodiversity Net Gain policy from the forthcoming Environment Bill to help finance and deliver a new approach to conservation management. The project will run for a minimum of 30 years, but the vision is to develop a habitat bank framework that will enable it to run in perpetuity. Aims and objectives include:

- Systematic conservation planning approach
- Sustainable financial model
- Habitat restoration and creation to support biodiversity
- River restoration and enhancement
- Public access and creation of quiet recreational space
- Linking to wide GI connections

SOA 16 - It is proposed throughout the stakeholder workshop process that a secondary Forestry England site could be proposed close to the northern edge of Thetford Forest. Currently there is a wide range of recreational activities available in other locations across the Forest, therefore it was suggested that an ecological park would be more appropriate to attract visitors with different interests. It is considered that any proposal would benefit from having:

- A variety of habitats for user experience
- Visually sensitive way-makers

SOA 17 - Thetford has one of the district's largest residential development allocations, with a large SUE of approximately 5,000 new homes, known as Kingsfleet, already granted planning permission. Work has already commenced on Phase 1, with the development due to be completed by 2024. Some of the key requirements of the development is it provides an integrated walking and cycling network, that connects into Thetford's existing network. However, it is felt that further opportunities lie north west of the site for enhance suitability GI that could take away pressure from other areas of Thetford Forest. From a desk top analysis, it would be recommended that numerous recreation routes could be implemented with connections to plantation woodland and Brettenham Nature Reserve, further North West of Thetford. Project initiatives could include:

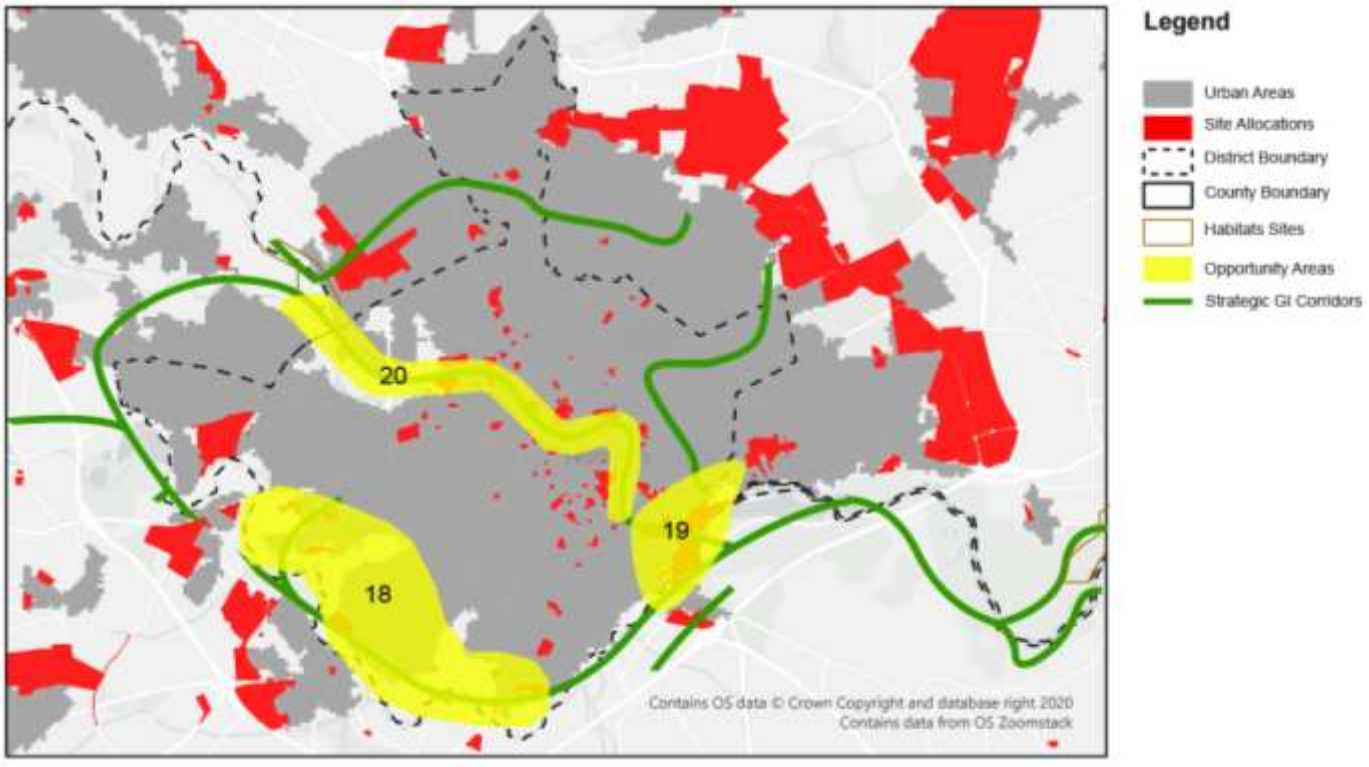
- Parking for visitors
- Minimum of a 2.7km Walking Route
- Links to long distance foot paths
- Inclusive and accessible-need disability needs and provide for varied groups

- Visually sensitive way-markers
- Naturalistic Space that should include:
    - Woodland
    - Open (non-wooded) areas

2.5.2.7 Norwich

Greater Norwich (Norwich City Council, along with South Norfolk Council and Broadland District Council) have recently published the GNIP. The GNIP identifies several projects across the Greater Norwich area, with many already being progressed and delivered. This includes but is not limited too; Kett's Heights biodiversity improvements, Earlham Millennium Green Improvement Project, and Castle Gardens. This, along with the emerging GN Local Plan are being used to support the City and the surrounding area in delivering strategic infrastructure to support growth, provide people with a high quality of life and enhance the natural environment. Many projects have already been scoped out, with some in the feasibility stage and others being delivered through a range of funding streams. To assist with delivery, the SOAs below reflect a number of these projects:

Figure 18: Opportunity Areas for Norwich



Source: Place Services, 2020

SOA 18 – The Yare Valley GI Corridor / Yare Valley Walk / Norwich Fringe South is an expanding area of enhanced Green Infrastructure, including the River Yare, a number of woodland parcels, and marshland habitats that are under increasing environmental pressures. As housing needs in the area grow, it is important that POS improvements, pedestrian and cycle connectivity and habitat enhancements are delivered. The Norfolk Fringe Project has already helped deliver many projects, including a new boardwalk that makes areas of the man-made broad at the University of East Anglia accessible in wet

conditions.

However, there are other expected projects in the pipeline that are in early fruition and need further investment and design work. These projects include:

- Bowthorpe and Earlham Marshes paths
- Yare Valley Path Northern extension
- Danby Wood improvements
- Earlham Woods enhancements

SOA 19 – The emerging Greater Norwich Local Plan allocates approximately 50ha of land in east Norwich (the 'East Norwich Strategic Regeneration Area' comprising Carrow Works, the Deal Ground/ May Gurney site, and the Utilities site) for comprehensive mixed use development with the potential for significant new housing and employment in this prominent gateway location. A masterplan is in the process of being commissioned which will form the basis of a supplementary planning document to supplement the GNLP policy. The draft (Regulation 18) policy 7.1 notes, in relation to the East Norwich Strategic Regeneration Area, the need to protect and enhance green infrastructure assets, corridors and open spaces within the area, including enhancing linkages from the city centre to the Broads, the wider rural area and elsewhere in Norwich, to include pedestrian /cycle links between Whitlingham Country Park and the city centre.

SOA 20 –The River Wensum that runs through Norwich has already been identified as an important GI corridor within both the JCS and GNIP. As a result, the River Wensum Strategy (adopted 2018) was produced with the aim of delivering the vision of improving the management of the river corridor and its surroundings, increasing access to (and use of) the area by all, including enhanced connectivity with the Norfolk Trails network, as well as enhancing the natural and built environment. Site specific projects for this area have already been derived and we would recommend implementation strategies for these continue. These projects include:

- Complete key sections of the riverside walk between New Mills and Trowse Swing Bridge
- Improved accessibility of the riverside walk in the city centre to make it accessible for all
- Enhanced links between the city centre and Whitlingham, and enhance connectivity to the Norfolk Trails network.

2.6 Recommendations

2.6.1 Overview

The Natural England RAMS Interim Advice Letter (Appendix 1) recommends that "large developments (50+ houses) include green space that is proportionate to its scale to minimise any predicted increase in recreational pressure to designated sites, by containing the majority of recreation within and around the developed site." In this Strategy, this is defined as EGI and given the importance of deflecting recreation pressure from Habitats Sites in the first instance, it is advised that it would be beneficial to review existing or proposed localised Green Infrastructure Strategies and/or policies to include enhancements proposed through EGI.

The Natural England Interim Advice Letter also states that "even when well-designed, 'on-site'

provisions are unlikely to fully mitigate impacts when all residential development within reach of the coast is considered together 'in combination'" and therefore they advise that "consideration of 'off-site' measures (i.e. in and around the relevant European designated site(s)) are also required as part of the mitigation package for predicted recreational disturbance impacts in these cases." GI may be necessary at the local (development site) level, to be secured by the LPA at the application stage and strategic (Local Plan making) level to divert and deflect visitors from the Habitats Sites. This strategy has discounted the need for additional County-wide measures. However, outside of Local Plan periods, this may not be the case and therefore the need will need to be re-assessed. For this reason, we would also recommend that an EGI Quality audit is undertaken of all existing open spaces.

2.6.2 EGI Audit

The effectiveness of EGI and SANGs as mitigation relies upon location and design. Therefore, it is necessary for measures to be of a certain quality. Whilst no formal guidance has been produced to determine what criteria may be required to provide suitable SANG or EGI to functionally divert recreational pressure from the Habitats Sites, many audits for other local authorities have based their assessment on criteria agreed by Natural England to provide SANG for the Thames Basin Heaths SPA (Provided in Appendix 3).

2.6.2.1 EGI Quality Criteria

The following guidelines for 'EGI quality' are taken from the Natural England SANGs Guidance and have been revised where necessary to meet the Norfolk need:

Accessibility	▪ The amount and nature of parking provision should reflect the anticipated use of the site by visitors. It should provide an attractive alternative to parking by the part of the Habitats Site for which it is mitigation. ▪ Car parks should be clearly signposted and easily accessed. ▪ New parking provision should be advertised as necessary to ensure that it is known of by potential visitors.
Networks of sites	▪ Because a large proportion of visitors to the Habitats Sites have long walks or run or bicycle rides the provision of longer routes is important. ▪ The design of routes within sites smaller than about 40 ha will be critical to providing routes of sufficient length and attractiveness for mitigation purposes.
Paths, Roads and Tracks	▪ Findings suggest that you should aim to supply a choice of routes of around 2.7km in length with both shorter and longer routes of at least 5km as part of the choice, where space permits. ▪ Paths do not have to be of any particular width, and both vehicular-sized tracks and narrow PRoW type paths are acceptable to visitors. ▪ Paths should be routed so that they are perceived as safe by the users, with some routes being through relatively open (visible) terrain (with no trees or scrub, or well-spaced mature trees, or wide rides with vegetation back from the path), especially those routes which are 1-3 km long. ▪ Paths should be surfaced but not necessarily tarmac paths, particularly where these blend in well with the landscape.

Artificial Infrastructure	▪ Generally, an urban influence is not what people are looking for when they visit the Habitats Sites and some people undoubtedly visit the Habitats Sites because they have a naturalness about it that would be marred by such features. ▪ It would be expected that sites have adequate car parking with good information about the site and the routes available. Some subtle way-marking would also be expected for those visitors not acquainted with the layout of the site. ▪ Other infrastructure would not be expected and should generally be restricted to the vicinity of car parking areas where good information and signs of welcome should be the norm, though discretely placed benches or information boards along some routes would be acceptable.
Landscape and Vegetation	▪ A semi-natural looking landscape with plenty of variation was regarded as most desirable by visitors. Landscape features within the landscape will vary depending on the Habitats Site you are trying to deflect visitors from. ▪ There is clearly a balance to be struck between what is regarded as an exciting landscape and a safe one and so some element of choice between the two would be highly desirable.
Restrictions on usage	▪ The bulk of visitors to the Habitats Sites come to exercise their dogs and so it is imperative that sites allow for pet owners to let dogs run freely over a significant part of the walk. ▪ Public Access should be largely unrestricted, with both people and their pets being able to freely roam along the majority of routes. This means that sites where freely roaming dogs will cause a nuisance or where they might be in danger (from traffic or such like) should not be considered.

This criterion is compiled into a checklist, similar to the Thames Basin Heaths SPA Quality Checklist contained in Appendix 3.

Enhancements that are identified in the EGI Audit should be based on user data. It is therefore recommended that visitor surveys are completed after auditing to ensure the GI meets the local need.

2.6.3 Enhanced Green Infrastructure (EGI) Policy Guidance

EGI could be integrated into policy either under associated GI and/or new Housing Requirements policies. For example, similarly Purbeck District Council have built Suitable Alternative Natural Green Space (SANG) into their Local Plan (Purbeck Local Plan Submission, Purbeck District Council, 2019). SANG is the name given to green space that is of a quality and type suitable to be used as mitigation for Habitats Sites.

Purbeck chose to use SANG as part of their 'New Housing Development Requirements' stating that it is expected that new housing development on allocated sites will "deliver appropriately designed suitable alternative natural greenspaces (SANGs) to avoid / mitigate the adverse effects from the new homes on European sites (in accordance with The Dorset Heathlands Planning Framework 2015-2020 Supplementary Planning Document, 2016)". They have also referenced the need for Strategic SANGS in the Infrastructure section of the Local Plan with a connected policy for a Strategic SANG (Policy I5: Morden Park strategic suitable alternative natural green space).

In a similar stance, EGI can also be incorporated into policy. For ease, recommended policy inclusions have been provided below:

Enhanced Green Infrastructure Policy Guidance

If EGI is to be incorporated into planning policy, in particular existing GI policies, we would recommend the following:

- **The GI network should be referred to as "A strategic multi-functional network of enhanced green infrastructure"**
- **The aim is for it to "provide areas attractive enough for local recreational use on or near where new homes are built that can deflect people away from Habitats Sites for recreation."**
- **Development should "seek to maximise opportunities for the restoration, enhancement and connection of the District's green infrastructure network throughout the lifetime of the development, both on-site and for the wider community."**
- **Reference could be made to this document, and objectives that: "seek to meet local standards and identified opportunities within the Norfolk Green Infrastructure and Recreational impact Avoidance and Mitigation Strategy and any future strategies adopted by the Council."**
- **We encourage local authorities to promote and work towards 40% GI within large-scale developments.**
- **Access to local GI should be enhanced. Opportunities to connect to existing Rights of Way networks and infrastructure must be utilised where possible to provide year-round use.**
- **Policy should lead to the delivery and implementation of SANG. This should be a unified approach across all LPAs.**

2.6.3.1 GI Strategy integration

Although to some extent EGI objectives differ from GI objectives, the general principle is the same; "multifunctional green space capable of delivering a wide range of benefits" therefore the inclusion of the term EGI can be justified legally. Nationally there are great examples of how SANG provision can be incorporated into GI Strategies. For example, Hart Green Infrastructure Strategy (Land Use Consultants, July 2017) provides details of priority projects within the district, along with recommendations for SANG delivery and opportunities for SANG enhancements. In a similar way, EGI can be incorporated, with recommendations for EGI enhancements to existing open spaces, opportunities for new EGI provision and specific EGI project/target areas.

2.6.4 Opportunity Area Delivery

Strategic (Plan Level) Opportunities can be delivered through appropriate master-planning for large scale developments and sustainable urban extensions to secure SANGs. However, where developments are of a smaller scale, we would recommend exploration of pooling resources to produce larger, multifunctional EGI within Opportunity Areas is undertaken.

If the LPAs feel that it would be opportune to explore proposals within these Opportunity Areas further, as previously suggested, an EGI Audit should be undertaken along with the production of individual Implementation Plans (IPs).

Within an Implementation Plan, consideration should be given to how the proposed GI projects fulfil GI functions and provide benefits. Consideration should also be given to any practical constraints to achieving the Green Infrastructure projects alongside an outline prioritisation exercise.

Options to work across LPA boundaries should be explored to maximise opportunities for people and the environment. This would give further flexibility on locations, as well as the proposed developments GI could cater for. For instance, small-scale developments, which would not have sufficient capacity for EGI on site could then benefit from large-scale off-site GI provision.

Appropriate funding streams should be identified (with input from key partners and stakeholders), based on the character of individual projects, as should outline capital and revenue costs and phasing, to ensure a guide to future investment in Green Infrastructure is as robust as possible.

3. RAMS

3.1 What is a Recreational impact Avoidance and Mitigation Strategy (RAMS)?

In addition to the provision of Green Infrastructure at both a development site and at the plan-making level, the RAMS aims to deliver the mitigation necessary to avoid the likely adverse effects on integrity from the 'in-combination' impacts of residential development that is forecast across Norfolk.

It is important to acknowledge that the RAMS exists to mitigate these 'in-combination' effects specifically. It is not a mechanism to deliver mitigation for recreational impacts from individual residential developments alone or individually; this must be provided on or near the development site. To this extent, the RAMS is 'strategic' in nature.

The RAMS identifies a detailed programme of strategic mitigation measures which would be funded by contributions from residential development schemes. The strategic approach of a RAMS has the following advantages:

- It provides developers, agents and planning authorities with a comprehensive, consistent and efficient way to ensure that appropriate mitigation for residential schemes is provided in an effective and timely manner.
- It is pragmatic: a simple and effective way of protecting and enhancing the internationally important wildlife in Norfolk and will help to reduce the time taken to reach planning decisions;
- It provides an evidence based and fair mechanism to fund the mitigation measures required as a result of the planned residential growth; and
- The notion of RAMS is endorsed by Natural England and has been used effectively to protect other Habitats Sites across England and is therefore the most effective way to mitigate in-combination recreational impacts. This RAMS specifically has also been endorsed by Natural England (see Appendix 1).

3.1.1 Legislative Background

This Strategy complies with the relevant legislation and national guidance, including:

- Article 6 of the Habitats Directive (92/43/EEC) 1994
- European Commission (2001) Assessment of plans and projects significantly affecting Habitats Sites
- Methodological guidance on the provisions of Article 6(3) & 6(4) of the Habitats Directive 92/43/EC
- Government Circular 06/2005
- Conservation of Habitats and Species Regulations 2017 (as amended)
- The National Planning Policy Framework (NPPF) 2019

The Conservation of Habitats and Species Regulations 2017 (as amended), commonly known as the

Habitats Regulations, transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into UK law. They also transpose elements of the EU Wild Birds Directive in England and Wales. The Regulations came into force on the 30th November 2017 and extend to England, and will continue to do so even after the UK leaves the EU.

The Habitats Regulations provide for the designation and protection of 'Habitats (European) sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites (henceforth referred to as Habitats Sites in accordance with the National Planning Policy Framework (NPPF)). Regulations 63 and 64 of the Habitats Regulations require a series of steps and tests to be followed for plans or projects that could potentially affect a Habitats Site.

The steps and tests set out within Regulations 63 and 64 are commonly referred to as the 'Habitats Regulations Assessment' (HRA) process that competent authorities must undertake to consider whether a proposed development plan or programme is likely to have significant effects on a Habitats Site.

HRA stage 2 is often referred to as 'Appropriate Assessment' (AA) although the requirement for AA is first determined by an initial HRA 'Screening' stage undertaken as part of the full HRA.

Specifically, Regulation 63 states:

> 63.— (1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—
>
> > (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and
> >
> > (b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives.

The Regulation 63 of the Habitats Regulations refers to "the competent authority". These are the body or bodies responsible for the application of the Habitats Regulations Assessment process, on a case-by-case basis to ensure compliance with the Habitats and Birds Directives. A competent authority is defined in Regulation 7 of the Habitats Regulations so as to include:

> a) Any Minister of the Crown (as defined in the Ministers of the Crown Act 1975(1)), government department, statutory undertaker, public body of any description or person holding a public office;
>
> b) the Welsh Ministers; and
>
> c) any person exercising any function of a person mentioned in sub-paragraph (a) or (b). and public body includes:
>
> > (a) the Broads Authority (4);
> >
> > (b) a joint planning board within the meaning of section 2 of the TCPA 1990 (joint planning boards) (5);
> >
> > (c) a joint committee appointed under section 102(1)(b) of the Local Government Act 1972 (appointment of committees) (6);

(d) a National Park authority; or

(e) a local authority, which in this regulation means—

(i) in relation to England, a county council, a district council, a parish council, a London borough council, the Common Council of the City of London, the sub-treasurer of the Inner Temple or the under treasurer of the Middle Temple;

(ii) in relation to Wales, a county council, a county borough council or a community council;

The Habitats Regulations also use the following terms, which are used in this Strategy and are defined below:

'Likely Significant Effect'	This is a possible adverse effect that would undermine the conservation objectives for a Habitats (European) Site, and which cannot be ruled out based on clear verifiable objective information.
'Alone'	Consideration given to the details of the plan or project which may result in effects on a Habitats Site.
'In combination with other plans and projects'	Consideration needs to also be given to the in-combination effects which will or might result from the addition of the effects of other relevant plans or projects.
'Adverse Effects on Integrity'	This is the stage 2 HRA test at Appropriate Assessment based on likely impacts on qualifying features on the Habitats Site. If any mitigation is needed at Stage 1 HRA screening, the assessment by the competent authority needs to consider if the plan or project can avoid Adverse Effect on Integrity of Habitats Sites.

The Government has produced core guidance for competent authorities and developers to assist with the HRA process. HRA is thus a vital part of a Local Plan's evidence base: for Plans to be considered legally compliant and sound, as set out in section 35 of the NPPF, each LPA must provide mitigation.

Natural England has published a set of mapped Impact Risk Zones (IRZs) for Sites of Special Scientific Interest (SSSIs), which underpin each Habitats Site on the MAGIC website (www.magic.gov.uk). The MAGIC website provides geographic information about the natural environment from across government and Natural England manages the service under the direction of a Steering Group who represent the MAGIC partnership organizations. This helpful GIS tool can be used by LPAs to help consider whether a proposed development is likely to affect a SSSI and determine whether they need to consult Natural England to seek advice on the nature of any potential SSSI impacts and their avoidance or mitigation. The dataset and user guidance can be accessed from the www.magic.gov.uk website.

Not all of the LPAs have prepared project level HRAs for residential developments within the Impact Risk Zones (IRZs) of the SSSIs that underpin each Habitats Site.

3.2 RAMS Baseline

In order to determine the baseline information for recreational impacts, the following methodology was followed to determine patterns of visitor use of the Habitats Sites within the County:

- Desk studies to determine what evidence of recreational impacts exists and identify any gaps supported by the Norfolk LPAs;
- Review of existing visitor survey datasets to supplement the desk studies and gain an understanding of the origins of visitors to the Habitats Sites and thereby determine the ZOIs for both residents and tourists;
- Continual engagement with Natural England to discuss and agree the methodology, location and results of the studies to provide robust evidence on which to develop the Strategy; and
- Stakeholder meetings with those parties with a responsibility for or an interest in the Habitat Sites to gain a fuller understanding of the Habitats Sites, the recreational pressures they are under presently, those that would arise with an increase in population and an understanding of what mitigation including enhanced GI provision, has been undertaken to date and how effective this is. Full details of the workshop attendees can be found in Appendix 5.
- Identifying the extent of housing need within LPA areas (in Local Plan periods), and also the extent of this need that will be met through new Local Plan housing allocations.

3.2.1 The Importance of the Norfolk Habitats Sites

Norfolk has a diversity of Habitats Sites from coastal and extensive forest to valley fens, washland and a chalk river and a desktop review looked at the existing data on the Habitats Sites and the species and habitats that they support.

Norfolk's coastal habitats are internationally important for non-breeding waders and wildfowl as well as its beaches dunes which support breeding birds and seals. The coastline along the Norfolk part of The Wash in the east is the largest marine embayment in Britain, with the second largest expanse of intertidal sediment flats in the country. The Norfolk Coast from the Wash around to the East coast is the only typical British example of a barrier beach system with extensive areas of salt marsh with characteristic creek patterns that have developed behind sand and shingle spits and bars. The Wash and North Norfolk coast European Marine Site is important for breeding and moulting of one of Europe's largest populations of common seal. The intertidal mudflats and salt marshes represent one of Britain's most important winter-feeding areas for waders and wildfowl outside of the breeding season.

'The Broads' is one of the most extensive remaining areas of fen habitat in Europe and its Habitats Sites are designated for three internationally important birds (marsh harrier, bittern and crane) which nest & forage in the wetland habitats. Geographically, 'The Broads' (which has a status equivalent to a 'National Park') also contains Breydon Water, an inland tidal estuary with extensive areas of mudflats, which supports internationally important numbers of birds.

'The Brecks' is characterised by an extensive area of grass heath (and some heather heath) and many heaths are designated as part of Breckland SAC, large arable fields, and the largest coniferous forest in lowland England. This Habitats Site (specifically a 'Special Protection Area' (SPA) related to the

protection of wild birds) holds internationally important populations of Stone Curlew, Nightjar and Woodlark. Stone Curlew establishes nests on open ground provided by arable cultivation in the spring, while Woodlark and Nightjar breed in recently felled areas and open heath areas within the conifer plantations. The forest is a major recreational attraction in the region and considered to be at capacity now as visitor pressure is a key vulnerability for ground nesting birds.

In addition to the above areas, Norfolk has hidden gems which are also internationally important; its extensive areas of valley fens, many of them valley-head spring-fed; the largest and best examples of wet heath in East Anglia and the River Wensum (a chalk river) as well as sharing the Ouse Washes with Cambridgeshire. Part of Redgrave & South Lopham Valley Fens Ramsar site (covered by Waveney and Little Ouse Valley Fens SAC) also lies in Norfolk and is internationally renowned for its population of Fen Raft spider.

3.2.2 Current recreational impacts on Norfolk Habitats Sites

3.2.2.1 Recreational pressures

Some of the designated Habitats Sites in Norfolk in scope for this Strategy are not currently considered to be suffering from recreational impacts e.g. Overstrand Cliffs SAC and some of the components of Norfolk Valley Fens SAC, but they may be at risk from increased pressure and disturbance from planned growth; land managers have expressed concern at some recreational activities such as dogs off lead in pools in the summer months at Redgrave & Lopham Fens (pers comm, Suffolk Wildlife Trust 2019).

A total of 25 different bird species are specifically listed by Natural England as designated 'Interest Features' for many of the Habitats Sites across Norfolk and all sites support sensitive habitats. The key vulnerabilities / factors affecting site integrity are identified in the Site Improvement Plans (SIPs) and Supplementary Advice for Conservation Objectives for each Habitats Site. These include recreational pressure for many but not all sites, but this results in disturbance to breeding birds (e.g. Little Terns) and non-breeding birds (wintering wildfowl and waders) as well as causing habitat damage to sensitive habitats.

The Norfolk coast, from King's Lynn eastwards to Great Yarmouth, has many locations which have been identified through the Conservation Objectives for the Habitats Sites as hotspots for disturbance of sensitive habitats and other features e.g. birds and seals. The Wash and North Norfolk coast SAC is important for breeding and moulting of one of Europe's largest populations of common seal which is a designated Interest feature. During harsh winters, a prolonged cold spell can mean birds struggle to get sufficient feeding time in between tides and any disturbance in these conditions is more significant to bird populations. Some roost sites hold large concentrations of birds, but numbers may change as use fluctuates and factors other than disturbance or habitat degradation may be an issue in some locations.

The Wetland Bird Survey (WeBS) monitors non-breeding waterbirds in the UK. There is a WeBS Alerts system which provides a method of identifying changes in numbers of water birds at a variety of spatial and temporal scales and reports are written every three years. It would be beneficial to integrate WeBS counts with a Norfolk RAMS bird monitoring programme. Species that have undergone major changes in numbers are flagged, by the issuing of an Alert. Alerts are intended to be advisory; subject to interpretation, they should be used as a basis on which to direct research and subsequent conservation efforts if required.

According to the SIP and Supplementary Advice, the Habitats Sites in the Broads are suffering from recreational impacts on SAC habitats and disturbance to wintering waterfowl in particular, is an issue

on a number of Broads' sites. This is largely a result of boat-based use of the water bodies, especially Breydon Water.

Breckland SPA has a 1.5km buffer zone in which development is anticipated to result in a Likely Significant Effect due to Functionally Linked Land (FLL) for its designation features. This aims to protect SPA birds from disturbance linked to residential development, particularly Stone Curlew on farmland within the SPA, although increased recreational use of Thetford Forest may exceed its capacity to protect Woodlark and Nightjar.

In addition, FLL outside of the designation boundaries for all SPAs in Norfolk, also needs to be protected from disturbance e.g. areas of farmland and heathland for Stone Curlew outside of the Norfolk part of Breckland SPA boundary or wintering wildfowl on farmland. This will need to be mapped and updated on a regular basis from monitoring surveys to inform planning decisions on residential development; this is considered likely to be included as a project in the mitigation package set out in this Strategy. As key roosts are used by SPA birds at different times of the year (breeding and non-breeding), there are seasonal variations as well as daily variations in usage due to the tidal cycle for coastal Habitats Sites. Key locations for SPA birds and SAC features e.g. seals and the state of the tide can mean birds are closer or further from the shoreline and potential disturbance.

The SIP for Breckland SPA and SAC includes public access/disturbance as one of the prioritised issues for action but does not record a threat to SAC features. It states that recreational and other activities have the potential to impact both SAC and SPA features. Disturbance does not currently appear to be significantly impacting the bird populations, but the impacts of increased recreational activity is uncertain. Recreational growth in Thetford Forest may impact on Woodlark and Nightjar. The forest is a major recreational attraction in the region. Similarly, military training activities have the potential to impact ground nesting birds, especially Stone Curlew, but the extent of this impact is unclear. SAC features may be affected through eutrophication (dog fouling, unauthorised fires) and disturbance of soils, in particular on commons and heaths. Recreational activity, particularly involving dogs, may adversely affect rabbits and cause spread of disease so this will need monitoring in the early years of the Strategy. Air pollution and the impact of atmospheric nitrogen deposition on Breck heaths features is listed in the SIP for further investigation by Natural England and this may trigger a separate mitigation approach in the future but is not considered to be within scope of this Strategy.

The valley fens, scattered across the county and those in the Waveney & Little Ouse valleys shared with Suffolk, support sensitive wetland habitats and rare species which are at risk from damage due to recreational pressure.

3.2.2.2 Identifying Visitor Patterns of Use of Habitats Sites

In the past, HRAs for Norfolk authorities have concluded that significant impacts were only likely where protected sites were within or in close proximity to the districts themselves. However, more recent evidence and research indicates that effects on some sites are likely to extend much further than the LPA boundary. The locations used in the 2015 and 2016 visitor surveys identified a median distance from postcode data for the grouped points e.g. Broads, Brecks and Coast.

A Footprint Ecology report for Norfolk County Council (Panter, C., Liley, D. & Lowen, S. (2016) contains details of visitor surveys undertaken at 35 locations within Habitats Sites across Norfolk during 2015 and 2016; potential locations were identified at a workshop held in Norwich on the 26th February 2015 and the list refined and agreed by the steering group. The report provides a comprehensive analysis of current and projected visitor patterns to Habitats Sites across Norfolk. The report combines data from multiple local authorities to predict changes in recreation use as a result of new housing planned

across Norfolk. It also provides recommendations for mitigation and monitoring.

The work was commissioned by Norfolk County Council/the Norfolk Biodiversity Partnership on behalf of all local planning authorities across Norfolk. The surveyed locations covered a range of Habitats Sites and all the locations had public access and a potential risk whereby increased recreation levels could be damaging. For simplicity, only SPA and SAC sites were mapped but many have multiple designations including Ramsar.

The work was carried out during 2015 and 2016 at 35 agreed locations. Analysis also drew on other data, for example planned residential growth (as allocated in current plans), provided by Norfolk County Council. The locations encompassed estuary, coast, heathland, wetland, grassland and woodland habitats. The survey points were grouped into seven broad geographic areas: the Brecks, Roydon & Dersingham, the Wash, the East Coast, the North Coast, the Broads and the Valley Fens. Surveys at each point involved 16 hours of survey work split evenly between weekdays and weekends and spread across daylight hours. As such fieldwork was standardised and broadly comparable.

Visitor surveys undertaken by Footprint Ecology in 2015-16 at Norfolk Habitats Sites with identified impacts from recreational disturbance, gathered information on the number of visitors to these sites and evidence of the distances which visitors will travel to access locations for recreation purposes.

Two thirds (66%) of all interviewees were on a short trip from home (local residents) and around a third (32%) of interviewees were on holiday (tourists). However, holiday-makers accounted for nearly half of all visitors interviewed at the North Coast and Broads.

The survey methodology was designed to provide a snapshot of access patterns at a selection of access points onto the Habitats Sites considered to already be affected by recreational impacts. The remaining Habitats Sites across Norfolk do not have visitor data which can be used to inform the need for mitigation measures.

The Footprint survey methodology was not designed to give accurate estimates of annual visitor numbers to each site and did not reference Ramsar sites; although many Habitats Sites have multiple designations, it is considered important to assess the likely impacts on designated features. Visitor surveys took place at different times of year at different locations, with the timing targeted to coincide with times when wildlife interest (e.g. designated features of Habitats Sites) was present and access was likely to be high. Fieldwork involved counts of people and interviews with a random sample of visitors.

Table 3: Designation features per Habitats Site (MAGIC, 2019) and visitor surveys undertaken to assess disturbance

Habitats Site	Designation features sensitive to recreational disturbance and visitor surveys undertaken			
Habitats	**SPA Breeding birds and/or SPA/SAC/Ramsar sensitive habitats (May to July)**	**Summer visitor survey completed?**	**SPA Non-breeding birds and/or SPA/SAC/Ramsar sensitive habitats (August to April)**	**Winter visitor survey completed?**
Ouse Washes	Yes	No	Yes	No
Norfolk Brecks	Yes	Yes	Yes	Yes

Habitats Site	Designation features sensitive to recreational disturbance and visitor surveys undertaken			
Habitats	**SPA Breeding birds and/or SPA/SAC/Ramsar sensitive habitats (May to July)**	**Summer visitor survey completed?**	**SPA Non-breeding birds and/or SPA/SAC/Ramsar sensitive habitats (August to April)**	**Winter visitor survey completed?**
Roydon & Dersingham	Yes	Yes	Yes	Yes
The Wash	Yes	Yes	Yes	Yes
North Norfolk Coast	Yes	Yes	Yes	Yes
Gt Yarmouth – Winterton Horsey	Yes	Yes	Yes	Yes
Norfolk Valley Fens	Yes	Yes	Yes	No
The Broads & Breydon Water	Yes	Yes	Yes	Yes
River Wensum	Yes	No	Yes	No
Waveney & Lt Ouse Valley Fens	Yes	No	Yes	No

Source: MAGIC / Footprint Ecology / Place Services, 2019

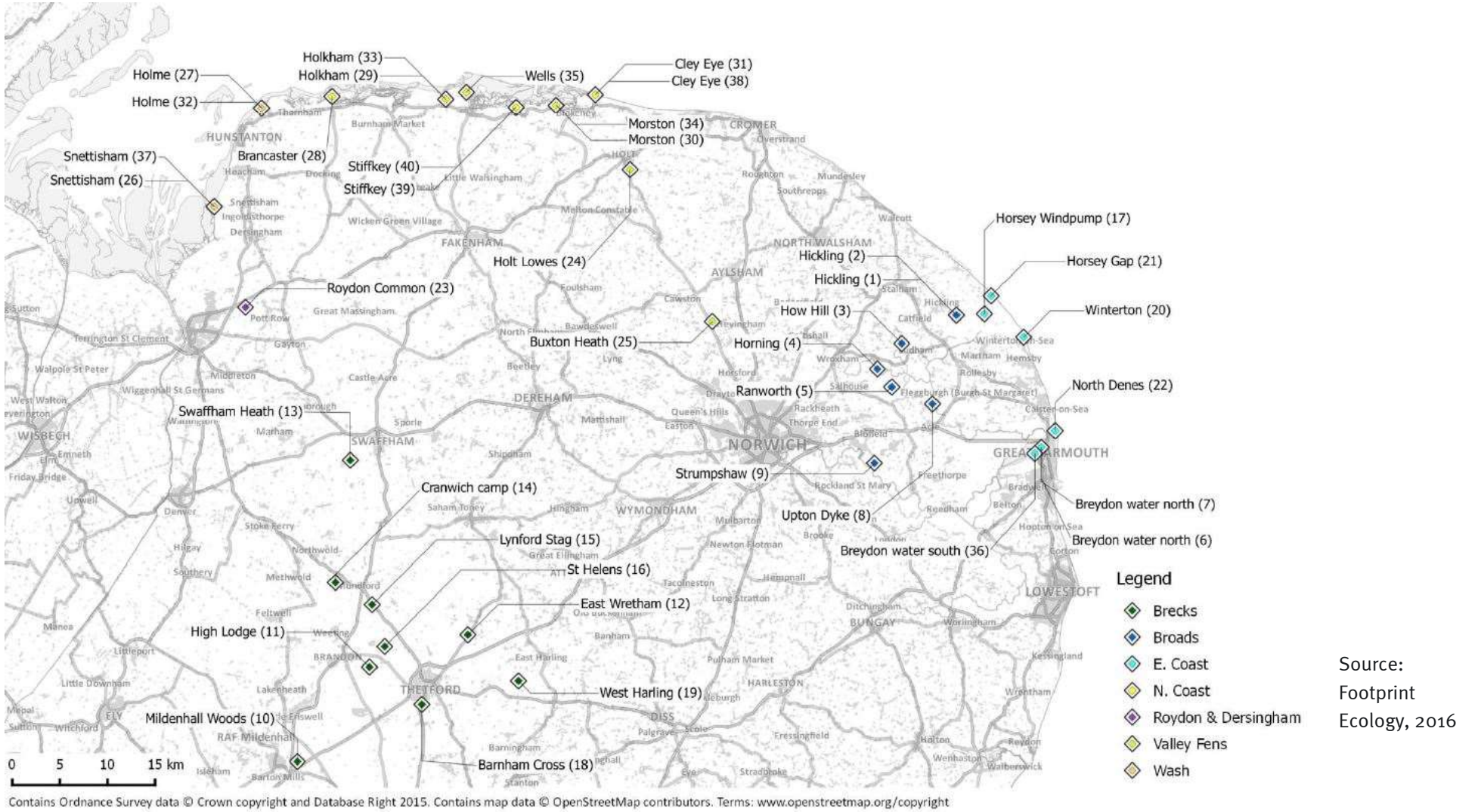
Key findings from the 2015/16 visitor survey results include:

- Over half (52%) of interviewees were visiting from home and resident within Norfolk. Some 16% of interviewees live outside Norfolk and had travelled from home on a short visit/day trip.
- In total 6,096 groups were estimated entering or leaving sites across all survey points. These groups consisted of 13,842 adults, 2,616 children and 3,466 dogs.
- Dog walking (41%) and walking (26%) were the most popular activities overall, but with big variations depending on the sites. Within individual areas this first and second ranking of dog walking and walking was consistent for the East Coast, Roydon & Dersingham, the Valley Fens, the Wash and the North Coast.
- Two thirds (66%) of interviewees were on a short trip from home and around a third (32%) of interviewees were on holiday. Holiday-makers accounted for nearly half of all visitors interviewed at the North Coast and Broads.
- Holiday-makers were typically staying in self-catering accommodation (31%) or campsite/caravan sites (29%). In the Broads over half (59%) of the holiday makers

interviewed were staying on a boat.

- The most commonly reported duration on site was 1 to 2 hours (31%), closely followed by between 30 and 60 minutes (27%). Key differences were the large proportion of interviewees visiting for more than 4 hours in the Broads (29% of interviewees) and conversely at Roydon Common, the large proportion visiting for less than 30 minutes (36%).
- Across all interviewees (including holiday makers), 31% of those interviewed were visiting the site for the first time. For those interviewees travelling from home on a short visit/day trip, over a quarter (27%) indicated they visited the site at least daily, reflecting high frequencies of use by local residents.
- Over three quarters (77%) of all interviewees had arrived at the interview location by car. Most of the remaining interviewees (18%) had arrived on foot.
- 'Close to home' was one of the main reasons people gave for choosing the site where interviewed that day. Scenery was particularly important for those visiting the North Norfolk Coast.
- Just over a third (36%) of interviewees was aware of a designation/ environmental protection that applied to the site they were visiting.
- A total of 1,314 routes were mapped from the interviews, showing where people had walked during their visit. Median route length across all sites and all activities was 3.18km. Across all sites the typical (median) dog walk was 2.93km. Walkers covered a median distance of 3.7km while activities such as boating (median 7.64km) covered longer distances.
- Over half (59%) of the holiday makers interviewed in the Broads were staying on a boat (Footprint visitor surveys 2015-16.)

Figure 19: Map of Visitor survey point locations in Norfolk Habitats Sites 2015-16



Source: Footprint Ecology, 2016

3.2.3 Establishing an evidenced Zone of Influence (ZOI) for recreational impacts

3.2.3.1 What is a Zone of Influence?

A Zone of Influence (ZOI) is a designated distance that establishes where development is likely to have a significant effect on a Habitats Site. It is an area emanating outwards from a Habitats Site within which development can be expected to have a negative effect on the integrity of the Habitats Site in question. Relevant to this Strategy, this means that residential development occurring within a Zone of Influence can be expected to generate additional recreational visits to Habitats Sites.

3.2.3.2 How have the evidenced ZOIs been calculated?

As outlined in Section 3.2.2.2 of this Strategy, visitor surveys undertaken by Footprint Ecology in 2015-16 at Norfolk Habitats Sites gathered information on the number of visitors and evidence of the distances which visitors will travel to access locations for recreation purposes. The Footprint Ecology surveys were undertaken on the Habitats Sites considered to already be affected by recreational impacts chosen at a workshop in 2015 and covered those sites with existing recreational impacts. Other Habitats Sites or some of the components were not considered to be at risk from this impact pathway as supported by the Supplementary Advice and Site Improvement Plans e.g. Overstrand Cliffs SAC and Norfolk Valley Fens SAC. This does not provide complete coverage of all Habitats Sites within scope of this Strategy though Natural England has advised on use of best available evidence to identify ZOI for likely recreational impacts.

Together with the local and county authorities and a range of organisations, Footprint Ecology agreed a sample of survey locations which represented the full range and types of site within the county. These survey results may not support the identification of Zones of Influence for each, or each parcel of, the Habitats Sites within scope for the Strategy.

The raw postcode data from the 2015-16 visitor surveys has allowed interpretation of the dataset for each Habitats Site and calculation of an evidenced ZOI. It is recommended that Natural England uses this for planning purposes and shows this as IRZs for the component Sites of Specific Scientific Interest (SSSIs) on the 'MAGIC map' website (Defra) specifically in relation to relevant development and recreational impacts.

Data from both the winter and summer visitor surveys (Footprint Ecology, 2015 & 2016) has been used primarily to calculate the ZOIs for each Habitats Site, and also to collate information on current recreational activities at Habitats Sites and predict likely impacts from increased use by additional residents.

The results of the winter and summer visitor surveys provided substantial evidence relating to who uses the Habitats Sites, where they travel from, how often they visit and why.

The data used to calculate the ZOIs defined in Figure 20 has been refined using best practice methodology for multiple survey locations within a single Habitats Site which may have different attractions and facilities. This has ensured a standardised ZOI has been calculated separately for both residents and tourists. Without refinement this would have increased the ZOI and affected the credibility of the data. However, the visitor postcode dataset was collected at different survey points within individual Habitats Sites at different times of the year.

According to best practice methodology utilised by consultants and accepted by Natural England, ZOIs are calculated by ranking the distances travelled by visitors to the Habitats Sites based on the hometown postcode data they provided. Not all postcode data is used as this can skew the results.

Instead the ZOIs are based on the 75th percentile of postcode data (i.e. the distance where the closest 75% of visitors come from).

The Footprint Ecology visitor survey dataset from 2015-16 comes from multiple survey locations in a single Habitats Sites. Best practice in these situations uses a different method which is to calculate the ZOI from the 75th percentile distance travelled for each survey location and then average the ZOI for each Habitats Site. This is the method used to calculate the ZOIs for this Strategy.

This 75th percentile has been used in this way at a range of other sites to define a broad area from where recreation use typically originates. The results from the Norfolk dataset would suggest that a countywide radius of the site would work to capture a Zone of Influence that would encompass the majority of visitors across the year and across survey points. This method was used for a number of strategic mitigation schemes, including the Essex and Suffolk Coast RAMS, and is considered by Natural England to be best practice.

The ZOIs identify the distance within which new residents are likely to travel to the Norfolk Habitats Sites for recreation. The ZOIs presented within this report will guide the requirement for residential developments to provide a financial contribution towards visitor management to mitigate for in-combination impacts on all the Habitats Sites.

Natural England have accepted the evidenced ZOIs and will update the IRZs for the constituent SSSIs shown on MAGIC website; this is on the basis of the overall ZOI because the data collected for this Strategy is the most comprehensive and up-to-date available. The individual ZOIs provide evidence to the LPAs of how many dwellings are proposed which are likely to affect each Habitats Site and inform the proportion of spend for developer contributions collected for a single development.

LPAs will also need to use the individual ZOIs to record the locations for developer contributions for delivery of mitigation measures at the relevant Habitats Site on project level HRAs and legal agreements. This will facilitate the delivery of mitigation measures at the appropriate Habitats Sites to avoid impacts from increased recreational pressure. This will thereby provide an audit trail for spend of developer contributions.

The Impact Risk Zones as identified by Natural England (see Table 4) and displayed on the MAGIC website (magic.defra.gov.uk/MagicMap.aspx), are set for each of the SSSIs that underpin the Norfolk Habitats Sites; these relate to likely risks from all potential impact pathways and flag when LPAs should consult NE. Based on experience shared in the formulation of the Suffolk and Essex Coast RAMSs, once the IRZs have been updated by NE based on the single ZOI for recreational impacts, the information boxes will include a note for new residential development; this is likely to state that financial contributions are required towards the emerging Norfolk Recreational impacts Avoidance & Mitigation Strategy (RAMS) and to contact the Local Planning Authority for further advice.

Table 4: Habitats Sites in Norfolk and current Impact Risk Zones (IRZs) for SSSIs underpinning Habitat sites

Habitats Site	Current SSSI Impact Risk Zone (Km) shown on MAGIC map
Ouse Washes SPA/SAC/Ramsar	5km
Breckland SPA/SAC	8km
Roydon Common SAC & Ramsar and Dersingham Bog SAC	7km

Habitats Site	Current SSSI Impact Risk Zone (Km) shown on MAGIC map
The Wash SPA/Ramsar	3km
The Wash and North Norfolk Coast SAC	3km
North Norfolk Coast SPA & Ramsar	5km
Overstrand Cliffs SAC	1km
River Wensum SAC	4km
Norfolk Valley Fens SAC	3km
Winterton - Horsey Dunes SAC	5km
Great Yarmouth North Denes SPA	5km
Broadland SPA &The Broads SAC	2km
Breydon Water SPA	3km
Waveney and Little Ouse Valley Fens SAC	3km
Redgrave & South Lopham Fens Ramsar	5km

Source: Place Services / MAGIC Map, 2019

The Figures below show the evidenced individual ZOIs for recreational impacts on each Habitats site and the overall ZOI for the Norfolk RAMS which covers the whole county, regardless of IRZs for any sites currently without visitor data.

The overall ZOI map is recommended as the one to be used for the Strategy tariff so that each LPA can secure developer contributions for a Norfolk wide RAMS package of measures. NB The overall ZOI excludes areas outside Norfolk i.e. within the adjoining counties of Suffolk, Lincolnshire and Cambridgeshire as developer contribution will be limited to applications within the jurisdiction of the Norfolk LPAs.

It is understood that West Suffolk Council are looking to potentially to include the Suffolk part of Breckland Habitats Sites (i.e. within their administrative area) within an updated RAMS in the future to include these.

Figure 20: Individual ZOIs for recreational impacts from residential development (for Habitats Sites with visitor data)

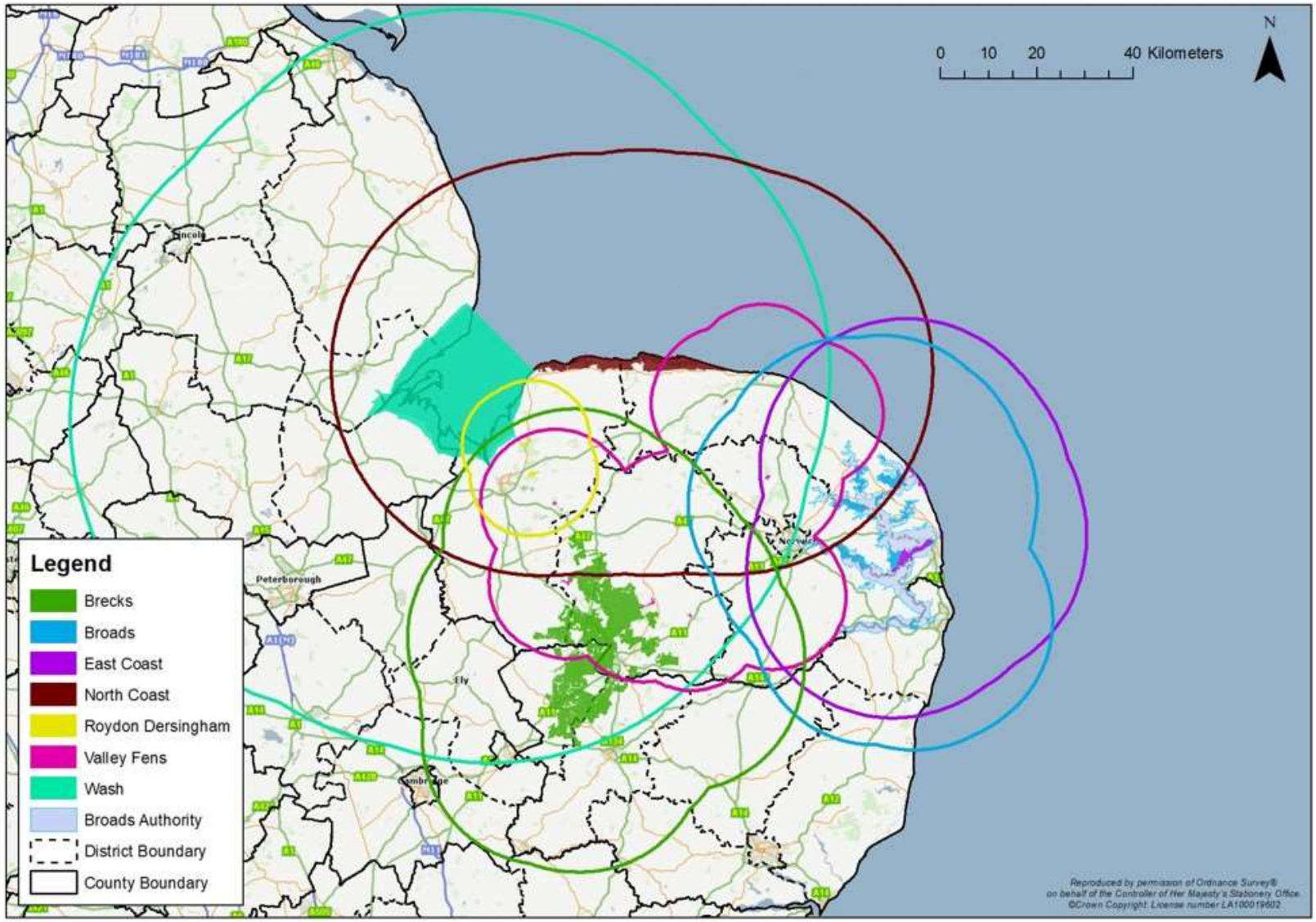
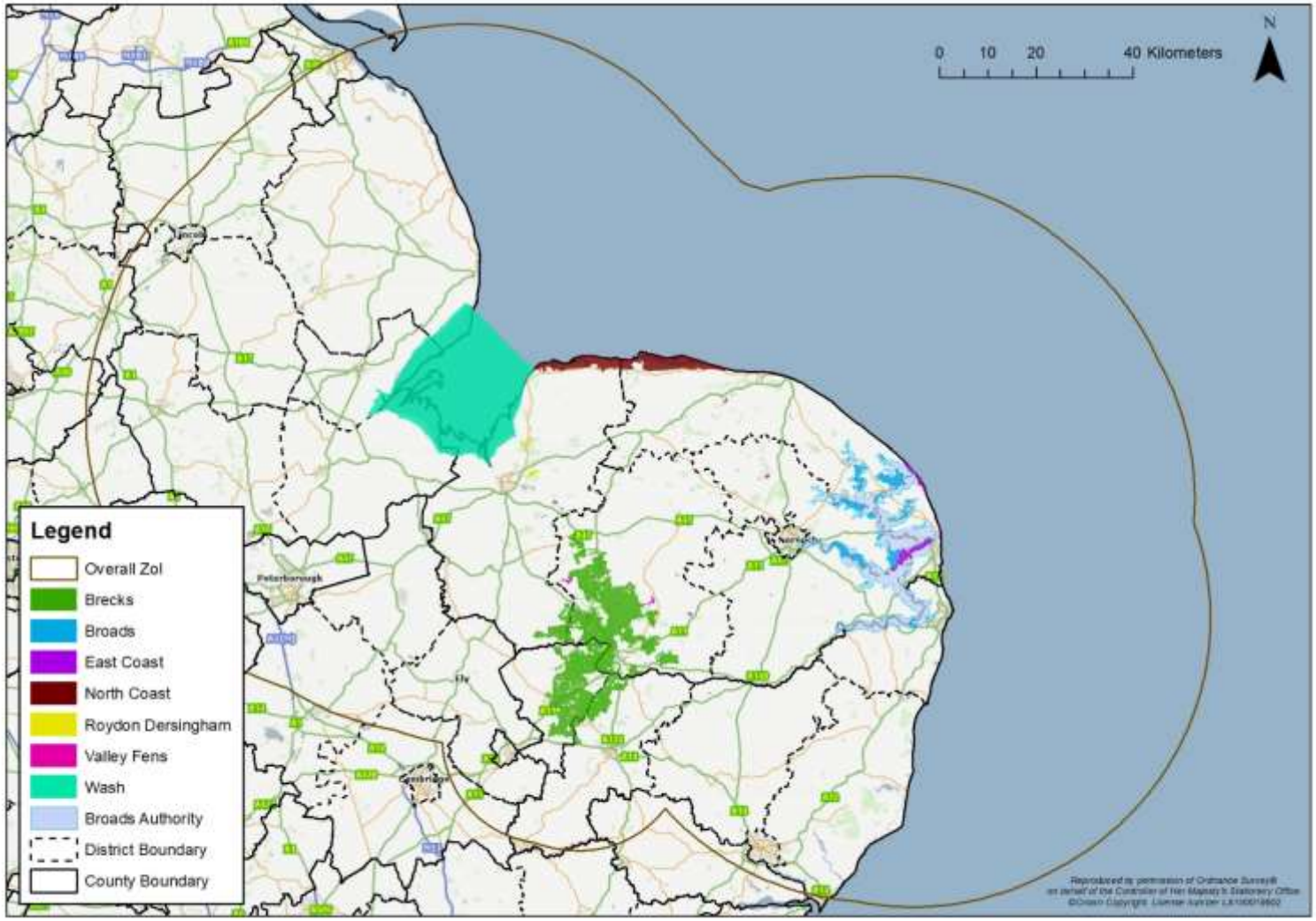


Figure 21: Overall ZOI for Norfolk RAMS tariff for recreational impacts from residential development



Source: Place Services, 2020

As the above maps show, the whole of Norfolk is covered by an evidenced ZOI for residential development.

It is essential to reference the relevant Habitats Sites from the ZOI information when preparing project level HRAs at application stage. This is needed to help allocate funds from developer contributions to the Habitats Sites which are predicted to be affected. As the Footprint Ecology report indicates the proportion of visitors from each LPA, this could be used by the RAMS Steering Group to allocate spend of developer contributions for each Habitats site.

Table 5 below identifies which ZOIs overlap with each LPA boundary. The colours are linked to each ZOI identified in Figure 20 except where there is currently no ZOI identified recreational impact or visitor dataset available.

Table 5: LPAs and ZOIs for Norfolk RAMS package

Habitats Sites / LPAs	King's Lynn & West Norfolk	Breckland Council	Broadland DC	Broads Authority	Great Yarmouth BC	North Norfolk DC	Norwich CC	South Norfolk DC
Ouse Washes SPA	No visitor data for this Habitats Site							
Ouse Washes Ramsar	No visitor data for this Habitats Site							
Ouse Washes SAC	No visitor data for this Habitats Site							
Breckland SPA								
Breckland SAC								
Roydon Common and Dersingham Bog SAC								
Roydon Common Ramsar								
Dersingham Bog Ramsar								
The Wash SPA								
The Wash and North Norfolk Coast SAC								
The Wash Ramsar								
North Norfolk Coast SAC								
North Norfolk Coast SPA								

Habitats Sites / LPAs	King's Lynn & West Norfolk	Breckland Council	Broadland DC	Broads Authority	Great Yarmouth BC	North Norfolk DC	Norwich CC	South Norfolk DC
North Norfolk Coast Ramsar								
River Wensum SAC	No visitor data for this Habitats Site							
Norfolk Valley Fens SAC								
Winterton - Horsey Dunes SAC								
Great Yarmouth North Denes SPA								
Broadland SPA								
Broadland Ramsar								
Breydon Water SPA								
The Broads SAC								
Waveney and Little Ouse Valley Fens SAC	No visitor data for this Habitats Site							
Redgrave and South Lopham Fens Ramsar	No visitor data for this Habitats Site							
Number of ZOIs affected by Local Plan	5	5	5	3	2	6	5	6

Key:	Norfolk Brecks ZOI	Not in the ZOI	Roydon Dersingham ZOI	Wash ZOI	North Coast ZOI	Valley Fens ZOI	East Coast ZOI	Broads ZOI

Source: Place Services, 2021

3.2.3.3 A ZOI for tourist accommodation

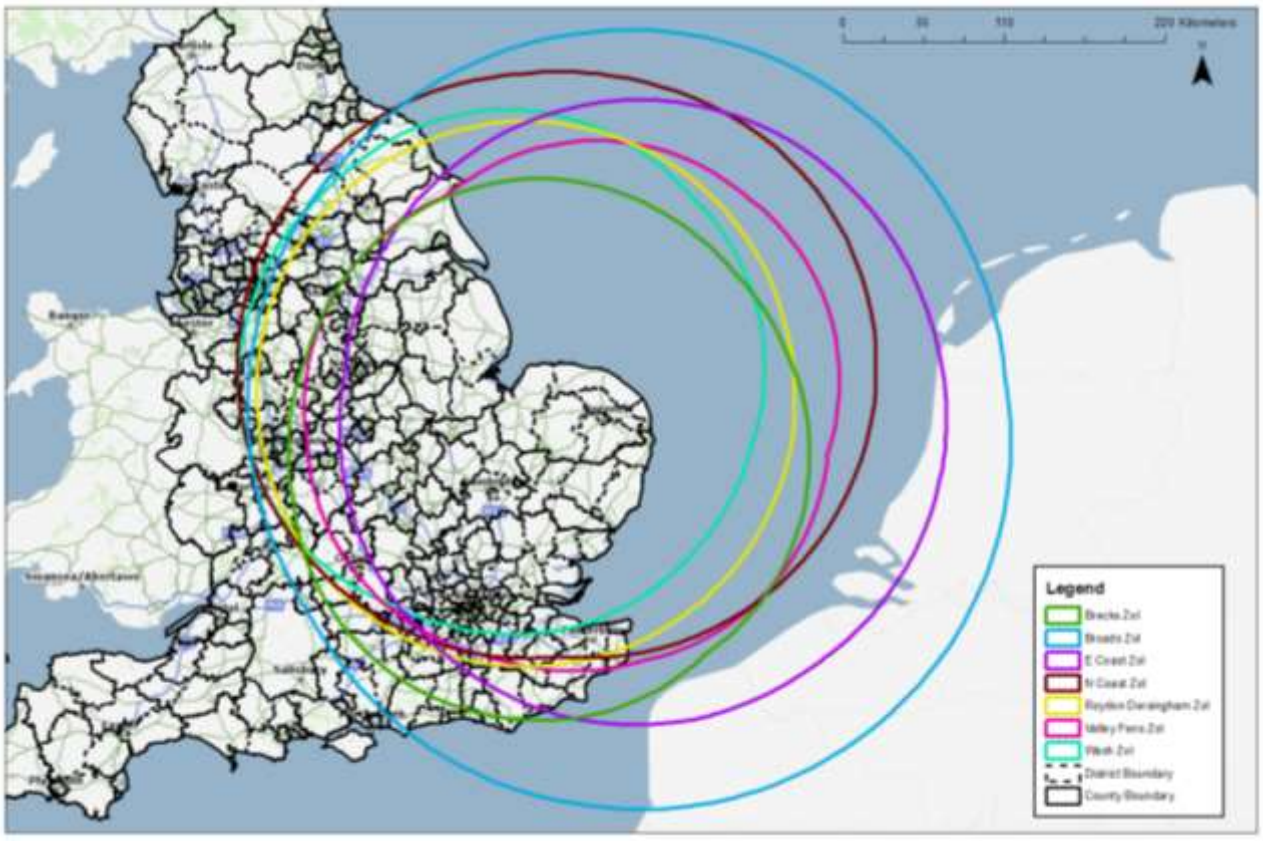
- A separate ZOI for tourists has been calculated (see figure below) which demonstrates the huge distance from which Norfolk attracts out of county visitors. However, planning applications consented by Norfolk authorities can only secure developer contributions for delivery of measures within the county.

It is recommended that this evidence is used to support the application of a RAMS tariff on tourist accommodation based on a per bed space ratio with the same ZOI as other residential growth. The Natural England interim advice to the LPAs, included Houses in Multiple Occupancy e.g. hotels, guest houses and lodges; and

Residential caravans/mobile homes/park homes.

- It is also recommended that residential moorings, holiday caravans & touring pitches should be included. Natural England may like to consider these types of development when issuing any revised advice to Norfolk LPAs ahead of the RAMS being adopted.
- As the evidenced ZOIs for tourist accommodation is countywide for all Habitats Sites, this means that developer contributions for this type of development will need reference all sites to be allocated accordingly reference be spread across all of the sites in legal agreements.
- It will be up the NSPF steering group to allocate spend for delivery of measures as they see fit. There is no “knock on” effect of Local Plans and Habitats Sites (as this does not relate to non-tourist related residential development) and this does not change the overall ZOI for the tariff.

Figure 22: ZOIs for recreational impacts from tourist accommodation



Source: Place Services, 2019

The analysis of visitor postcode data for tourists to Norfolk collected in 2015-16, indicates that for all Habitats Sites, the whole county (and considerably further afield) is within the ZOI for recreational impacts from tourist accommodation. This supports the principle of including tourist accommodation within scope of the developer contributions on a 'per six bedspace ratio' of the tariff identified for residential growth, although no new tourist accommodation units are allocated in any of the Norfolk Local Plans which this Strategy seeks to support.

ZOIs have been calculated for this Strategy for each of the Habitats Sites which have a robust dataset from visitor postcodes - as the best available evidence - and these are shown in the table below.

Table 6: ZOI Calculations for Norfolk Habitats Sites with regard to recreational impacts

Area	ZOI using complete dataset	ZOI for residents only	ZOI for tourists only
Brecks sites	27km	26km	163km
Broads sites	194km	25km	248km
East Coast sites	51km	30km	202km
North Coast sites	148km	42km	198km

Area	ZOI using complete dataset	ZOI for residents only	ZOI for tourists only
Roydon & Dersingham	12km	12km	182km (only 1 piece of data)
Norfolk Valley Fens	18km	15km	156km
The Wash	66km	61km	162km

Source: Place Services, 2019

As there is no visitor postcode data for all of the Habitats Sites, there is currently no evidenced ZOI for recreational impacts for these internationally designated sites. However Natural England's interim advice (12 August 2019, ref 257629) states that consideration should be given to determining if the strategy could include the required visitor data collection and site monitoring to determine site specific mitigation where there are gaps in evidence.

Natural England's advice confirms that the calculated ZOI covers the whole of Norfolk County encompassing all designated sites. It is therefore reasonable to assume that there will be additional residential visits to all Habitats Sites resulting from the increased population associated with planned housing growth. Therefore, the RAMS mitigation package will include visitor and habitat monitoring to avoid future impacts and identify specific mitigation measures for these sites if necessary. Natural England have included these ZOIs in their interim advice to the Norfolk LPAs on HRA requirements (August 2019) relating to recreational impacts on Habitats Sites predicted from residential growth identified in their emerging Local Plans.

The visitor surveys took place in winter 2015/16, when non-breeding waders and wildfowl (which are designated features of the Habitats Sites) are present along the Norfolk coast (August to April). The second round of visitor surveys took place during the spring of 2016 when breeding birds such as Little Tern, which are designated features, use it for nesting. Some Habitats Sites provide habitat for SPA birds which could be impacted by trampling during the summer months used by non-breeding species over winter. There is therefore a need to monitor this potential impact at all SPAs when their designation features are not present.

Key findings from the Footprint Ecology visitor surveys report relating to housing change links to allocated new housing and implications included:

- A predicted 14% increase in recreational use of the Natura 2000 sites surveyed by Norfolk residents (in the absence of any mitigation), as a result of new housing during the current plan period.
- The increase is likely to be most marked in the Norfolk Brecks, where Footprint Ecology predicted an increase of around 30%. For the Broads the figure is 14%; 11% for the East Coast; 9% for North Norfolk; 15%for Roydon & Dersingham; 28% for the Norfolk Valley Fens and 6% for the Wash (note these figures relate to the surveyed access points only and to visits by Norfolk residents).
- For parts of the North Coast, the Broads, and parts of the East Coast, the links between an increase in local housing and recreation impacts are less clear as these sites attract a high number of visitors coming from a wide geographical area, both inside and outside Norfolk. There are therefore likely to be pressures from overall population growth both from within the county and further afield.
- Potential/recommendations for mitigation and monitoring at all sites; in particular Green

Infrastructure such as Suitable Alternative Natural Greenspace ('SANGs'); better signage; a Ranger team and awareness raising campaigns.

3.2.3.4 Additional evidence gathered and analysis

Correspondence with stakeholders including the Royal Society for the Protection of Birds (RSPB), Forestry Commission (FC) and Norfolk Wildlife Trust (NWT) has highlighted the need for a defined monitoring regime for recreational impacts on the three designated birds for Breckland SPA. Some monitoring efforts are at risk from a lack of funding due to responsibilities for providing these resources being undefined. It is considered essential that robust monitoring provides data to assess the potential for pressures from residential development. This can then identify which mitigation measures are the most effective at protecting designation features of the Habitats Sites and the locations for their delivery. This discussion and correspondence with these organisations is outlined in Appendix 9.

The Site Improvement Plans and Supplementary Advice for Qualifying Features for the Norfolk Habitats Sites (prepared by Natural England) include recreational disturbance as a key vulnerability or factor for Adverse Effect on Integrity (AEOI) for many of the Norfolk sites. The main impacts are:

- Disturbance of birds particularly wintering wildfowl (at a number of sites in the Broads) and Little Terns on dunes.
- Eutrophication (dog fouling, unauthorised fires) and disturbance of soils, in particular on commons and heaths.
- Damage caused by trampling of lichen dune grassland and dune heath.

The Site Improvement Plan (SIP) for the North Norfolk coast states that it is a very popular area for recreational activity and visitor numbers are likely to grow, for example as a result of the England Coast Path as well as housing development. A range of recreational activities may have adverse impacts on the sites (Boating; motor boating; water skiing; jet skis; commercial and non-commercial wildlife tours; commercial shipping; kiters (including surfers, boarders and buggy boarders); moorings; access to moorings; motorised vehicles; bikes, hovercraft; bird/wildlife watching; (dog) walking; Samphire collection, shellfish collection, bait digging, reed cutting, beachcombing, sea lavender gathering; beach barbecues; littering; wildfowling). Conflicts with the management of fragile habitats and species which can be easily disturbed by recreational activity will need to be carefully addressed. To overcome these challenges further collaboration between stakeholders and local people may be needed with the aim of more holistic management of the area. For example, the North Norfolk Kiter's Working Group have a voluntary management scheme restricting and monitoring activity with an annual review. The European Marine Site (the Wash and the North Norfolk Coast) scheme has mechanisms to reduce damage from recreational activity. Incidents are reported through an Incident Recording Process (IRP), but a chance still exists of future incidents occurring, by members of the public unaware of the potential impacts.

The relevant SIPs and Supplementary Advice (only available for SPAs and SACs) however, do not include recreational disturbance as a key vulnerability or factor for Adverse Effect on Integrity (AEOI) for the following sites:

- Breckland SAC
- Norfolk Valley Fens SAC
- Ouse Washes SAC or SPA
- Overstrand Cliffs SAC

- River Wensum SAC (angling & crayfish)
- Redgrave & Lopham Fen SAC
- Roydon Common & Dersingham Bog SAC
- Waveney & Lt Ouse Valley Fens SAC

Nutrient enrichment may become a threat to sensitive SAC vegetation in the future and dogs swimming in pools on SACs in the summer may need to be managed to avoid an Adverse Effect On Integrity (AEOI) – the Stage 2 HRA Appropriate Assessment test - on aquatic species, which are qualifying features.

Where the relevant Site Improvement Plans and Supplementary Advice on conserving and restoring features do not currently include recreational disturbance, trampling, or nutrient enrichments as a key vulnerability or factor for Adverse Effect On Integrity e.g. Overstrand Cliffs SAC, Norfolk Valley Fens SAC and Waveney & Little Ouse Valley Fens SAC, these were not selected for visitor surveys in 2015-16. These SACs do not therefore currently have visitor survey data. There are therefore no costed *mitigation* measures for these sites in the initial RAMS package but *monitoring* of impacts is included and will inform reviews of the mitigation package and the tariff over time.

3.2.4 Residential (including tourist) accommodation planned in the overall ZOI within Local Plans

3.2.4.1 Natural England Interim Advice Letter

Natural England, in an interim advice letter sent to all Norfolk LPAs in August 2019, has confirmed the individual ZOIs and overall countywide ZOI for recreational impacts for use at application stage, as outlined in this Strategy. This is the case for both the ZOI for residential development and that for tourist accommodation. Please see Appendix 1 of this Strategy for the letter in its entirety.

3.2.4.2 Predicted Increase in Visitors from Planned Residential Growth

Local Plans allocate land for development including residential growth and the Habitats Regulations Assessment identify which allocations and policies are likely to result in significant effects on the Habitats Sites within scope.

Growth in each LPA partner area is set out in the following sections, with implications for effects on Habitats Sites summarised as outlined in each LPA's Local Plan HRA/AA.

Breckland

Over the Local Plan period the population is set to grow from 131,857 in 2012 to 153,678 by 2036 (ONS 2014 based sub-national population projections 2012-2036).

All proposed allocations within Swaffham are within 1500m and 3km of the Brecks SPA. The Breckland Local Plan Submission HRA identifies that there is a likely significant effect on European sites through the screening of allocations in the Local Plan. Due to a lack of data it is not possible to rule out the potential impact of development on functionally linked land for Stone Curlews. All allocations will be required to be supported by a project level HRA, which may consist of additional survey work and will determine site specific mitigation measures.

Land to the south west of Watton is located within 1500m of the Breckland Farmland Special Protection Area, which is designated for the special interest feature Stone Curlews. Evidence has shown that development up to 1500m from the site can impact upon Stone Curlew. A Habitats Regulations Assessment has been undertaken to assess the impact upon the Breckland Special Protection Area. All proposed allocations within Watton are within 1500m and 3km of the Brecks SPA. The Breckland Local Plan

Breckland

Submission HRA identifies that there is a likely significant effect on European sites through the screening of allocations in the Local Plan. Due to a lack of data it is not possible to rule out the potential impact of development on functionally linked land for Stone Curlews. All allocations will be required to be supported by a project level HRA, which may consist of additional survey work and will determine site specific mitigation measures.

Evidence used to support the adoption of the Core Strategy in 2009 included research to inform the Habitats Regulations Assessment (HRA) of the Core Strategy which examined the effects of housing and roads on the distribution of the Stone Curlew in The Brecks. The adopted mitigation policy required that any new development which may impact on the SPA must be subject to Appropriate Assessment. The measures are defined by buffers (Local Plan Map 5.1). New development will not normally be permitted within 1,500m of the edge of the SPA (primary buffer represented by red cross hatching) unless it can be demonstrated by an appropriate assessment that the development would not adversely affect the integrity of the SPA. Such circumstances may include the use of existing buildings and development where completely masked from the SPA by existing development.

Stone Curlews are also found outside the SPA; these birds are clearly part of the SPA population and functionally linked. Accordingly, a secondary buffer (represented by blue cross hatching) indicated areas that have been identified where there are concentrations of Stone Curlew (using data gathered over the periods 1995-2006, and 2007-2015 (most recently using data from 2011- 2015).

Within these areas, development may be brought forward providing a project level Habitats Regulations Assessment can demonstrate adverse effects have been prevented, for example where alternative land outside the SPA can be secured to adequately mitigate for the potential effects.

In 2013 a "Further Assessments of the Relationship between Buildings and Stone Curlew Distribution" study was carried out to update previous work on the effect of buildings and roads on Stone Curlews in The Brecks. Including new analysis and using additional survey data, this study report focused on the effects of buildings and roads on the distribution of breeding Stone Curlew in The Brecks. The report provides strong support for the continuation of a 1500m zone around the areas capable of supporting Stone Curlews. Within this zone additional development is likely to have a significant effect on the SPA.

A buffer zone for development extends 1,500m from the edge of those parts of the Breckland SPA that support or are capable of supporting Stone Curlews. A separate buffer zone does the same for other land (outside the SPA) supporting the qualifying features of the SPA.

The HRA for the Main Modifications (Footprint Ecology, February 2019) includes the following key issues:

Impacts of built development on Stone Curlew

- Mitigation measures now well established and incorporated into the Local Plan through the Stone Curlew Buffer zones, updated in light of new data.

Recreation disturbance to SPA birds

- A measure not yet fully progressed from the Core Strategy HRA. Securing adequate recreation provision at new development, and working with partners to appropriately manage recreation, particularly at accessible forest sites. Commitments are now included in ENV 3.

Urbanisation effects on SAC and SPA habitats

- A measure not yet fully progressed from the Core Strategy HRA. Framework now committed to within Policy ENV 3 for working with relevant partners to protect and restore the most urban heath sites, with a requirement for developers to contribute to measures within the framework where development may lead to increased recreation use of urban heaths.

The following mitigation measures are currently applied for the Local Development Framework, in light of the previous HRA findings and recommendations made:

Breckland

- Direct effect of built development on SPA birds = policy wording and 1500m/400m zones mapped
- Indirect effect of disturbance = policy wording committing to a recreation management, monitoring and mitigation strategy in collaboration with partners
- Urban effects on heaths around Thetford = developer funded approach to urban heaths management and the provision of alternative green spaces
- Recreation pressure on the North Norfolk Coast = Plan wording to commit to new research and collaboration with other neighbouring local authorities
- New and upgraded roads = policy commitment to preventing any new roads or road improvements within 200m of Breckland SAC
- New and upgraded roads = excluded from the 1500m Stone Curlew zone
- Water issues = policy wording to secure flood alleviation measures and commitment to bringing forward new development in step with infrastructure and supply improvements to avoid impacts on Norfolk Valley Fens SAC and Ramsar and Lt Ouse & Waveney Valley Fens SAC and Ramsar

The increases for sites in the Brecks were much higher than the Norfolk-wide 14% increase and as such development in the Breckland area, due to its proximity and scale, has particular implications in terms of recreation. These results are relevant in considering the impacts from the overall quantum of development and the likely scale of change in recreation at sensitive sites, with particular increases predicted from growth within Thetford, Swaffham and Mundford.

The Supplementary Advice for Qualifying Features of Breckland SPA (Stone Curlews, Woodlark & Nightjar) includes information on managing disturbance caused by human activity. The frequency, duration and/or intensity of disturbance affecting nesting and/or foraging birds should not reach levels that significantly affect the populations of these SPA birds. All three species have been found to be sensitive to human-related disturbance and this may take the form of noise, light, sound, vibration, trampling and presence of people, animals and structures.

Research has found that Stone Curlews are highly susceptible to disturbance with active responses being recorded at distances of up to 500m from a dog walker (Taylor et al, 2007). A further study carried out by Sharpe et al, 2008) found that Stone Curlew nest density was considerably lower on arable land around settlements up to a distance of 2500m. The research was used to inform a comprehensive study undertaken by Breckland Council as part of an HRA of its Core Strategy. As a result of the HRA, a 1500m constraints zone has been put in place around those parts of the Breckland SPA that supports or is capable of supporting this SPA bird. In addition to the 1500m buffer, a second buffer has been established to capture areas frequently used by nesting Stone Curlew outside of the SPA (functionally linked land) which forms part of the SPA population. These areas were selected from 1km gird squares which held at least 5 nests during the period 1995-2006. This constraint zone has been adopted by al l the LPAs where this SPA boundary falls under their jurisdiction but does not apply a blanket ban on development. The cumulative effect of new housing within the 1.5km constraints zone therefore has the potential to lead to an increase in urban pressure on parts of Breckland SPA with a risk of harmful effects to Stone Curlew. However, for residential development allocated in Breckland's Local Plan will need to deliver mitigation measures as identified in the Local Plan HRA and Natural England is exploring a strategic approach to mitigating these potential impacts arising from new housing.

Research investigating the impact of disturbance on Woodlark populations on heathlands found that nest density was lower on sites with higher level of human disturbance (Mallord et al, 2007). Liley et al, 2007 studied the impacts of recreational disturbance on Annex 1 breeding birds including Nightjar and Woodlark on heathland sites in Dorset. The higher the density of housing resulted in fewer birds on the heaths and the research shows that the impact of housing situated close to a heath is more severe than housing is further away. As a result of these findings, a 400m zone around SPA heaths was proposed within that Local Plan as a suitable distance at which to totally limit further development around the boundaries of heathland sites. The 400m, as selected as Natural England, is regarded as a pragmatic distance to represent the zone of highest potential impact on

Breckland

the SPA from new residential development. This distance has been adopted by Breckland Council and the exclusion zone has subsequently been adopted by all the LPAs where the SPA falls under their jurisdiction.

Broads Authority

The HRAs for the Broads Local Plan and the Broads Management Plan both focus on visitor management, including boating activities. The plans provide comprehensive measures for managing tourism, and this accords with the duties of The Broads Authority. The Local Plan was adjudged to not need a strategic solution to mitigate recreational impacts on Habitats Sites. Project-level HRAs are however needed at the planning application stage for all residential development.

Borough of King's Lynn & West Norfolk

The Local Plan states that the requirement for mitigation applies to housing and tourist accommodation applications within the whole area, including hotels, guest houses, lodges, static caravans & touring pitches. For tourist accommodation the contribution is calculated on a case by case basis by the Council, depending on the type, location and seasonality of the accommodation (section 5.6.1). The approach differs to RAMS as in there is not a coasted suite of measures and money is allocated through an application process which is facilitated through the Norfolk Coast Partnership (NCP), further information can be found on the Norfolk Coast Partnership website. The mitigation fund covers any admin costs/time to the NCP. Project level HRAs are required as part of this process.

Great Yarmouth

The HRA for the Core Strategy (Footprint Ecology, 2015) provided recommendations for Habitats Sites mitigation and monitoring. NB the plan period will now be from 2013 to 2030. The aim of the Strategy is to implement the protection of the main local Habitats Sites: Winterton-Horsey Dunes SAC, Breydon Water SPA & Ramsar site and North Denes SPA, from any adverse effects on integrity resulting from increased recreational pressures which may arise from new housing and tourism development planned by the Core Strategy growth. The plan-wide HRA recommends the immediate implementation of the following measures:

- Monitoring of visitor numbers and vegetation change to identify any impacts from the Core Strategy planned development.
- Provision of mitigation measures such as bins for dog waste, interpretation boards, waymarked routes and control of dogs.
- Contribution to the management of the little tern colony to mitigate impacts of visitor pressures.

Section 3.1: planning obligations will be secured to provide a series of necessary monitoring and mitigation measures based on the proximity of new residential and tourist development to the relevant Natura 2000 sites. This is explained in a draft policy option on page 5 of the Habitats Monitoring and Mitigation Strategy (attached). Tourist accommodation is defined in section 3.2 and exemptions listed in section 3.8. The implementation of the strategy is explained in section 4.1 and differs from both RAMS and King Lynn's approach. A project level HRA is also required for each development but some proposals can be processed by the council according to criteria agreed with NE, more information can be found on the Great Yarmouth Borough Council website (Habitat Guidance and Assessment Template).

Broadland, Norwich City & South Norfolk (Greater Norwich Local Plan)

Since 2016, Norwich City, Broadland and South Norfolk District Councils have been jointly preparing a Greater Norwich Strategic Plan and consultants are working on an Appropriate Assessment (AA) to inform it and support it at examination. The AA for this joint plan identifies an increased prevalence and occurrence of negative recreational effects to the Habitats Sites, which in the absence of effective mitigation is likely to lead to adverse effects on the sites' integrity.

As the housing figures for Norwich City are incorporated into the Greater Norwich Local Plan, the Regulation 18 HRA (Dec 2019) assesses the combined impacts of housing growth identified by all three of these LPAs. The text below reflects the NE interim advice relating to the need for GI to avoid impacts from residential development alone but also refers to the emerging Norfolk GI and RAMS approach to avoid impacts from the Local Plan in combination with other plans and projects. *It is ascertained that the Greater Norwich Local Plan Strategy would have no adverse effect upon the integrity of any European site* ***acting alone,*** *subject to the following outstanding matters:*

- *Mitigation of recreational impact upon European sites comprising*

  a) a tariff based payment taken from residential, and other relevant accommodation e.g. tourist accommodation, that will be used to fund a mixture of mitigation measures, most likely of soft and hard mitigation measures at the European sites;

  b) the provision of suitable alternative natural green space (SANGs), which would be large enough to meet a range of recreational needs,

  c) implementation of a wider programme of Green Infrastructure Improvements in accordance with current and emerging project plans, so that residents have an alternative to European sites for regular activities such as dog walking.

  - *Satisfactory completion of a Water Cycle Study which demonstrates no adverse impact on European sites (Policy 1, Section 5)*
  - *Clarification of Policy 6, Section 10 perhaps as a final bullet point 'Habitats Regulations Assessments will be required for small scale tourism accommodation within 1km, and for larger scale tourism accommodation within 10km, of a European site. Habitats Regulations Assessment will also be required for tourism, leisure, cultural and environmental activities which would utilise European sites'. (Section 10.2)*

The Norfolk Authorities are progressing a Norfolk-wide study, the Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy (GIRAMS). This strategy is expected to set out a proposed approach to tariff contributions from new development, in accordance with the first part of the mitigation identified above. This study may also provide useful evidence/guidance for a future SANGs strategy.

To alleviate recreational pressure on European sites alternative recreational opportunities should be provided. Where increased recreational use is predicted to cause adverse impacts on a site, avoidance and mitigation should be considered. Avoidance of recreational impacts at European sites involves location of new development away from such sites or provision of an alternative recreational resource.

This could take the form of a new country park containing woodland, small and large waterbodies (where feasible and subject to aircraft safeguarding constraints, open grassland or potentially inland beach functions (if feasible) nearer the strategic development sites.

Broadland District Council requires mitigation to be provided by new development to address likely significant impacts on projected sites. Broadland's mitigation strategy required new residential development of 5 or more homes to make on-site or off-site (including commuted sum payments in lieu of provision) and informal GI contributions (equivalent to 4ha per 1000 population).

North Norfolk

The Core Strategy was subject to 'Appropriate Assessment' which assesses potential effects on Habitats Sites (Special Areas of Conservation, Special Protection Areas and Offshore Marine Sites) and the Appropriate Assessment report is available on the Council website at www.northnorfolk.org/ldf. The recent HRA screening of policies and allocations in the emerging Local Plan Part 1 (Footprint Ecology, 2019)) identified recreational pressure as a key theme for more detailed assessment at the appropriate assessment stage. At the First Draft Local plan stage, the Appropriate Assessment section of this report concluded that the policy wording is adequate for Habitats Site protection, but that there would be benefit in setting out more clearly the requirements for Habitats Sites as a separate policy to the wider requirements for biodiversity and geodiversity. This would be beneficial as the emerging strategic mitigation approach to alleviate recreation pressure is likely to require more detailed policy and supporting text working to give clarity n developer requirements.

The abovementioned HRA report considers that the main impact pathway to take to appropriate assessment is identified as recreation pressure, and this is applicable to all of the Habitats Sites screened into the assessment apart from the River Wensum SAC. It notes that the most recent North Norfolk plan level HRA work is the 2010 HRA undertaken by Royal Haskoning for the Site Allocations document. This concluded that the site allocations set out within the plan would not cause an adverse effect on any of the European sites with the commitment of North Norfolk District Council to progress key mitigation measures at a strategic level in relation to recreation. The activities required are summarised below:

- A programme of assessing visitor behaviour at European sites and their potential impact, to establish a pre-development baseline from which the impact of future development can be assessed.
- Provision of open space within the larger site allocations is provided for, and the HRA of the Site Allocations advised that there is a need for further understanding of the potential role of these open spaces and the green infrastructure network in reducing pressure on European sites.
- Ensuring that any future monitoring taking place at European sites is complementary to advancing the evidence base in relation to consideration of recreation impacts and mitigation needs.

The AA states that Reference to the partnership working with the Norfolk wide authorities on this matter is important to demonstrate an ongoing commitment. It is therefore anticipated that the section of the HRA relating to delivering strategic mitigation to support the Local Plan will be expanded to include an explanation of the Norfolk GI and RAMS and how it needs to be attributed in policy, at the next iteration of the HRA. In summary, it is currently understood that the Strategy will involve the following:

- Assessment of current green infrastructure provision and future provision within site allocations, to inform additional green infrastructure requirements for European site mitigation purposes (i.e. avoid impacts from the development alone)
- Access management measures to be implemented at the European sites, justified with evidence and costed to provide a per house contributions tariff (i.e. avoid impacts in combination with other plans and projects)
- Establishment of a project board to oversee implementation

The HRA includes a recommendation for advising on policy wording in relation to the Norfolk RAMS and finds that whilst a conclusion of no adverse effects on European site integrity cannot currently be made. It is concluded that there are measures recommended or in progress that are capable of providing the necessary certainty to enable a conclusion of no adverse effects at the next iteration of the HRA.

Discussions with Natural England will check their support for the mitigation proposals and these discussions will therefore inform the next iteration of this HRA. This HRA will also be updated to reflect any other consultee responses of relevance to the HRA.

3.2.4.3 Housing Planned in the Evidenced Zones of Influence

The table below outlines the amount of housing that is being planned for in each Local Plan. All LPAs are at different stages of the plan making process. Some figures will be based on Local Plan allocations, but where these are currently not known, LPAs have provided an informed estimate based on evidence from housing trajectory documents and past housing delivery rates.

The housing data goes up to the year 2036 so where necessary, the Local Housing Need (calculated using the standard methodology) has been used to estimate allocations for the additional period up to 2038. These housing numbers will be reviewed and, where necessary, updated over the lifetime of the strategy in accordance with LPA monitoring data, as part of the Norfolk GI and RAMS monitoring and review process.

The housing numbers supplied in the table below are based on the quantity of net new dwellings that are expected to fall within the ZOI for the Norfolk GI and RAMS. All LPAs are wholly covered by the county wide ZOI, and therefore the numbers of homes that are still expected to be built within the ZOI have been included in the figures in the tables below. Estimated windfall is the amount expected for the length of the Strategy.

The figures in the table below will change over time and the tariff will change at each review. The tariff has been calculated based on the level of growth within the LPAs' Local Plans, including allocations and windfall allowances.

Table 7: Planned Growth within Norfolk until 2038

				Dwellings to include in tariff		
LPA Partner	**A Local Plan Housing Provision**	**B Number in Emerging / Current Local plan already completed**	**C Number in Emerging / Current Local Plan already with Planning Permission**	**D (A-B-C) Remaining Allocations**	**E Windfall**	**TOTAL (D+E)**
Greater Norwich[3]	36,487	5,240	21,454	9,793	4,450	14,243
North Norfolk[7]	11,060	1,964	2,716	6,380	0	6,380
Great Yarmouth[4]	9,915	1,692	3,343	4,880	1,111	5,991
Breckland[5]	12,668	1.075	9,493	2,100	700	2,800
King's Lynn & West Norfolk[6]	8,455 (combined)	448	1,680	6,327	6,838	13,165
Broads	222	0	92	130	0	130
						TOTAL: **42,709 dwellings**

Source: Norfolk Strategic Planning Framework / Place Services, January 2021

[3] Housing commitment and completions figures are based on draft monitoring outputs as of 1 April 2020. Local Plan housing requirements are based on the emerging Regulation 19 Draft Greater Norwich Local Plan (GNLP) Document. The GNLP plan period is 2018-2038. The Housing Trajectory assumption are based on the plan achieving an average annual delivery which is equal to the minimum Local Housing Need (LHN) requirement for Greater Norwich of 2,027 home per year. LHN requirement is calculated as of 2018.

[4] The Great Yarmouth Local Plan runs to 2030 - for 2030-2036 the GY Local Housing Need (calculated using the standard methodology) has been used to estimate allocations for this period.

[5] The Local Plan period is 2012 – 2036, however will be subject to an immediate review with possible extended end date of 2041.

[6] Local Housing Need = 539 (539 x 20 = 10,780) Emerging Local Plan review (2016 -2036).Note this is a review and carries forward the majority of allocations already made in the 2016 Plan. Only two modest allocations totalling 111 dwellings are made. The allocations and completions from windfall sites since 2016 already will meet the LHN. The windfall allowance is based upon historic trends and includes a 25% discount as land is a finite resource. However, it should be noted that the current planning system and indeed the Local Plan review are very flexible in relation to windfall development. Figures are taken from the 2019/20 Housing Trajectory: https://www.west-norfolk.gov.uk/info/20079/planning_policy_and_local_plan/753/housing_delivery_test_hdt_action_plan

[7] Housing Target is adjusted to reflect updated standard methodology 553x20 years for plan period. Windfall allowance 170pa, (16yrs remaining , 2,720) adjust to reflect plan requirements outside completion, permissions and emerging allocations

It should be noted that without 'Plan period' housing trajectories, it has not been possible to identify whether there are any likely 'peaks' across Norfolk (i.e. any 'dwelling per annum' spikes) that could affect the mitigation required in set periods. For instance, if all the LPAs were relying on higher dwelling per annum numbers in years 10-15 of plan periods for example (to meet overall plan period requirements), then more mitigation would be needed in that period. Although this would not affect the tariff, additional Ranger resource may be needed.

The Strategy is based on average growth / annual housing targets over Local Plan periods. Final phasing and delivery may differ slightly due to market conditions (etc) but for the purposes of this Strategy annualised delivery considerations remain appropriate.

3.3 Mitigation at Habitats Sites

This sub-section addresses the following parts of the brief:

- Exploring effective mitigation measures;
- Addressing when the mitigation measures are required;
- Explaining where the mitigation is required;
- Explaining how mitigation relates to development;
- Setting out how mitigation measures can be funded;
- Proposing how the mitigation will be implemented;
- Proposing how the success of the mitigation measures will be monitored; and
- Setting out how best to incorporate monitoring data and other information and best practice into future reviews of the strategy and Local Plans.

3.3.1 Existing Habitats Sites Monitoring and Mitigation Schemes

3.3.1.1 Borough of King's Lynn & West Norfolk

The Borough-wide Natura 2000 sites 'Monitoring and Mitigation Strategy' states that the requirement for mitigation applies to housing and tourist accommodation applications (including hotels, guest houses, lodges, static caravans & touring pitches) within the whole area. For tourist accommodation the contribution is calculated on a case by case basis by the Council, depending on the type, location and seasonality of the accommodation. This approach differs to a RAMS as there is no costed package of measures and developer contributions are allocated through an application process which is facilitated through the Norfolk Coast Partnership (NCP). This mitigation fund covers any admin costs/time to the NCP. Project level HRA's are required as part of this process and some proposed mitigation measures are included.

3.3.1.2 Great Yarmouth Borough Council

The 'Habitats Monitoring and Mitigation Strategy' aims to implement protection measures for the main local Natura 2000 sites: Winterton-Horsey Dunes SAC, Breydon Water SPA & Ramsar site and Gt Yarmouth North Denes SPA, from any significant effects resulting from increased recreational pressures which may arise from new housing and tourism development planned by their Core Strategy growth. The plan-wide HRA recommends the immediate implementation of the following measures:

- Monitoring of visitor numbers and vegetation change to identify any impacts from the Core Strategy planned development.
- Provision of mitigation measures such as bins for dog waste, interpretation boards, waymarked routes and control of dogs
- Contribution to the management of the Little Tern colony to mitigate impacts of visitor pressures

The Great Yarmouth Habitats Monitoring and Mitigation Strategy uses planning obligations to secure developer contributions to provide a series of necessary monitoring and mitigation measures based on the proximity of new residential and tourist development to the relevant Natura 2000 sites. This is explained in a draft policy option and tourist accommodation (in section 3.2) and exemptions listed (in section 3.8). The implementation of the strategy is explained (in section 4.1) and differs from both the RAMS and Borough of King's Lynn & West Norfolk approaches. A project-level HRA is also required for each residential development, however some proposals can be processed by the council according to criteria agreed with NE.

3.3.1.3 Broadland District Council

The Recreational Provision in Residential Development SPD (2016) states that "The Habitats Regulations Assessments undertaken for the Joint Core Strategy, the Site Allocations DPD and the DMDPD conclude that any impact upon the Natura 2000 sites is considered unlikely. However, because the possibility of any potential impact cannot be ruled out entirely, green infrastructure (within the Local Plan area) is required in order to mitigate the impacts of development." This principle is taken forward through subsidiary policies including Policy EN3 of the Local Plan which needs to meet the 4ha per 1,000 population standard for informal recreational provision.

The approach taken to avoid recreational impacts by provision of strategic Green Infrastructure within residential sites and offsite within the Local Plan making area, aims to implement protection measures for the local Habitats Sites. This approach is key to diverting and deflecting residents from using Habitats Sites on a daily basis and high quality Green Infrastructure reduces the level of impacts. However, this differs from the other two mitigation and monitoring schemes, as the Broadland scheme is unable to deliver mitigation at the Habitats Sites outside the Plan making area.

3.3.1.4 North Norfolk District Council

NNDC have a policy in place seeking mitigation contributions from dwellings since the adoption of the Site allocations plan in 2011.

3.3.1.5 Greater Norwich Local Plan

The emerging Greater Norwich Local Plan is accompanied by an interim HRA which identifies in detail how internationally designated ecological habitats and wildlife sites in the wider area, including the Broads and the Norfolk coast, would potentially be impacted by recreational pressures likely to be generated by growth in Greater Norwich. Local Plan Policy 3 therefore sets a requirement that development mitigates impact on sites protected under the Habitats Regulations Directive.

The HRA identifies a range of mitigation measures to alleviate additional recreational pressure from additional growth planned in the Greater Norwich Local Plan. These include interventions at the sites themselves, providing suitable alternative natural green space (known as SANGS) and the implementation of a wider programme of green infrastructure improvements.

3.3.2 Exploring mitigation options at Habitats Sites

This section explores those approaches that are being undertaken in other parts of the country and what learning points are relevant for this Strategy. A knowledge of other approaches acts as a starting point for developing a RAMS that is appropriate for Norfolk and the unique challenges faced by multiple authorities and a large number of Habitats Sites that will be affected by recreational pressure.

3.3.2.1 What's being done elsewhere?

Surrey Heath Borough Council - Thames Basin Heaths Special Protection Area Avoidance Strategy SPD 2019

This case study is useful as it explores that notion of 'strategic' SANGS to additionally assist in the mitigation of effects away from the SPA itself. These are typically owned by individual LPAs who have purchased land in a strategic location for this purpose. New development can be 'allocated' to a strategic SANG within catchment areas, and contributions from developments within these catchments can be used for SANG enhancement, and ongoing management and maintenance.

What are the identified effects on Habitats Sites?

The Thames Basin Heaths Special Protection Area (SPA) is a network of heathland sites which are a habitat for three internationally important rare bird species: Dartford warbler, woodlark and nightjar. All three species nest on the ground or at low level and so are easily disturbed or harmed by recreational activity such as dog walking. Predation by domestic cats is also a risk factor, as is the potential for fly tipping and arson on the heathland habitat.

Research conducted on behalf of Natural England in 2005 indicated that the existing level of recreational pressure is having a detrimental impact on the three species. The breeding success of these ground-nesting birds is affected by disturbance from people and their pets using the SPA for recreational purposes.

What did they do to mitigate the effects?

An SPD approach established a 400m buffer around the SPA within which no net new residential development will be permitted; without which it would not be possible to conclude no adverse effect on the integrity of the SPA. A project-level HRA will be needed to demonstrate that any development within this zone will not have an adverse effect on the SPA and/or the acceptability of any avoidance and mitigation measures provided within the SPD.

The SPD also set out the provision of SANGs (of a certain capacity) which were currently not in use for recreation or significantly under-used to provide a new alternative for recreation. The SPD further sets out that SANGs should be in place before any development is occupied so that the risk of additional recreational pressure arising on the SPA is avoided. Additionally, mitigation was proposed in the form of Strategic Access Management and Monitoring (SAMM) measures and co-ordinates visitor management across the whole of the publicly accessible SPA. Access Management was seen as an important part of the avoidance strategy. The SPD proposed to promote the use of SANGs by improving the accessibility of sites, identifying recreational routes (in particular circular walks easily accessible from residential areas) and promoting these measures.

Is this mitigation proposed relevant to the situation in Norfolk?

As the SPD has only recently been progressed, the successfulness of the mitigation measures is unknown at this stage. The mitigation proposed is unique to the effects identified for the Thames Basin Heaths SPA, in particular those related to three bird species from new development. The mitigation proposed within the SPD relates very specifically to these effects and is not solely related to recreational pressure as is the case with the Norfolk RAMS strategy. Nevertheless, the case study informs this Strategy of the relationship between recreational disturbance emanating from growth over a wide area and the provision of 'strategic' enhancements to the GI network at the District level which can serve specific catchments.

The Dorset Heathlands Planning Framework 2015-2020 – An implementation plan to mitigate the impact of new housing development upon the Dorset Heaths Special Protection Area (SPD)

This case study outlines that mitigation can be supplemented by other GI projects. Furthermore, the suite of mitigations recommended include both infrastructure and 'non-infrastructure provision' which has implications for funding mechanism options in Norfolk and an appropriate mechanism to deliver mitigation.

What are the identified effects on Habitats Sites?

Public access to lowland heathland, from nearby development, has led to an increase in wild fires, damaging recreational uses, the introduction of incompatible plants and animals, loss of vegetation, soil erosion and disturbance by humans and their pets amongst other factors.

These effects are most keenly felt within 400m of heathland where Natural England advise that additional residential development is likely to have a significant adverse effect upon the designated site, either alone or in combination with other developments. The implication of this is that in most cases it will not be possible for an LPA undertaking an 'appropriate assessment' of a proposal for residential development to be certain that any adverse effects could be avoided or alleviated. Within an area of 400m to 5km, significant adverse effect in combination with other proposals will still be identified, but that avoidance or mitigation measures can allow development to be approved.

What did they do to mitigate the effects?

An SPD approach sets out that mitigation of effects between 400m and 5km will include 'Heathland Infrastructure Projects' such as SANGs to divert recreational pressure away from heathland. Residential developments that cannot avoid or mitigate their own adverse effects are required to make a contribution towards the overall Avoidance and Mitigation Strategy. This strategy has two elements, Heathlands Infrastructure Projects (such as SANGs) which are funded through CIL (where a schedule is adopted by LPAs), and Strategic Access Management and Monitoring (SAMM), which is 'non infrastructure provision' such as wardens, education and monitoring.

SAMM cannot be funded through CIL. The SAMM charge is also effective for prior approval applications for the change of use and or conversion of non-residential development to housing. This means that any new dwelling that comes forward will pay a direct contribution toward mitigating the adverse effects of its impact upon the Dorset Heaths. The contribution is payable through either a Unilateral Undertaking or Section 111 agreement. Proposed agreements under Section 111 will require the LPA and the developer to enter into the agreed form of S106 agreement at an agreed time. Section 111 is applicable as the SAMM is considered subsidiary to facilitating the mitigation.

Is the mitigation proposed relevant to the situation in Norfolk?

The success of the SPD can largely be measured through the success of collecting of contributions. The SPD responds to an area within a specific distance of a single Habitats Site and for that reason is quite different from the effect that this Strategy seeks to mitigate. Required mitigation within the SPD includes SANGs supplemented by other GI projects however, which is appropriate to a GI and RAMS Strategy. The Dorset Heathlands would be affected by development in a number of ways, whereas the Norfolk RAMS deals with 'in-combination' recreational effects only which has further implications for funding mechanisms that ensure mitigation is relevant to specific development. In Dorset the SPD ensured that CIL would pay for Heathland Infrastructure Projects and other mechanisms for other mitigation measures.

The Suffolk Coast Recreational disturbance Avoidance and Mitigation Strategy

This case study establishes an approved method of mitigation for both traditional coastal and forest habitats. It also outlines effects related to both planned housing growth and those that can be expected through tourist related development. The Strategy also introduces two tariffs that reflect differing levels of planned growth in some LPA areas and a proportionate approach.

What are the identified effects on Habitats Sites?

This Strategy is a collaborative project between East Suffolk Council, Ipswich Borough Council and Babergh & Mid Suffolk District Councils to help prevent recreational pressure on Habitats Sites on the Suffolk Coast (including forest habitats), in part due to residential development in the area and an increase in visitors. Parts of the Suffolk coast are also popular tourist destinations and the Strategy separates sites where access is predominantly from tourists rather than local residents. Effects on sensitive receptors included those regarding rare and vulnerable birds which feed, nest and/or rest on the Suffolk Coast including woodland / forest habitats. Further receptors include wildlife which may be chased or disturbed by off-lead dogs, the presence of too many people, footpaths becoming eroded by people walking and vegetation becoming trampled. Trampling decreases plant cover and changes the ground flora species composition.

What are they doing to mitigate the effects?

The Strategy includes a list of measures and projects to be funded through a tariff approach, including:

- Within the forestry blocks suitable nesting habitat for Nightjar and Woodlark will be created temporarily when trees are felled;
- Employment of specific RAMS wardens to educate visitors;
- An audit of signage and car parking to determine high and low use areas;
- The consideration of alternate locations for dog activities away from nesting, roosting and feeding bird areas; and
- Monitoring work to find out if implemented measures are working.

RAMS payments are requested for development of one or more new dwellings and some tourism development, within a 13km zone of influence from designated sites. The Strategy sets out that a contribution to RAMS is a simple way of allowing the AA of smaller developments to conclude that the in-combination effect will be mitigated. Two tariffs areas have been identified, to reflect lower planned housing growth in some areas that others, offering a 'fair' contribution that is proportionate to effects.

Is the mitigation proposed relevant to the situation in Norfolk?

Although this RAMS project considers coastal recreational impacts, it does factor in the protection objectives of numerous Habitats Sites within the Suffolk coastal area including areas of forest - this is similar to the habitats found in Norfolk. The RAMS is also now considering tourist related development, which again is relevant to Norfolk Habitats Sites. The Strategy sets out that although paying into RAMS is the easiest way to help mitigate against recreational disturbance impacts to designated sites arising from new residential development, there is an option not to pay into the RAMS fund - providing onsite mitigation is expensive and will be assessed to ensure it provides meaningful recreation. It must provide a suitable alternative to visiting a European site. Additionally, the Strategy outlines that RAMS is a comprehensive form of mitigation to address cumulative effects - addressing effects on a piecemeal basis is unlikely to be effective.

3.3.2.2 Analysis and review of mitigation options for each Habitats Site in Norfolk

An initial workshop was held for key stakeholders in May 2019 to gather local and specialised knowledge from organisations and individuals on the following:

- The locations of visitors at the coast and the recreational activity currently taking place;
- Current recreational disturbance problems; and
- Current mitigation measures in place.

A follow-up workshop was then held with key stakeholders in July 2019 which provided an opportunity to capture the mitigation measures considered as most effective to avoid the impacts likely to result from increased recreational pressure on the Norfolk Habitats Sites in the future.

For each Habitats Site, stakeholder input has helped to identify current issues of recreational disturbance which have provided a focus for and will help prioritise measures in the Norfolk GI and RAMS. The information gathered from the workshops has been summarised in the tables below for each Habitats Site. These show the current recreational disturbance by increased visitor access, existing mitigation in place and identification of any gaps in mitigation which could be considered to be part of the RAMS element of this Strategy. However, it is important to note that this is not an exhaustive list of all the measures in place.

Table 8: Issues and impacts identified from stakeholder workshops and stakeholder discussions

Issue	Impact	Mitigation in place / trialled
Walkers/ joggers/ dog walkers/ horse riding/ paddle sports / swimming/ canoeing/ kayaking powerboating etc. in sensitive areas	▪ Little terns/nesting birds disturbed ▪ Erosion of site	1) Trialling visitor management approaches at Horsey/Winterton, Holme, Brancaster, Holkham through ENDURE project. 2) Wardens/volunteers 3) Signage focused on dog walkers 4) Dog walking events/dog breakfast to spread the message/ No dogs policy mid-April to August Scolt Head. 5) Alternative paths around the perimeter of sites 6) Education material available 7) Fencing for tern colony Scolt Head. Also monitoring of habitat change & erosion 8) Social media campaign 9) Holkham foreshore staff & Dersingham Bog engage with visitors, monitoring of nesting success and impacts of recreational disturbance on species habitats monitored for impacts of erosion

Issue	Impact	Mitigation in place / trialled
		10) Positive signage, no 'do not's New recreational best practice guide been out for consultation so can be considered catalogue for measures.
Increased number of campsites/glamping close to designated sites	People likely to visit protected areas which causes traffic/noise	N/A
Dog walkers trespassing onto Nature Reserve after the Information Centre shuts	Disturbance to habitats	1) Increased signage 2) Awareness of implications

Source: Place Services, 2019

Table 9: Types of recreational disturbance reported at the Norfolk GI and RAMS Workshops and stakeholder discussions

Body	Information currently available	What measures are in place to avoid / mitigate disturbance
Norfolk County Council	*ENDURE Project:* ▪ Visitor management on Sand Dune sites ▪ Trialling approaches ▪ Walking with Stakeholders to ID issues *Norfolk Trails:* ▪ Delivering England Coast Path and National Path ▪ People counter data available for trials and sites ▪ Visitor information surveys *Prowad link project (Wash EMS)* - soon to undertake visitor survey for the area *Marriotts Way Project* - Visitor info & Education & Interpretation	1) Trialling visitor management approaches at Horsey/Winterton, Holme, Brancaster, Holkham through ENDURE project 2) Will involve social media campaign on site into wardens/rangers - fencing/signage
North West Norfolk	▪ Site records of increased disturbance from a range of activities including -	1) Scolt Head - Sumer Walden on Scolt Head - Temporary shut between mid-April and August - Inland has 'no dogs' policy mid-April-

Body	Information currently available	What measures are in place to avoid / mitigate disturbance
	sailing, power boarding, canoeing, kayaking ▪ Visits to sites increasing erosion on vulnerable habitats (North Norfolk sites) and disturbance, walkers, joggers, general increase in visitor numbers increasing impacts on breeding animals and habitats ▪ Lots of other activities on the coast and inland sites.	August. Fencing to Tern colonies monitoring of habitat change and erosion 2) Holkham Foreshore - Staff monitor breeding shorebirds and advise and engage with visitors around disturbance 3) Dersingham Bog - staff monitor visitors and engage with visitors on site. Detailed monitoring of nesting success and impacts of recreational disturbance on species habitats monitored for impacts of erosion
The Wash North Norfolk Marine Partnership (WNNMP)	*MMO Project (University of Hull)* ▪ Understand and map recreational activities and associated pressures across British ▪ Detailed info and GIS layers for The Wash and N. Norfolk, EMS + Cromer MCZ. *WNNMP* ▪ Coordinated disturbance monitoring programme across EMS since 2004. Reports available. New online reporting tool is built to automate monitoring. ▪ Automate for other areas/sites"	1) New recreational best practice guide. Consultation ends May 25th. ------ 20 activities and provides advice across all spatial and seasonal scales. 2) Can be considered a best practice catalogue 3) Online and paper version available 4) Includes an activity icon - signage to develop a visually consistent communication strategy across region 5) Dog walking management strategy report commissioned that covers Holkham NNR (& Gibraltar Point NNR - Lincs) and adjacent area (Steve Johnson) 6) Need to develop a consistent approach for both sites - WNNMP 7) Avians Group
Norfolk Coast Partnership	▪ Family friendly sites (sites more able to handle visitor pressure) ▪ Sensitive sites (data collected from site wardens on the most sensitive breeding/feeding/roosting/layout out sites for birds and seals ▪ Older surveys on visitor reasons to visit specific sites ▪ Older dog disturbance work (with WNNMP) ▪ In Progress:	1) NCP are the facilitators of the BKLWN HMM Fund, as well as sitting on the Panel 2) Happy to share process/development of the fund 3) Would be happy to spread this role across other LAs/across Norfolk or to help in setting up a countrywide approach 4) Completed 'Your Norfolk Coast' project with tourism businesses about their customers' recreational impacts. We continue to work on these issues - key theme for us.

Body	Information currently available	What measures are in place to avoid / mitigate disturbance
	- Key Performance Indicators for the coast (AONB) - New Norfolk Coast Management Plan	
Royal Society for the Protection of Birds (RSPB)	▪ Visitor surveys at Winterton for LIFE project ▪ Little term site profiles - passed to due ▪ Reserve management plans available will have NE sign off	1) Little tern site profiles 2) Reserve management plan 3) Fencing, wardening, signage common 4) RSPB doing behaviour change project in east Norfolk. Targeted signage on dog walkers. Signs changes to be focused on what 'can' be done rather than 'can't' be done. Pictures of dogs to encourage target audience. Run a 'dog breakfast' event in August to make contact with dog walkers at car park, provide chance to talk and demonstrate interest in what the group want at the site. Well received event and work through 2018 - built positive link with the community.

Source: Place Services, 2019

3.3.3 Proposed mitigation and reasoned outputs

This Strategy has used the evidence gathered in the previous sections to identify a package of effective measures considered necessary to avoid and mitigate the impacts of recreational disturbance from planned residential growth over the next 20 years in each participating LPA area. This section looks solely at the measures which need to be delivered at the Habitats Sites across Norfolk to deal with the residual impacts which are not deflected by strategic Green Infrastructure. The Natural England interim advice to the Norfolk LPAs (Aug 2019) (see Appendix 1) includes details for Green Infrastructure to containing the majority of recreation within and around the residential site to avoid impacts from the development alone. The RAMS package is designed to avoid impacts from the development in combination with other plans and projects; it is not designed or reasonable for the RAMS to mitigate or reduce the current level of recreational disturbance in the Norfolk Habitats Sites as this would be unreasonable for future developers. However the RAMS measures identified for delivery at these sites will promote good visitor behaviour, which will have a positive impact where there are existing conflicts, and ensure adverse impacts on vulnerable interest features do not increase.

Based on the observations reported by site managers, and an excerpt provided to the consultants by Natural England from their 'Housing Development and Estuaries in England: Developing Methodologies for Assessing the Impacts of Disturbance to Non-Breeding Wildfowl' (Footprint Ecology, unpublished report for Natural England[7]) it is considered that the most effective mitigation measure at estuaries is

[7] Ross, K., Liley,D. Austin, G., Clarke, R.T., Burton, N.H., Stillman, R.A., Cruickshanks, K. and Underhill-Day, J. (2014)

on-site Ranger i.e. face to face communication. This intervention can be considerably more effective than signs, byelaws and general information provision; it is supported by Natural England and implemented by other HRA mitigation partnerships in conjunction with other bespoke behaviour intervention measures as needed. The RAMS package therefore places an emphasis on Ranger engagement with the public, but it also contains may other tools in its toolbox such as monitoring (visitor numbers and behaviours, vegetation and species including disturbance incidents) to build up a picture of what successful mitigation looks like for each Habitats site to deal with issues that concern the site managers.

Published research for the Solent estuary on the first year results of monitoring bird disturbance in the presence/absence of Rangers (Liley,D. and Panter, C. (2017)[8] showed that at seven out of the ten locations surveyed, the proportion of birds disturbed (i.e. any behavioural response) was significantly lower when a Ranger was present. Activities where the proportion of birds disturbed was less when a Ranger was present were dog walking, walking, jogging, and 'other' (i.e. activities that did not fit with our standard categories). These are potentially some of the activities that would be most easily intercepted by the Rangers. Whilst the results from this first year are not intended to provide comprehensive findings or complete results, they show slight positive effects of Ranger presence, particularly in terms of the overall number of birds disturbed, rather than the proportion of events that cause disturbance. The monitoring is intended to provide baseline results for comparison with future years and to guide how the Ranger team is deployed. Implications are discussed but key recommendations are:

- For each site, a target is set for what the Ranger team is aiming to achieve, and this is communicated directly to visitors. Targets would relate to visitor numbers (e.g. fewer visitors walking in a particular area), visitor behaviour (e.g. fewer dogs off lead), bird numbers (e.g. increased use of an area by birds) or bird behaviour (e.g. fewer birds flushed). Ranger effort would then become focussed to specific spots and targets and the monitoring could also, in part, directly report against those targets.
- The reach and effectiveness of the Ranger team is increased through temporary signs (e.g. 'A' boards that can be put out at key locations), temporary fencing etc. that can help influence people besides one of the Rangers simply speaking to them. An example is a roost on a linear section of beach where people can approach in either direction. As the Ranger can only stand on one side of the roost, the use of temporary signage/fencing etc. on the other side could make a major difference.

Different types of recreational impact will need bespoke mitigation measures and the list of impacts reported for Norfolk Habitats Sites are wide ranging. Some sites will need more monitoring data to inform which measures is likely to be most effective and others will benefit from a menu of measures to influence visitor behaviour.

A Natural England presentation at the HRA mitigation "meet up" in Havant (Nov 2018) described how to develop and test behavioural interventions based on the finding that there is often a fundamental difference between stated attitudes and behaviour when dealing with environmental issues. Dr Rose O'Neill & Dr Cheryl Willis explained that, when it comes to exploring changing behaviours, the challenge is not to focus only on the individual (their attitudes, knowledge and awareness). It is more effective is to look beyond the individual to the context in which behaviours are occurring. This supports the need for the Norfolk RAMS steering group and when in post, the Delivery Coordinator to use the package of measures and test which intervention will work best in each situation on any site.

Clearly, the prioritisation of the implementation of the mitigation measures will need to consider which

measures will achieve the greatest impact, the cost of the measures and the amount of funds available in the Norfolk RAMS budget and the complexity of projects, for example some may require long term planning and feasibility work.

The package of mitigation measures, some coast-wide and others specific to an individual Habitats Site will need to be implemented "in perpetuity" although the costs are currently calculated for the lifetime of the Local Plans as advised by Natural England. The term "in perpetuity" has a legal definition of 125 years (The Perpetuities and Accumulations Act 2009) and it has been accepted in strategic mitigation schemes for European sites such as those in place for the Thames Basin Heaths and Dorset heathlands. The conclusion on a time period for the RAMS to cover is therefore recommended as the earliest date any Local Plan covers to the last date any Local Plan covers i.e. until 2038. This will however need to be agreed by the LPAs to support each Local Plan at examination. The RAMS package of measures will also therefore need to cover sufficient mitigation to be delivered for the periods for each Local Plan. This will have a slow start, with fewer Local Plans adopted than not at present, rising to deliver mitigation across all of the Norfolk's Habitats Sites identified. This will allow the package costs to be finalised and a tariff calculated.

Developer contributions will be ongoing to support future local plan periods with an updated package. Existing RAMS partnerships elsewhere in England invest some of the developer contributions to ensure that mitigation for impacts from residential development can be delivered for the Local Plan periods without the need for successive funding. Bird Aware Solent currently invest 40% of all such contributions and the Bird Wise project in Kent split funds at approximately 40% spend and 60% investment.

As the tariff is applicable on a per dwelling basis, it will also apply to unplanned growth that may come forward in the timeline of the project. As the partner LPAs have different time periods for their Local Plans, NE's advice was that a fair and appropriate approach would be for the single Norfolk RAMS pot to be available for developer contributions for all adopted Local Plans. Therefore, those LPAs with adopted Local Plans should be able to deliver the mitigation measures for the sites affected by their development as soon as possible. Those LPAs with Local Plans still in preparation will start the transfer of developer contributions to the countywide RAMS pot for strategic delivery when the strategy has been adopted. This approach would give a staggered start to the RAMS pot and build funds as Local Plans are adopted; these would need to be spent at the sites predicted to be affected and recorded in legal agreements to provide an audit trail for each LPA decision on relevant development.

With regular reviews built into the Norfolk GI and RAMS report – with regular gate reviews for assessing progress of the measures delivered under implementation of the RAMS mitigation package – it is suggested that the LPAs should fix a suitable point before the end of the last Local Plan adoption for all parties to agree a final review and need for another period of RAMS to support future Local Plans. This will be influenced by any future HRA Appropriate Assessments of new Local Plans.

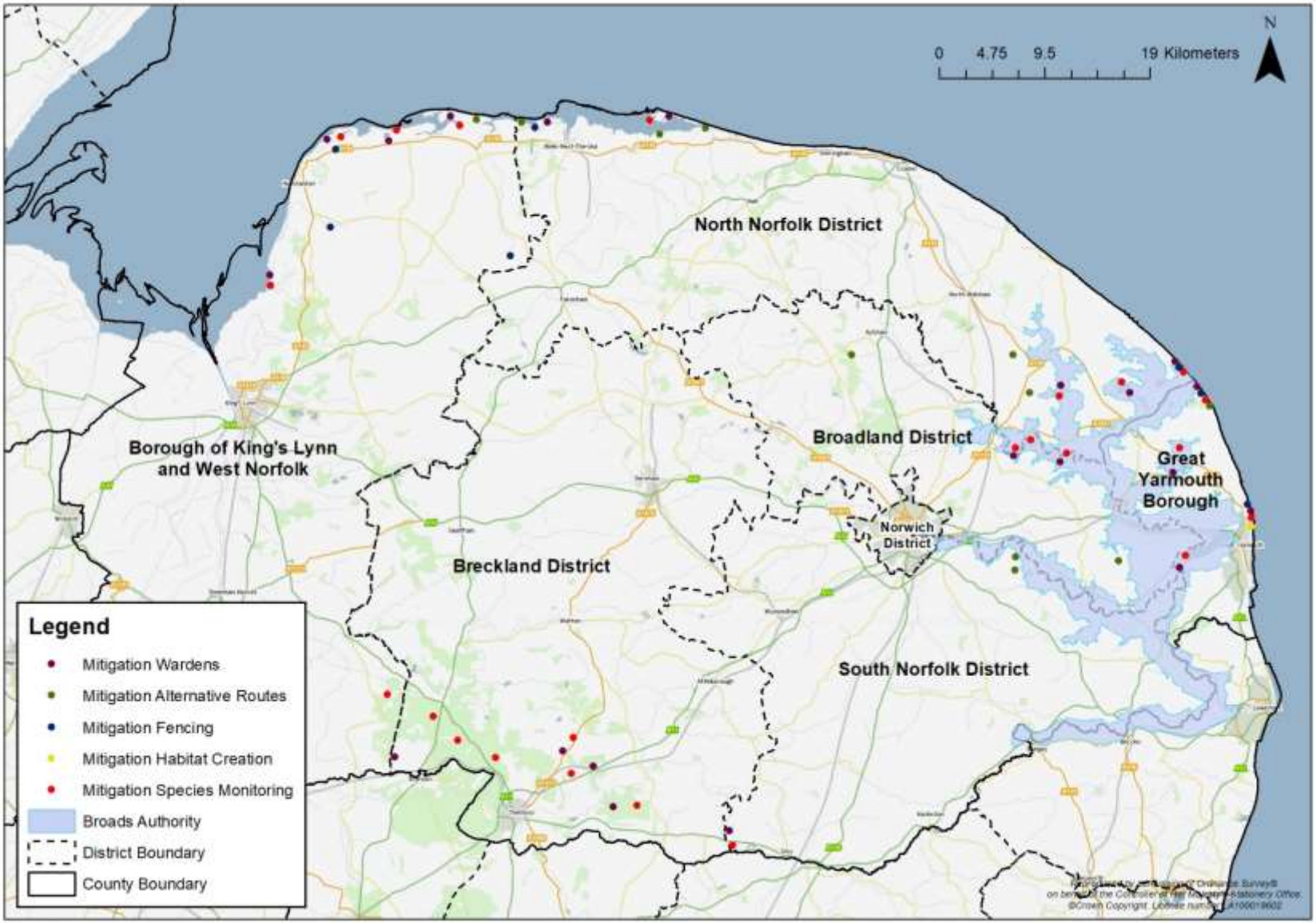
In reality, regular reviews of Local Plans and implementation of the Norfolk GI& RAMS, will provide opportunities for a continuing and rolling delivery of mitigation measures to meet the 'in perpetuity' test at examination and all decisions on relevant development.

In the interim period and in line with NEs' interim advice, all LPAs are asked to prepare HRA records using the template provided or something similar, secure sufficient GI on site or provision nearby, and collect developer contributions for the delivery of mitigation at the Habitats Sites as necessary. This is in order to avoid AEOI from residential development

After the current Strategy lifetime, future timetables will need to be prepared based on reviews of the Strategy itself and its evidence base.

Figure 23: Types of recreational disturbance reported at the Norfolk GI and RAMS workshops

Figure 24: Key mitigation options identified at the Norfolk GI and RAMS workshops and partner organisations



Source: Place Services, 2020

To identify the key "hotspots" where visitor behaviour is already resulting in significant effects on Habitats Sites, the initial sites identified were the survey points listed in the Footprint report "Visitor surveys at European Protected Sites 2015-16". These were identified at a workshop held in Norwich held in February 2015 with the local and county authorities and a range of organisations and after the workshop, the consultants checked some potential survey locations on the ground and the list was finalised with the steering group to match the available budget (40 survey points in total though not all in Norfolk) and workshop suggestions. The visitor survey work coincided with periods when the nature conservation interest at each location was potentially the most sensitive, and when people were likely to be visiting so the results provided a good indication of visitor pressure at the time.

Many but not all of the survey locations were recognised as "hotspots" so the workshops held in 2019 for this project, aimed to update the picture of visitor behaviour at these and other locations at all the Habitats in Norfolk, not just those surveyed in 2015-16. This was supplemented with discussions with Norfolk Wildlife Trust (who were unable to attend either of the two workshops in 2019) and land managers and LPA partners. They confirmed that most of the locations surveyed were now hotspots for visitors with concerns of many having reached their capacity with impacts on vulnerable features and additional locations were also identified. From these discussions 41 'hotspots' locations across Norfolk have been identified where sensitive features are already being affected and therefore , without mitigation, the Habitats Sites are likely to be adversely affected by the predicted increased level of recreational pressure from residential development forecast and allocated within Local Plans.

As some information is confidential, maps included in this Strategy will for example not identify roosts for breeding and non-breeding birds but instead identify locations where conflict is an issue due to access points and car parks and could therefore result in adverse effect on the integrity of Habitats Sites.

3.3.3.1 Rangers

Based on the delivery of strategic HRA mitigation partnerships elsewhere in England (e.g. Thames Basin and Dorset Heaths, Solent and North Kent Coast), Natural England has been keen to support face-to-face communication as an effective method of influencing visitor behaviour and thereby avoiding and mitigating adverse impacts on vulnerable features at Habitats Sites of different types.

The interventions for the Norfolk RAMS Ranger team are broadly categorised as education, communication and habitats based. 'Education and communications' is discussed in Section 3.3.3.3 below.

For the reason outlined above, the Norfolk RAMS mitigation package therefore has a focus on education and public engagement activities to raise awareness of appropriate visitor behaviour at Habitats Sites and the number of Rangers proposed is based on practical experience of Bird Aware Rangers on the Solent. As an established team, hotspot locations will be visited each week. Based on the 41 hotspots identified by Norfolk stakeholders at the workshops, the RAMS package includes sufficient resources for the Norfolk coast (from the Wash to the East coast), the Broads and, subject to monitoring to confirm the need and timing for this measure, also for the Norfolk Brecks. This provision will be monitored and reviewed throughout the lifetime of the project / Local Plan periods. At present, the resource recommended has been based on existing provision elsewhere in England with review on travel time and mileage provided by Habitats Sites managers. How this resource is utilised by the project will be dependent on need to provide flexibility in discussion with Natural England and Habitats site managers.

The Norfolk hotspot locations would therefore benefit from weekly visits to encourage appropriate recreational behaviour and can support existing site staff as well as tie in with site monitoring work

throughout the year. This could include surveys of vegetation and species as well as updating visitor surveys at different locations.

At coastal sites, visits will need to be planned around the tides as some sites are best at high tide for resting birds, while others are great feeding spots at low tide. Equipment such as a telescope will help the Ranger team show visitors a good view of the birds or seals at these Habitats Sites, as to the naked eye it is easy to overlook them as they are well camouflaged. HRA mitigation Rangers elsewhere report that when a visitor has had a good look through a telescope, it makes it much easier for them to explain why they need to be given space so they can feed and rest. This approach is likely to be suitable at inland sites too where sensitive birds are found e.g. the Brecks and the Broads.

Natural England understand that the concern relating to inclusion of a 'one size fits all' mitigation measure for Norfolk Brecks Habitats sites, related to the timing within the package. NE staff felt that flexibility for implementation of measures in the part of Norfolk needed to be included and front loaded the package with habitat and species monitoring (i.e. SPA and SAC features) as well as visitors and this allows for consideration of the West Suffolk Local Plan to be supported by a Brecks-wide approach before deciding if Ranger and education activities are the best use of resources. The package delivery timeline retaining the costs for a future Norfolk Brecks engagement budget provides flexibility and has allowed the package to be finalised and a tariff calculated.

Provision of educational awareness will be a key role for the RAMS team to encourage appropriate behaviour at the sensitive locations where new residents (including tourists staying in the county) are likely to cause recreational impacts, often unintentionally. This face to face communication will be key and could be a regular "come and watch the birds/seals" pop-up event with an opportunity for the Ranger team members to explain the best way to avoid disturbance. However, support for existing Ranger provision is also key to building relationships with existing managers of Habitats Sites; it is essential that each Local Authority can demonstrate transparency for spend of developer contributions, so the RAMS Ranger team need to be seen as an additional resource for additional recreational impacts, and not to address existing issues or funding being used to fill in gaps in provision.

As well as visits to the Habitats Sites, it will be key to provide talks and walks e.g. to schools, clubs and societies, attend local events run by a wide variety of organisations and use their time to plan activities and co-ordinate with other providers. It will to be important to maintain close working links with colleagues in the RAMS Ranger team to enable the Delivery Coordinator to keep up to date with their work programme as it changes with new housing developments commencing. Other time will also need to be spent on training to ensure Health & Safety e.g. lone working, and development of best practice e.g. codes of conduct for different recreational activities; educational materials and props and interpretation for the Norfolk GI and RAMS website and social media, which will need to dovetail with other information e.g. site notice boards & England Coast Path.

It is recommended that joint messages are developed with other organisations already delivering similar activities with the RAMS Ranger team in these areas, to ensure clear and consistent messaging achieves as wide a reach as possible. For example, Broads Authority (BA) Rangers look after several land sites across the area as well as being water-based and an important part of the Broads Ranger role is to influence public behaviour on sites and to encourage safe use without causing damage. They spend most of the summer speaking to people about safely using sites, for example the use of barbeques and accessing the water. The byelaws ensure activities are carried out in a way that do not cause damage to the natural environment (less boat wash to damage habitats, etc). In addition, BA Rangers hold their own events including guided walks and safety days to engage with wider audiences. The BA visitor information centre staff and Education Officer play an important role in educating and engaging with the public as well. Any member of the Ranger team based in the Broads would benefit

from close links with Broads Authority Rangers to help identify key areas. There would also be links with their education work and events programme including the Broads Curriculum. The RAMS Ranger team requirement would therefore be best delivered via or in partnership with the Broads Authority and benefit from their experience in providing Ranger services that fulfil multiple roles, from engagement to practical work and enforcing bye laws.

It is possible that during the winter, one of the RAMS Ranger team could be dedicated to one or two Habitats Sites when disturbance of over-wintering birds is likely, as additional new housing delivery numbers are greatest in this part of the Norfolk RAMS Zones of Influence. Ranger team visits in the winter months will be focussed on key locations to counter problems e.g. associated with bait digging, impacts on seals, and the fact that dog walkers are not allowed on to the beaches during these months.

In the months of May to September, Ranger team efforts should be dedicated to locations within Habitats Sites where the trampling of sensitive habitats affecting SPA spring and summer breeding birds are the focus e.g. at Winterton/Horsey, North Denes, Holme, Brancaster and Holkham. Under the EU Interreg funded ENDURE project, the Norfolk County Council Environment team is looking to reduce the impact visitors have on Norfolk dunes when visiting the coast path and other trails. This can build on the findings of the report commissioned by Natural England to help improve the management of walkers with dogs at Winterton and Great Yarmouth North Denes (Jenkinson, 2015). While site-based measures may initially appear to be the most obvious steps to take in the study area, it is considered that the first priority must be to ensure good working partnerships and relationships are in place and then maintained to minimise effects arising from the actions of partners and other nearby land managers in the future that could otherwise, inadvertently, become significant.

The NSPF will need to consider the resourcing of mitigation to deal with peaks in effects related to housing being delivered, as there are no phasing details provided at this stage to influence the mitigation package. It is therefore recommended that the LPAs note that there may be a need to adjust the number of mobile Ranger team members and link recruitment to identifying a need for face to face presence in any particular part of the county as well as evidence that this measure has been triggered by evidence of adverse visitor impacts. There is no 'one-size fits all' tool for the delivery of mitigation measures in the RAMS 'toolbox' so the Steering group will need to be guided by the Delivery Coordinator with an oversight of monitoring reports.

The roles of the Norfolk RAMS Ranger team, as allocated by the RAMS Delivery co-ordinator, could also include assistance with the delivery of site-specific and local projects and the monitoring of visitors. As the Strategy is rolled out, the work of the Ranger team will likely change to include publicity, events, monitoring, reporting and working on some of the longer-term measures.

Apart from the 41 identified hotspots for disturbance of habitats and species e.g. key roosts and feeding areas (as shown in Figure 25) that will require the Ranger team visits across the Norfolk RAMS area, other less sensitive sites will also require additional visits. Locations identified should also include those with high visitor numbers regardless of risk to Habitats Site features. Based on information provided by Bird Aware Solent Rangers, key locations should receive weekly visits as 'High Risk' sites for recreational disturbance, whilst other locations should be categorised as Medium (with monthly visits scheduled) or Low (with seasonal visits required). This frequency of visits to specific sites within the geographical work area of each member of the Ranger team is aimed at maximising public engagement at the appropriate time of year, which may be year-round in some locations.

Mobile Ranger team members could also carry out further visitor surveys over the lifetime of the Norfolk GI and RAMS to provide updated baseline for ZOIs as part of the monitoring programme. This would

ideally be prioritised as follows:

- Summer visitor surveys at all sites as the Ramsar sites and Norfolk SACs include habitat features sensitive to recreational pressure at all times of the year, especially from water-based recreation. The ZOI should then be re- calculated from the combined dataset from summer visitors as well as over winter too.
- Winter and summer visitor surveys at all the Norfolk SPAs as these had not been covered as part of Footprint Ecology Norfolk visitor survey programme 2015-16.
- Winter and/or summer visitor surveys for those sites which were surveyed as part of the Footprint Ecology Norfolk visitor survey programme 2015-16 but which had a dataset lower than 400 as per the Visit Britain guidelines.

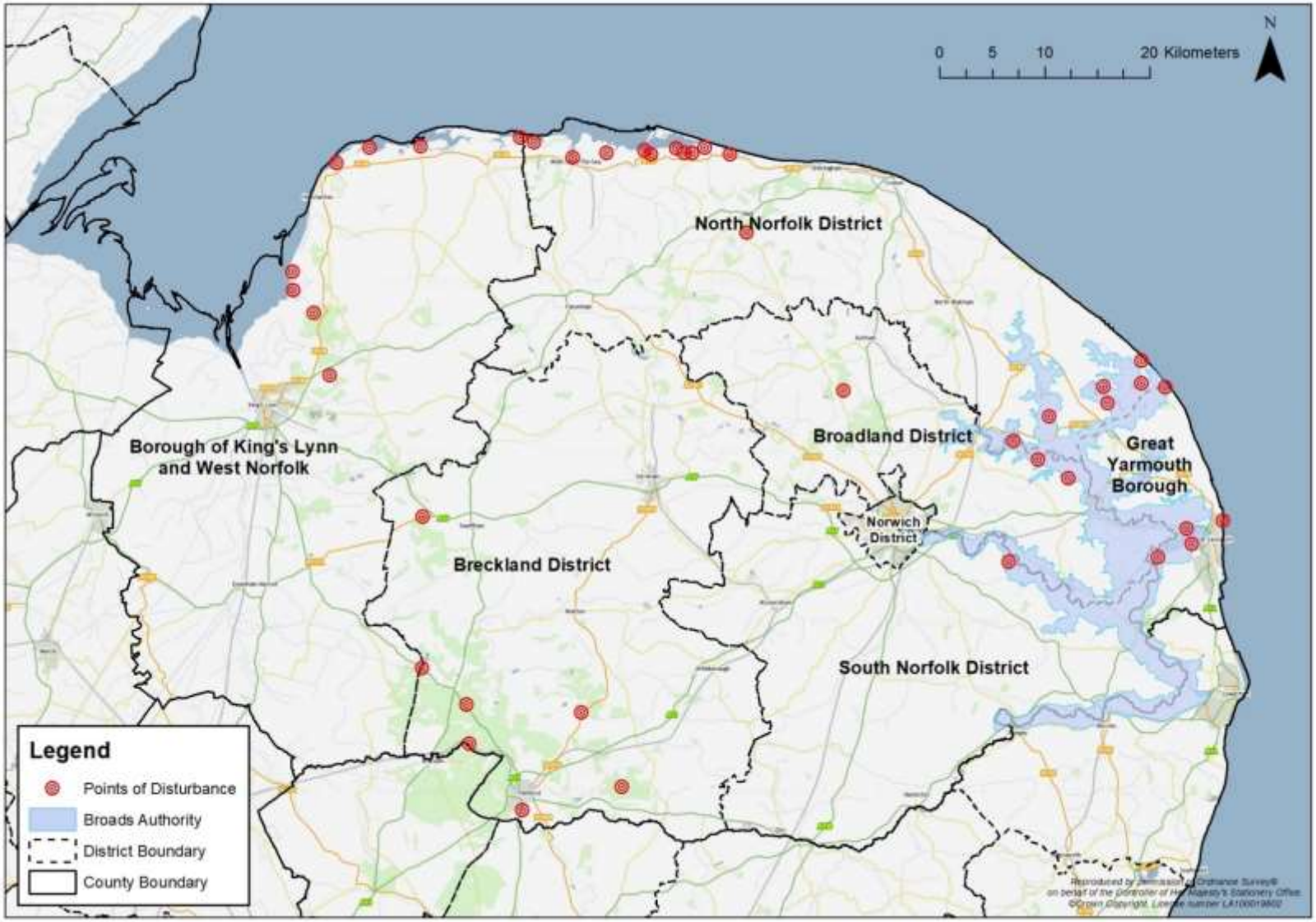
Joint visits with other organisations will demonstrate partnership working and this has been successfully demonstrated by Bird Aware Solent Rangers e.g. for a pop-up event with some of their educational props such as bird skulls, beach finds and a telescope. This meant many families gained an insight into their local environment and enjoying matching the skulls to the pictures. Some quotes from their blog show the value of this face to face communication at avoiding and mitigating for recreational impacts:

> "It always gives Rangers a sense of pride when the people we talk to leave us, appreciating that the area is special for the thousands of birds who call it home every winter."
>
> "One thing I have come to appreciate is how important it is to have a visible Ranger presence along the coast. I am often surprised by the number of people that see birds scatter after being disturbed, yet they do not realise the impact of this. I try to explain that this disturbance contributes to loss of feeding time and additional energy use which can threaten the bird's chance of surviving the winter. I'm really pleased to say that this usually gets people's attention and it's then I see a change in their outlook. It's in this 'eureka' moment that the difference the Ranger team makes on a daily basis is really highlighted. Most people out enjoying the coast already have an appreciation of the environment and wildlife, we just help them to connect to it."

3.3.3.2 Proposed locations for measures to avoid impacts from planned residential growth in Norfolk

The locations for delivery of key measures proposed in the mitigation package are shown in the figure below as identified by stakeholders at the workshops held in 2019 and subsequent discussions held with conservation organisations including NWT, RSPB, Natural England site staff and LPA partners.

Figure 25: Locations for disturbance impacts and Norfolk RAMS mitigation proposals



Source: Place Services, 2020

The geographical distribution of recommended mitigation measures shown in the figure above indicate key locations where resources should be focussed. Each LPA needs to mitigate for in-combination impacts outside of their administrative boundary, and not just for their local Habitats Sites. Strategic mitigation is spread according to need on the ground and the package costed for tariff collection; as each project-level HRA Screening Report completed by the LPAs needs to identify the Habitats Site(s) which are predicted to be impacted. This is needed for the legal agreements to provide an audit trail of developer contributions.

Each LPA should be preparing project-level HRA Screening Reports for all residential development in line with NE interim advice (August 2019), which included an HRA template for this purpose. Where the applicant agrees to contribute to the Norfolk RAMS, the development will be HRA compliant. The strategic solution is not however mandatory, and applicants could try to provide their own data for visitor surveys at the relevant Habitats Sites (dependent on ZOI(s)) and assess the likely recreational impacts for their development to enable the LPA to prepare a bespoke project-level HRA.

In very exceptional circumstances therefore a developer may offer alternative mitigation if:

- details of the visitor surveys carried out and mitigation offered with evidence of how this will fully mitigate the impacts in perpetuity. This should be submitted along with the application and will require the input of a professional ecologist.
- the information is sufficient to support the LPA in preparing a bespoke HRA Appropriate Assessment to check that the measures offered are effective and can be delivered in perpetuity. This is potentially a lengthy process and the outcome of the Appropriate Assessment may show that the alternative mitigation offered is insufficient. The AA will require formal consultation with Natural England and in line with the CJEU Court ruling (*Holohan and Others v An Bord Pleanála*), there are more detailed requirements on the competent authority for any plans or projects at the Appropriate Assessment stage, including, but not limited to cataloguing the entirety of habitat types and species for which a site is protected and being beyond reasonable scientific doubt concerning the effects of the work envisaged on the site concerned.

However, securing alternative effective mitigation measures, and sufficient funds for their delivery in perpetuity, could be difficult. The timescales and costs involved minimise the likelihood of this approach being accepted as sufficient by the LPA or Natural England and unlikely to be compliant with Habitats Regulations if they cannot avoid Adverse Effect On Integrity of Habitats Sites.

3.3.3.3 Education and communication

A cost-effective approach which has been successfully implemented by a number of HRA mitigation partnerships (e.g. North & East Kent and the Solent), is to develop a brand and use positive and clearly understandable message to engage with visitors where birds are key to the site integrity. This positive and comprehensive approach can be more engaging than an explanation of the Norfolk GI and RAMS or Habitats Regulations and the intricacies of planning and conservation law. A brand could be promoted on relevant websites to engage and motivate interested parties.

The Solent partnership uses the brand name 'Bird Aware'[8] North Kent uses 'Bird Wise', which is based upon the Bird Aware model. The use of the Bird Aware brand for parts of the Norfolk GI and RAMS, if forthcoming, would not mean that the entire focus of the Strategy was on SPA birds, as designated habitat features must be protected in their own right through the Norfolk GI and RAMS and these would

[8] Bird Aware - www.birdaware.org

not be neglected if this branding was used.

The Solent Bird Aware project now offers a portal for information and partners under the Bird Aware brand. This is also the case for the 'Bird Aware Essex Coast' which has a ready-made communication package including an established website. This could be available for the Norfolk RAMS team to purchase and would include a bespoke Bird Aware Norfolk webpage and an initial print run of Norfolk GI and RAMS leaflets containing relevant local photos. A strategic approach or campaign is usually most effective where an easily understandable, clear, persuasive and memorable message/brand is presented to the target audience at the point of contact (recreational users of the sites in this case). For example, the RSPB have built an easily recognisable and well-respected brand and, although their key focus is on protecting birds, their educational materials etc. advocate the conservation of other species and habitats too. This improves people's awareness of these as well. With this in mind, it would be mindful that the educational materials and Ranger team interactions with the public, for example, should cover wider habitat protection as well as those related to birds.

Using a brand would complement the use of the Norfolk RAMS Ranger team. Further, the provision of "face to face" conversations visitor was a measure that was commonly cited in the Norfolk GI and RAMS workshops as being effective. This face-to-face engagement with visitors is the main feature of other mitigation schemes such as the Solent (Bird Aware partnership), in the Thames Basin Heaths and Dorset heathlands. Encouraging people to avoid disturbance of roosting birds e.g. Little Terns or Stone Curlews, or feeding wildfowl and waders on the coastal mudflats, has been identified as one of the most effective mitigation measures by wardens of Habitats Sites across England.

The Norfolk RAMS Ranger team would spend the majority of their time outside at the Habitats Sites. Their work would represent a key communication tool in educating and communicating with visitors, influencing how visitors behave and showing people wildlife. The advantage of such an approach is that the staff can focus their time at particular priority sites/locations as required, such as those with the best visitor access and those likely to result in disturbance of key wildlife areas including bird roosts.

Other monitoring recommended and included in the RAMS mitigation package will be the collation and mapping of key roosts and feeding areas outside the SPAs; undertaking an audit of existing signage and interpretation boards; reviewing and writing new codes of conduct e.g. related to water sports, hire boat users, bait digging, paramotors, kite surfers, drones, horse riders; and vegetation surveys to identify any concerns regarding trampling impacts, including logging disturbance events (particularly those caused by dogs).

Some of the surveys would benefit from the input of volunteers, as Ranger team members with educational skills may not have botanical or invertebrate identification skills. This could be a mechanism to engage with specialists in the local area and spread wider awareness of the project and its aims.

The Delivery Coordinator would also monitor levels of new residential development in each LPA area to note relevant ZOIs for Ranger team visits, as well as consented housing applications to track funds available in each quarter of the financial year. This would then be fed back to Steering Group / each LPA, along with reporting on the implementation of mitigation at locations and tracking the spend of project monies transferred to the accountable body. This role would also include liaising with other organisations providing site wardens, promoting walks and talks by the Ranger team to clubs and other groups; managing website information, social media and promotional materials; and arranging for new interpretation boards or signage and setting up a countywide dog project. Partnership working, monitoring and review will be essential tasks for the partner LPAs.

3.3.3.4 Habitats based actions

In addition to staff resources focusing on communication & educational events, it will be important for them to also co-ordinate projects to support the monitoring and management of vegetation and species by site managers. This is expected to be an important focus in the Norfolk Brecks initially with 1FTE RAMS Ranger team member, as the Suffolk Brecks is outside the scope of this Strategy, so a landscape scale approach will need to be progressed in the future in conjunction with West Suffolk Council with additional resources needed to deliver mitigation measures.

The proposed Norfolk RAMS mitigation package also includes an audit of signage at Habitats Sites, including interpretation as well as appropriate access points, and a budget for new interpretation boards where these are considered appropriate visitor interventions.

- Working with landowners and partners will be crucial for any fencing needed to protect existing breeding sites e.g. for Little Tern & Ringed Plover populations on the coast, or identify new locations which need protection for qualifying features outside the Habitats Sites i.e. on Functionally Linked Land. Bird monitoring surveys will need the RAMS team to work closely with landowners and partners particularly to map key roosts and feeding areas; in the Brecks, much monitoring work has been undertaken on all three Breckland SPA birds to monitor their distribution and inform the buffer areas for development but assessment of impacts in Thetford Forest will need additional surveys before decisions can be made on mitigation measures. As it is important that a monitoring dataset is maintained for all Habitats Sites to inform mitigation measures, there is a budget line for this within the RAMS package.
- Monitoring of sensitive habitats & species is likely to need specialist surveyors though conservation organisations may be able to deliver contracts for car park counts, bird counts, visitor surveys and access management assessments.
- As many disturbance incidents reported include dogs, there is a budget line for setting up a dog related project for the county's Habitats Sites. Similar to the Suffolk Coast & Heaths AONB project "I'm a good dog", Dorset Dogs project or Bird Wise Coastal Canines Club https://northkent.birdwise.org.uk/coastal-canines-club/, this will aim to engage with dog walkers, promoting sites for dog walking, providing information on dog walking and highlighting issues at Habitats Sites. It can build on existing use of dog bans & dogs on lead areas plus promotion of dog friendly beaches on the North Norfolk Coast.
- Another tool in the RAMS toolkit is the identification of zones for different activities – based on detailed knowledge of the Habitats Sites and the geographical distribution of their sensitive qualifying features.
- Provision of literature regarding codes of conduct for those interested in undertaking water sports at Habitats Sites is another project which has been included in the RAMS package of measures. Following engagement with water sports users, it may be that a pilot for zonation at particular locations along the Norfolk coast could be introduced, similar to that on the Exe Estuary. Codes of conduct can be effective if they have the support of users groups, e.g. for bait digging, power hang gliders, kayakers and kite surfers and the use of drones. Whilst these are education /communication measures, they need to be based on habitat and species monitoring and assessment. Any projects including proposal for Public Rights of Way diversions will require detailed discussions with landowners and the Norfolk County

Council team; these may not be appropriate but some situations have found this measure is workable so a budget line has been included to include legal costs. As the BKLWN and Gt Yarmouth BC mitigation funds will be superseded by a Norfolk wide RAMS fund for developer contributions, there is a small budget identified for strategic mitigation projects in a specific location; any spending from this budget will need to be evidence based supported by data gathering undertaken in the Strategy and where there is a deliverable and identified need.

3.3.4 Costed mitigation package for RAMS

The costed mitigation package in Table 10 has been based on bespoke measures considered necessary to avoid likely disturbance at key locations with easy public access. A precautionary approach to avoid adverse effects has been adopted, with priority areas for measures identified as those which have breeding SPA birds which could conflict with high number of visitors to the Habitats Sites in the summer, and those with important roosts and foraging areas in the winter. Sensitive habitats are also at risk from damage by high numbers of visitors and potential hotspots have been identified for Ranger team visits. This may include the need for a water-based member of the RAMS Ranger team. The package includes an effective mixture of avoidance and mitigation measures to provide flexibility and deliverability, based on similar costed provision elsewhere in England. It is a toolbox for the NSPF Steering Group and the Delivery Co-ordinator once in post to consider and discuss with Natural England the timing and locations for individual measures.

The RAMS package has been developed through identifying best practice measures (see case studies outlined in previous section) and gathering local nature conservation practitioner expertise, from a new dedicated staff resource to focussing on awareness raising and appropriate behaviour with a wide range of recreational user groups at Habitats Sites. However, this approach needs to be implemented in conjunction with LPA provision of GI to intercept and deflect visitors from these sensitive sites in the first instance. The package particularly prioritises measures considered to be effective at avoiding and mitigating recreational disturbance by Habitats Sites managers and those seeking to manage water sports on the Norfolk coast to avoid impacts through appropriate behaviour. These measures can be justified as necessary, relevant and reasonable and enables the LPAs to demonstrate that as competent authorities, they can avoid adverse effects on the integrity of Habitats Sites.

The Ranger team should aim to visit 2 sites each day on 3 days/week to allow for other work commitments. This calculation supports the inclusion of five Norfolk RAMS Ranger team members (Broads, 3 x Coast and when considered appropriate, also in the Brecks (subject to monitoring to inform the need)) within the mitigation package and any additional seasonal Ranger team members will need to be assessed based on developer contributions collected and priorities for delivery of mitigation in any specific areas.

The RAMS Ranger team visits in the Broads would hugely benefit from close partnership working with the Broads Authority Rangers to support the message of appropriate behaviour for water-based activities. RAMS Ranger team patrols are aimed at encouraging all users to take an active role in avoiding impacts from recreational activities on the Broads and on coastal waters. It is hoped that codes of conduct and zonation of sensitive waters near SPA bird roosts and foraging areas can be implemented, similar to measures on the Exe Estuary[9]. Broads Authority Rangers actively manage water use through the Byelaws which are the framework for controlling use and protecting habitats on

[9] Exe Estuary Management Partnership

the Broads.

It may be possible for the RAMS Ranger team to transfer their visits outside of season for a particular Habitats Site and direct efforts as needed at a strategic level. Following the first five years of the project, and in line with Local Plan review periods, there may be predicted peaks in housing delivery, though evidence for spend will be based on the findings of activity reports from the RAMS Ranger team. To provide flexibility for strategic deployment of resources, indicative locations are identified though 'ground-truthing' from Ranger team visits and updated surveys for the Norfolk GI and RAMS project Board and Delivery co-ordinator to account for any unforeseen circumstances. Table 10 outlines the costed mitigation package until 2038.

Table 10: Mitigation package costed until 2038

Priority	Theme	Measure	One off cost or each time	Annual cost (not gross salary)	No. of years	Total cost	Notes
Immediate	Governance	Set up and operation of a Partnership Executive Group	N/A	(LPA £1,000)	21	**£0.00**	The RAMS should be overseen by a single accountable body amongst the LPA partners who would additionally be responsible for the employment of any required staff identified within this Strategy. This would need to be an 'in kind' contribution from the LPA as this is a statutory requirement of the competent authorities. NB This is over and above the requirement for s106 monitoring of developer contributions.
Immediate – 2022/23	Staff resource	Delivery Coordinator	N/A	£45,000 starting salary	17	**£900,543.19**	Salary costs include NI and overheads & 2% annual increments. As LAs need audit & scrutiny, it is recommended that this role is within one of the LAs. The Delivery Coordinator will provide management of the RAMS Ranger contract.
		Travel expenses budget	N/A	£450	17	**£9,150.00**	Mileage rate 45p/mile; Delivery Coordinator estimated annual mileage 1,000 for 17 years= £7650 plus train travel out of county estimated £1,500/year = £9150 budget.
		Training	N/A	£500	17	**£8,500.00**	Annual budget £500.

Priority	Theme	Measure	One off cost or each time	Annual cost (not gross salary)	No. of years	Total cost	Notes
Broads & Coast and indicative 2027/28 for Norfolk Brecks	Ranger contracts (by tender every 5 years)	Broads Habitats sites	N/A	£36,000	16	**£671,014.27**	Estimated contract budget line includes 2% annual increments
		Coastal Habitats sites (3 FTE)	N/A	£108,000	16	**£2,013,042.81**	Estimated contract budget line includes 2% annual increments
		Norfolk Brecks Habitats sites (start subject to monitoring of impacts)	N/A	£36,000	11	**£428,073.76**	Estimated contract budget line includes 2% annual increments. **Indicative start date 2027**
		Travel expenses budget for RAMS Ranger contract	N/A	£18,000 Years 7-12 £ 22,500 Years 12-22	16/11	**£121,500.00**	Mileage rate 45p/mile; Ranger team estimated annual mileage 10,000 x 4 FTE for 16 years = £18,000 x 4 (3 Coast & 1 Broads) = **£72,000** plus 10,000 x 1 FTE for 11 years (Norfolk Brecks) = **£49,500** Total **£121,500**
		Equipment and uniform for RAMS Ranger contract	N/A	(small ongoing cost)	N/A	**£60,000.00**	Estimated contract budget line for polo shirts, waterproof coats, rucksacks and binoculars with one set costed per 5 year contract

Priority	Theme	Measure	One off cost or each time	Annual cost (not gross salary)	No. of years	Total cost	Notes
		Training	N/A	£2,000 Years 7-12 £2,500 Years 12 - 22	16/11	**£17,500.00**	Estimated contract budget line includes £500 training/ team member= £2,000 x Years 7-12 (£12k) + £500 Norfolk Brecks for Years 12-22 (£5.5k) = £17,500
		Administration & audit	N/A	(LPA £1,000)	16	**£0.00**	As above
	Access	Audit of Signage including interpretation	£1,000	N/A	N/A	**£1,000.00**	To be undertaken by Delivery Coordinator / Ranger team and/or volunteers with small additional budget for local travel
		New interpretation boards	£97,200	N/A	N/A	**£194,400.00**	£2,700 per board, based on HLF guidance. Approx. 18 boards needed (at an average of two per Site). Number of boards allows for two replacements in Plan period at each site. NB boards as costed are for new / additional needs and NOT for the replacement of existing boards.
	Monitoring of residential development & RAMS contributions	Commencement of new residential developments and within which ZOIs	N/A	N/A	N/A	**£0.00**	All LPA s106/ infrastructure/contributions officers to track financial contributions for each development (on commencement) for all LPAs; part of audit trail for s106 monies. No cost as undertaken as part of LPA work in Development Management and s106 or Infrastructure officers

Priority	Theme	Measure	One off cost or each time	Annual cost (not gross salary)	No. of years	Total cost	Notes
	Monitoring of Functionally Linked Land for SPA birds	Recording implementation of mitigation and track locations and costs	N/A	N/A	N/A	**£0.00**	No cost as delivered as part of core work by RAMS Delivery Coordinator
		Collation & mapping of key roosts and feeding areas outside the SPAs in particular in the Norfolk Brecks	£10,000	N/A	N/A	**£10,000.00**	Initial dataset to be available to inform site visits by Ranger team
		Work with landowners and partners to collate bird monitoring surveys to identify land outside SPAs which support qualifying features. Particularly in the Norfolk Brecks	N/A	£5,000	17	**£85,000.00**	Repeat every 5 years to fit with Local Plan reviews.
	Monitoring of visitors	Baseline Visitor surveys **at additional locations** in summer (with questionnaires)	£15,000	N/A	N/A	**£15,000.00**	Initial focus on baseline for Habitats Sites with no data e.g. Norfolk Valley Fens, Waveney & Lt Ouse Valley Fens and estimated cost £5k/Habitats Site x 3. Liaise with NE, AONB, NCC PRoW re England Coast Path.

Priority	Theme	Measure	One off cost or each time	Annual cost (not gross salary)	No. of years	Total cost	Notes
	Communication	Website set up for Day 1	N/A	N/A	N/A	**£0.00**	Norfolk RAMS webpage **set up** costs £4k to be covered by LPAs and ideally hosted by one LPA partner.
		Walks and talks to clubs and user groups by RAMS team	N/A	N/A	N/A	**£0.00**	Covered by Ranger team contract plus Delivery Coordinator & in due course volunteers
		Promotional materials	N/A	N/A	N/A	**£50,000.00**	Use existing education materials e.g. Norfolk Coast AONB, BKLWN or Gt Yarmouth/ RSPB, for education packs, stationery, dog bag dispensers, car stickers etc.
Short to Medium term	Dog related project	Set up county wide dog project similar to Suffolk Coast & Heaths AONB "I'm a good dog", Dorset Dogs or BirdWise Coastal Canines Club.	£15,000	N/A	N/A	**£75,000.00**	Seek to use AONB design for leaflets & website text for management of dog walking, liaison with specialist consultants (Dog focussed), liaison with dog owners etc., liaise with dog clubs & trainers. Build on use of dog bans, leash control orders and promotion of dog friendly beaches. Maintain project with repeat promotion every 5 years.
	Water sports zonation for Norfolk Coast	N/A	£10,000	N/A	N/A	**£10,000.00**	Approx. costs only to be refined when opportunity arises

Priority	Theme	Measure	One off cost or each time	Annual cost (not gross salary)	No. of years	Total cost	Notes
2025/26	Website	Delivery Coordinator to keep website & promotion on social media up to date	N/A	£12,000	16	**£204,000.00**	Update e.g. with Norfolk Brecks refresh costs spread over plan period and include dog and water borne recreation focussed pages on Norfolk RAMS webpages plus merchandise e.g. dog leads. Estimated 1 day/month for 17 years.
	Visitor Monitoring	Update Visitor surveys at all locations in summer & winter (with questionnaires)	£5,000 per Site	N/A	16	**£225,000.00**	Estimated cost £5,000 / Habitats Site / year for rolling programme of 15 Sites (£75k). Estimated x 3 throughout RAMS package timescale = £225k. Liaise with NE & NCC PROW re: England Coast Path and LPAs re budgets as some of the survey costs may be absorbed into the budget for the HRAs needed for Local Plans. This could reduce the amount of contributions secured via Norfolk RAMS which could be used for alternative measures, so this is a worst case scenario cost.
		Signage at Habitats sites	£58,000	N/A	N/A	**£290,000.00**	£14,500 x 4 – this allows for 3 designs of discs (e.g. paw prints in traffic light colours to show where no dogs, dogs on lead, and dogs welcome). There are 7,500 of each x 4 replacements (every 5 years) factored into total cost. This may link with a timetable e.g. Norfolk Coast with dog ban 1st May to 30th Sept.

Priority	Theme	Measure	One off cost or each time	Annual cost (not gross salary)	No. of years	Total cost	Notes
	Codes of conduct	For water sports, bait digging, para motors/power hang gliders, kayakers, kite surfers.	£5,000	N/A	N/A	**£25,000.00**	Use existing Norfolk Coast AONB, BKLWN, RSPB resources with small budget for printing as promotion online & using social media. Talks to clubs and promotion covered by Delivery Coordinator and the RAMS Ranger team. Review every 5 years.
	Local mitigation projects	Work with landowners & partners to identify locations for local priority projects.	£1,000,000	N/A	N/A	**£1,000,000.00**	A project fund for mitigation at identified locations for specific RAMS related projects that meet local requirements (subject to meeting the aims of this Strategy). Spending from this budget should be evidence based supported by data gathering undertaken in the strategy and where there is a deliverable and identified need. Projects should be strategic and will be scrutinised in detail before any spend is agreed by the Steering Group.

Priority	Theme	Measure	One off cost or each time	Annual cost (not gross salary)	No. of years	Total cost	Notes
	Ground nesting SPA bird project – fencing - specifically for breeding Little Terns, & Ringed Plovers - and surveillance costs for Stone Curlew	Work with landowners & partners to identify existing or new locations for fencing to protect breeding sites for Little Tern & Ringed Plover populations	£15,000 per site x 2 (4 sites identified for fencing) Replacements of fencing likely to be required every 5 years (4 times in Plan period)	N/A	N/A	**£240,000.00**	Check with RSPB, NE & EWT when fencing project is prioritised; Based on costs for supporting the Little Tern colonies at North Denes and Winterton to include fencing and any other relevant equipment; funds cover purchase of new fencing as required (such as every 5 years). This includes an element of management costs for the project. Surveillance of Stone Curlews on private land to be undertaken by trained volunteers/landowners.
Longer term projects	Car park rationalisation	Work with landowners, Habitats Site managers & partner organisations	£150,000	N/A	N/A	**£50,000.00**	Indicative costs for rationalising some car parks are based on the Suffolk RAMS to be refined when opportunity arises. Some car parks may be reduced in size with minimal cost and this figure will need to be accurately costed on bespoke projects as locations will dictate costs and details need to be considered by the Steering group at their regular reviews of the mitigation package and tariff calculations.
	Habitats sites monitoring (birds)	Birds monitoring for key roosts & breeding areas within and outside SPAs	£25,000	N/A	16 (x 8)	**£200,000.00**	Costs for trained volunteers; surveys £5000 for each of 5 Ranger areas) **every 2 years**.

Priority	Theme	Measure	One off cost or each time	Annual cost (not gross salary)	No. of years	Total cost	Notes
		Vegetation monitoring (those Sites liable and with features sensitive to trampling)	N/A	£5,000 per Site	4 times over RAMS period	**£300,000.00**	Costs for surveys every 5 years =£20k (per Site) x 15 (number of Habitats Sites).
	Route diversions	Work with PRoW on projects	£15,000	N/A	N/A	**£15,000.00**	Approx. costs only to be refined when opportunity arises

	COSTS
TOTAL MITIGATION PACKAGE	£7,218,724.03
+ 10% contingency	£721,872.40
TOTAL COST	£7,940,596.43

3.4 RAMS Recommendations

3.4.1 A Single Countywide Tariff Approach

This Strategy recommends a tariff approach to ensure funds are collected and pulled together to deliver the RAMS mitigation package proposed. Although the number of ZOIs for Habitats Sites in each LPA area varies depending on the geographical position, a single county wide tariff area is recommended for the sake of simplicity. This reflects the entirety of Norfolk including all partner LPAs and would see a common tariff amount for all net new dwellings[10] in the county. This has been calculated from the RAMS mitigation package to cover the lifetime of the Local Plans.

The tariff is proposed to be applicable to every net additional dwelling (with per bedspace and student accommodation unit ratios), unless the house builder can demonstrate to the satisfaction of the relevant LPA and Natural England that alternative avoidance and mitigation measures can be delivered in perpetuity and these will be effective at avoiding adverse effect on the integrity of the Habitats Sites, in combination with other plans and projects.

The list of relevant residential growth which this Strategy, and therefore the RAMS tariff, applies to and the is therefore as follows:

1. All new dwellings of 1+ units in current site allocations and windfall (excludes replacement dwellings and extensions)
2. Houses in Multiple Occupancy e.g. hotels, guest houses and lodges;
3. Student Accommodation
4. Residential care homes and residential institutions (excludes nursing homes)
5. Residential caravan sites/mobile homes/park homes;
6. Gypsies, travellers and travelling show people plots;

and in addition to Natural England's Advice we recommend including:

7. Residential moorings, holiday caravans, touring pitches and campsites.

3.4.1.1 Calculating the Tariff

A per dwelling tariff has been calculated by dividing the total cost of the Norfolk RAMS mitigation package by the total number of houses still to be delivered over the Local Plans period i.e. any houses already consented having come forward early, are not included in this calculation. Contributions cannot be collected from developers to pay for mitigation necessary to avoid impacts from consented residential development.

As developer contributions collected will need to be spent at the individual Habitats Sites where impacts are predicted from residential developments, it is important that project level HRA Appropriate Assessments record which sites need delivery of mitigation measures for inclusion of this detail in the legal agreements. The spend on mitigation can thereby be tracked in relation to residential developments commenced to avoid impacts prior to occupation.

As set out in Table 11 below, the split of the total cost for the Norfolk RAMS mitigation package for each

[10] For other units of accommodation such as student accommodation there will be a per bed space ratio.

LPA to collect (i.e. the proportion of the costs to be collected from developers) is based on their housing figures, including windfall, to be delivered by the Local Plan. If predicted housing numbers are not realised, the associated impacts will also be less so the cost of the mitigation necessary will be reduced. There will be no need to review the pre-dwelling tariff in this situation although review of the mitigation package in case of additional impacts is recommended.

The total cost for calculation per dwelling tariff is based on the total number of dwellings identified in each Local Plan which have not received 'Full' consent i.e. any houses already consented having come forward early, are not included in this calculation. Any Reserved Matters applications which did not have HRA applied at outline stage will need to be considered on a bespoke arrangement to ensure the LPA as the competent authority is compliant with Habitats Regulations. Similar measures could be implemented in addition to those costed for housing covered by the Norfolk GI and RAMS if additional funding is provided.

This figure is therefore £7,940,596.43 divided by 42,709 (dwellings) which means the recommended tariff is £185.93 rounded up to the nearest pence. As mitigation must be delivered i.e. it is a legal requirement for each residential development, it is neither considered legal to round the tariff down nor up further than the nearest pence, as developer contributions must be reasonable and justifiable.

Table 11: Housing numbers and cost of RAMS mitigation for each LPA

Charging Zone	Dwellings coming forward up to the end of Norfolk GI and RAMS plan period not already consented *	Cost per dwelling tariff (rounded up to nearest pence)	Cost of mitigation per LPA area (based on total cost divided by dwelling figure)
Borough of King's Lynn and West Norfolk	13,165	£185.93	£2,447,768.45
Breckland	2,800	£185.93	£520,604.00
Broads Authority	130	£185.93	£24,170.90
Great Yarmouth	5,991	£185.93	£1,113,906.63
North Norfolk	6,380	£185.93	£1,186,233.40
Broadland	14,243	£185.93	£2,648,200.99
Norwich City		£185.93	
South Norfolk		£185.93	

Charging Zone	Dwellings coming forward up to the end of Norfolk GI and RAMS plan period not already consented *	Cost per dwelling tariff (rounded up to nearest pence)	Cost of mitigation per LPA area (based on total cost divided by dwelling figure)
Total dwellings coming forward up to the end of Norfolk GI and RAMS plan period not already consented			42,709
Total cost of package (including 10% contingency)			£7,940,596.43
* this will include an estimated value for windfall not currently in the Local Plan.			

Source: Place Services, 2021

The cost of implementing some of the mitigation measures will increase with inflation so the per dwelling tariff will be updated each year in line with the Retail Price Index.

The LPAs will need to record their decisions on project level HRAs (as advised by Natural England) in line with the Norfolk RAMS when adopted.

As there are no allocations for tourist related accommodation in any of the Local Plans of the partner LPAs, it is recommended that any applications will need to apply the RAMS tariff on a 'per six bedspace ratio' for campsites, hotels and caravan parks / extensions.

We recommend adopting a similar approach to student accommodation as agreed by Natural England for the Essex Coast RAMS and suggest that the Norfolk LPAs apply the RAMS tariff on a 'per 2.5 student accommodation unit ratio'. This is based on guidance contained in the Housing Delivery Test Measurement Rule Book (MHCLG, July 2018) includes communal student accommodation in the calculation of housing need, with an assumption that 2.5 units of student accommodation equates to one unit of general market housing. The 'Essex Coast RAMS Guidelines for proposals for student accommodation' can be found in Appendix 7.

3.4.2 Tariff Collection Mechanisms for LPAs

As the effects on Habitats Sites have been identified as a direct result of the increase in population from new housing development, developer contributions must be used to mitigate these effects and these effects only. As such, contributions and a suitable funding mechanism is required to address recreational impacts on Habitats Sites alone and with certainty.

Mechanisms already exist for collecting contributions from housing developments in the form of 'Section 106' agreements, 'Section 111'(up-front payment) agreements or 'Unilateral Undertakings'. These mechanisms are similarly applicable in the instance of the RAMS as mitigation is required due to the effects resulting from all residential developments in Norfolk. A contribution is therefore required to make all residential developments acceptable in planning terms as per Section 106 of 'The 1990 Town & Country Planning Act'. Examples of collection mechanisms in Suffolk and Essex suggest that a Norfolk system could include s106 for major applications and s111 for minor and householder applications.

Without such a contribution, planning permission should not be given to residential schemes due to the subsequent effect on Habitats Sites. Options exist for the partner LPAs to collect contributions through any one of the above-mentioned mechanisms; however, this strategy recommends that RAMS contributions are sought through s106 where there are other contributions to be collected and a

Section 111 agreement (instead of a UU) where this is the sole developer contribution. This is a legal obligation between a developer and the LPA that allows the speedy issue of decision notices for residential developments as payment is made 'up front' when a planning application is submitted, with monies returned should the application be refused. This mechanism is currently preferred by East Suffolk Council, Babergh District and Mid Suffolk District Councils in regard to the Suffolk Coast RAMS Details of this approach can be found on the East Suffolk Council website and Babergh & Mid Suffolk DCs websites.

As the proposed Strategic approach includes the most effective measures which can be delivered in perpetuity, the RAMS will replace the successful Borough level mitigation & monitoring strategies for Habitats Sites which are funded by developer contributions. There is an element of the RAMS package which includes funds for locally identified projects which are not covered by priority measures. These projects will need to be agreed by the Steering Group and monies paid direct to contractors or grants to organisations.

3.4.3 Next steps – 'Governance'

As the competent authority needs to meet its legal commitments, each LPA will be responsible for collecting the tariff from all qualifying dwellings and for monitoring the tariff contributions that they receive from developers. Each LPA should ideally also contribute equally[11] towards project implementation costs that cannot be covered by the tariff contributions such as annual accountable body accountancy costs and project staff redundancy. Set up, management and on-costs are built into the package.

It is recommended that moving forward, a Steering Group is set up of LPA partners and any other specialist bodies that the LPAs feel will enhance the delivery of the RAMS. It is integral that all LPA partners are involved as pooled contributions are intended to be collected by the local authorities and for the purpose of mitigating the effects of their collective Local Plans.

It is further recommended that a Partnership Delivery Agreement be drafted to cover ongoing governance, coordination and delivery of the RAMS. This will cover the structural, operational, HR and financial arrangements for the RAMS. The RAMS should be overseen by a single accountable body amongst the LPA partners who would additionally be responsible for the employment of any required staff identified within this Strategy. The Project Delivery Coordinator should be employed by the accountable body. It would reasonable for the Norfolk Strategic Planning Framework to fund the preparation an Implementation plan/programme for the Strategy and identify how each partner LPA can demonstrate its commitment to delivery at their Local Plan Examination in Public.

As residential developments inform the LPAs of intention to commence, the financial contributions will be triggered under the legal agreements signed by the developers. These monies will need to be transferred to the Accountable Body and mitigation measures delivered including visits at the hotspots for recreational disturbance by the Ranger team in advance of the new dwellings being occupied. The Habitats Sites named in the project level HRAs (i.e. those predicted to have impacts from each development) will need the Ranger team to visit these regularly, with less frequent visits to those Habitats Sites which have not been identified as needing mitigation. This is important for monitoring visitor numbers at different times of the year to ensure behaviour is appropriate and undertake surveys as required by the Steering Group to inform future mitigation needs.

[11] Reduced costs may be considered for the Broads Authority who have very limited proposed development within the ZOIs

3.4.4 Policy options

It will be important to secure proportionate financial contributions for relevant residential development so although HRA requires legal compliance by the LPA to avoid Adverse Effects on Integrity of Habitats Sites, a policy to identify the need for delivery of mitigation measures is recommended. The Natural England interim advice on this matter is clear and developers should be advised of the need for **both** sufficient natural greenspace on development sites (in line with Natural England advice Annex 1 and 11 advice) and the per-dwelling tariff of the county wide RAMS.

At application stage, the relevant contribution in line with the RAMS tariff will need to be secured by a legal agreement payable prior to commencement in order that mitigation is delivered prior to occupation. Delivery of mitigation measures in perpetuity for residential development is necessary, and therefore needs to be secured by a legal requirement. The delivery of effective mitigation measures is necessary to ensure the LPA can demonstrate any consented residential development will avoid Adverse Effect on Integrity of the relevant Habitats Sites. Each Local Plan is recommended to contain policy text (and reasoned justification) to promote the RAMS mitigation option and the example below has been adapted from the Chelmsford Local Plan after examination and an example s106 agreement is provided in Appendix 10.

Suggested Policy

"The potential impacts on Habitats sites from recreational pressure from residential development will be addressed through :

(i) the provision of local level GI / open space and (ii) mitigation of residual effects through a developer contributions.

(ii) Contributions from residential developments will be secured towards mitigation measures identified in the Norfolk Recreational impact Avoidance and Mitigation Strategy (RAMS) which will be completed by the time the Local Plan is adopted. Prior to RAMS adoption, the authority will seek contributions, where appropriate, from proposed residential development to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to mitigate any recreational impacts in compliance with the Habitats Regulations and Habitats Directive."

Suggested Supporting Text / Reasoned Justification

Residential developments proposed within the Local Plan have the potential to result in a significant increase in recreational disturbance at the Norfolk Habitats Sites (list the relevant SPA, SAC and Ramsar sites). Measures required to mitigate the impacts of recreational disturbance on Habitats Sites will be delivered as detailed in the Norfolk GI and Recreational impact Avoidance and Mitigation Strategy (RAMS). Any residential development that is likely to affect the integrity of Habitats Sites, will be required to either contribute towards mitigation measures identified in the RAMS (or any subsequent Supplementary Planning Document) or, in exceptional circumstances, identify and implement bespoke mitigation measures in perpetuity to ensure compliance with the Habitats Regulations.

Following consultation with Natural England, a Norfolk-wide GI and Recreational impact Avoidance and Mitigation Strategy (RAMS) is being prepared to include all Habitats Sites. The strategy will identify where recreational disturbance is happening and the main recreational uses causing the disturbance. New residential development that is likely to affect the integrity of the European Sites will be required to contribute towards the implementation of the mitigation. It is considered that this development allocation will be required to pay for the implementation of mitigation measures to protect the (list sites). The appropriate mechanisms will be identified in the adopted GI and RAMS document.

4. SUMMARY OF RECOMMENDATIONS

4.1 Green Infrastructure

This Strategy identifies that there is no need for a 'county-wide' or 'county-level' solution regarding GI provision in addition to those measures already in place at the strategic and localised level, to enable Local Plan growth. The RAMS section of this strategy (Section 2) has explored mitigation options in Norfolk related to avoiding recreational impact on Habitats Sites in combination with other plans and projects and concluded that these can be ensured through a suite of mitigation measures at the Habitats Sites. The GI provision is essential to divert and deflect visitors away from the sensitive Habitats Sites and their rare species to avoid adverse effects on the integrity of these sites from the development alone.

Section 2 of this Strategy sets out detailed recommendations or 'opportunities' in regard to ensuring improvements to the GI network across Norfolk. These recommendations can be summarised below:

- The integration of 'Enhanced Green Infrastructure (EGI)' criteria within GI Policy in emerging Local Plans, to ensure that developers are aware of their responsibilities regarding the quality of GI provision.
- LPAs to undertake an EGI Audit, exploring whether GI provision could be improved moving forward to offer an additional recreational offer close to where people live. This audit would use a set of EGI Quality Criteria to ensure social, economic and environmental benefits.
- Exploring the potential for Plan-level GI provision within the 'Opportunity Areas' identified in this Strategy, in order to rectify deficiencies and future-proof growth in future Local Plan periods whilst offering additional recreational benefits.

4.2 RAMS

The RAMS section of this Report (Section 2) sets out detailed recommendations to enable residential and tourist accommodation growth identified within the Local Plans of the partner LPAs. The RAMS is only able to deal with impacts in-combination with other plans and projects. The predicted impacts from residential development alone need to be avoided by sufficient GI on or nearby each development site as per Natural England's interim advice to the Norfolk LPAs. These recommendations can be summarised below:

- That the mitigation measures identified be agreed and a tariff approach be implemented to ensure funds are collected to deliver the mitigation package proposed. This is necessary now in line with Natural England advice although transfer of contributions to a single RAMS pot will need governance details to have been agreed and implemented.
- Where there are other contributions to be collected, that RAMS contributions are sought through s106 and via a Section 111 agreement (instead of a UU) where this is the sole developer contribution.
- That each LPA should (ideally) contribute equally towards project implementation costs that cannot be covered by the tariff contributions such as annual accountable body accountancy costs and project staff redundancy.

- That a Partnership Delivery Agreement be drafted to cover ongoing governance, coordination and delivery of the RAMS. This will cover the structural, operational, HR and financial arrangements for the RAMS
- That each emerging Local Plan contain policy text and reasoned justification (as suggested within this Strategy) to ensure that RAMS mitigation is forthcoming.

5. ABBREVIATIONS/GLOSSARY

5.1 Terms used in this Strategy

Term	Definition
Accessible Natural Greenspace Standards (ANGSt)	These Natural England standards recognise the importance of nature in the urban context in terms of improving the quality of people's lives and people's entitlement to have access to, and experience of, nature near to where they live. These standards recommend that people living in towns and cities should have: ▪ an accessible natural greenspace of at least 2 hectares in size, no more than 300 metres (5 minutes' walk) from home ▪ at least one accessible 20-hectare site within two kilometres of home ▪ one accessible 100-hectare site within five kilometres of home ▪ one accessible 500-hectare site within ten kilometres of home ▪ one hectare of statutory Local Nature Reserves per thousand population.
Adverse Effect on Integrity (AEOI)	This is the stage 2 HRA test at Appropriate Assessment based on likely impacts on qualifying features on the Habitats Site. If any mitigation is needed at Stage 1 HRA screening, the assessment by the competent authority needs to consider if the plan or project can avoid Adverse Effect on Integrity of Habitats Sites.
Appropriate Assessment (AA)	Forms part of the Habitats Regulations Assessment
Area of Outstanding Natural Beauty (AONB)	An Area of Outstanding Natural Beauty (AONB) is an area of countryside in England, Wales or Northern Ireland which has been designated for conservation due to its significant landscape value
Bird Aware Solent	An initiative to raise awareness of the birds that spend the winter on the Solent, so that people can enjoy the coast and its wildlife without disturbing the birds. BirdAware is the brand name of the Solent Recreation Mitigation Partnership which is made up of fifteen local councils, Natural England, the Royal Society for the Protection of Birds, Hampshire & Isle of Wight Wildlife Trust, and Chichester Harbour Conservancy.
Bird Wise	A Partnership helping to raise awareness of protected birds that spend time on our coastline every year.
Community Infrastructure Levy (CIL)	The Community Infrastructure Levy (CIL) is a charge that local authorities can set on new development in order to raise funds to help fund the infrastructure, facilities and services -

Term	Definition
	such as schools or transport improvements - which are needed to support new homes and businesses in the areas.
Competent Authority	The invested or delegated authority to perform a designated function.
Countryside Rights of Way (CRoW)	The Countryside and Rights of Way Act 2000 (CRoW Act) normally gives a public right of access to land mapped as 'open country' (mountain, moor, heath and down) or registered common land. These areas are known as 'open access land'.
Department for Environment, Food & Rural Affairs (Defra)	A UK government department responsible for safeguarding the natural environment, supporting the food and farming industry, and sustaining the rural economy.
Delivery mechanism	A way of making a project or initiative happen, such as a system for accruing monies to pay for mitigation.
ENDURE project	ENDURE is a project 'Ensuring Dune Resilience (Against Climate Change)'. The project looks at establishing sand dunes as adaptive, living sea defences.
England Coast Path	Natural England are implementing the Government scheme to create a new national route around the coast of England
Enhanced Green Infrastructure (EGI)	Enhanced Green Infrastructure represents accessible 'Green Infrastructure' that can in part perform the role of a SANGs i.e. GI that provides areas attractive enough for local recreational use on or near where new homes are built that can take the strain away from people visiting Habitats Sites for recreation.
Environment Agency (EA)	The Environment Agency has the purpose of protecting of the environment from threats such as flood and pollution.
Forestry Commission (FC)	The Forestry Commission is the government department responsible for protecting, expanding and promoting the sustainable management of woodlands.
Forestry England (FE)	Forestry England looks after over 250,000 hectares of woodland and other natural environments across England through sustainably managing the land. It is one of the two agencies that the Forestry Commission works with.
Functionally Linked Land (FFL)	Areas of land or sea that are considered to be functionally linked to a Habitats (European) Site, but which lay outside the boundaries of the designated site.
Green Infrastructure (GI)	The GI in an area represents a network of multi-functional green space which can ensure environmental benefits and an improved quality of life for local communities. Developments

Term	Definition
	are required to provide improvements to the existing GI either on site or through necessary planning contributions.
Habitats Sites	A term introduced by the NPPF (2019), Habitats Sites include SPA, SAC & Ramsar sites. Includes SPAs and SACs which are designated under European laws (the 'Habitats Directive' and 'Birds Directive' respectively) to protect Europe's rich variety of wildlife and habitats. Together, SPAs and SACs make up a series of sites across Europe, referred to collectively as Natura 2000 sites. In the UK they are commonly known as European sites; the National Planning Policy Framework also applies the same protection measures for Ramsar sites (Wetlands of International Importance under the Ramsar Convention) as those in place for European sites.
Habitats Regulations Assessment (HRA)	Requirement for consideration of impacts of plans and projects on Natura 2000 and Ramsar sites.
Habitats Monitoring and Mitigation Fund (HMM Fund)	Developers within the Borough Council of King's Lynn and West Norfolk boundary are currently required to pay a small levy of £50 per dwelling to the borough council in order to help monitor and mitigate the adverse effects of increasing visitor numbers to Natura 2000 sites* resulting from the development. These levies have been drawn together to create the West Norfolk Habitats Monitoring and Mitigation Fund.
Impact Risk Zone (IRZ)	Developed by Natural England to make a rapid initial assessment of the potential risks posed by development proposals. They cover areas such as SSSIs, SACs, SPAs and Ramsar sites.
'In combination'	Consideration to the in-combination effects which will or might result from the addition of the effects of other relevant plans or projects.
LIFE projects	European Union initiatives for protecting the key nature conservation interests of Natura 2000 sites.
Likely Significant Effect (LSE)	This is a possible adverse effect that would undermine the Conservation Objectives for a Habitats (European) site, and which cannot be ruled out based on clear verifiable objective information.
MAGIC Map	The MAGIC website provides geographic information about the natural environment from across government. The information covers rural, urban, coastal and marine environments across Great Britain. Natural England manages the service.
Natura 2000 sites	Natura 2000 is a network of protected areas covering Europe's most valuable and threatened species and habitats. It is the largest coordinated network of protected areas in the world, extending across all 28 EU countries, both on land and at sea.

Term	Definition
Natural England (NE)	Natural England - the statutory adviser to government on the natural environment in England.
National Planning Practice Guidance (NPPG)	Expands on the requirements of the National Planning Policy Framework (NPPF) by offering relevant practice guidance.
Norfolk Coast Partnership (NCP)	The Norfolk Coast Partnership (NCP) focuses on the pressures on the area arising from increasing numbers of visitors, which were perceived as having a damaging effect on the area's natural beauty. The focus has broadened, although management of recreational pressures is still a high priority.
Norfolk Rural Strategy	A Strategy that recommends "a commitment to deliver landscape scale environmental schemes covering multiple landowners to deliver integrated large-scale improvements which support public access, tourism and economic opportunities e.g. a landscape which integrates boating, cycling and walking routes with food, drink, culture and accommodation facilities to drive value visits".
Norfolk Strategic Planning Framework (NSPF)	A document produced through the collaboration of the listed authorities: ▪ Broads Authority (BA) ▪ Broadland District Council (BDC) ▪ Breckland District Council (BDC) ▪ Borough of King's Lynn & West Norfolk (BKLWN) ▪ Great Yarmouth Borough Council (GYBC) ▪ North Norfolk District Council (NNDC) ▪ Norwich City Council (NorCC) ▪ South Norfolk Council (SNC)
Norfolk Wildlife Trust (NWT)	A Trust that gives conservation advice to a wide variety of organisations and individuals, provides education services, and cares for over 50 nature reserves and other protected sites encompassing wetland, heathland, woodland and coastal habitats that provide a home for flagship species including otter, water vole, natterjack toad, bittern, common crane, marsh harrier, bearded tit, swallowtail and Norfolk hawker.
Local Housing Need (LHN)	The housing needs of an LPA area determined by a standard methodology that establishes a minimum level of new housing needed in an area.
Local Planning Authority (LPA)	The public authority whose duty it is to carry out specific planning functions for a particular area.

Term	Definition
Public Rights of Way (PRoW)	A public right of way in the form of a footpath, bridleway, restricted byway, byway open to all vehicular traffic or a public road is a right that can be used by all members of the public.
Ramsar site	Wetland of international importance designated under the Ramsar Convention 1971 held in Ramsar, Iran.
Responsible Officer	Natural England officer responsible for a particular Habitats Site.
Royal Society for the Protection of Birds (RSPB)	The country's largest nature / bird conservation charity.
Section 106 agreement	Section 106 agreements (based on that section of the 1990 Town & Country Planning Act) are private agreements made between local authorities and developers and can be attached to a planning permission to make acceptable development which would otherwise be unacceptable in planning terms.
Section 111 agreement	A Section 111 agreement is a legally binding covenant that requires developers to enter into agreement under Section 111 of the Local Government Act 1972.
Site Improvement Plan (SIP)	SIPs outline the priority measures needed to achieve and maintain European species and habitats within a site in favourable condition. They provide a high-level overview of the issues affecting the condition of the site; identify the priority actions to address the issues; and identify the potential funding sources available. SIPs are based on Natural England's current evidence and knowledge and are live documents which are updated as further meetings take place with partners.
Strategic Access Management and Monitoring (SAMM)	Measures and co-ordinates visitor management across the whole of a Habitats Site. Access management is often seen as an important part of any RAMS / avoidance strategy.
Suitable Accessible Natural Green Space (SANGS)	The name given to green space that is of a quality and type suitable to be used as mitigation for the Habitats Sites.
Special Area of Conservation (SAC)	Land designated under Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.
Special Protection Area (SPA)	Land designated under Directive 79/409 on the Conservation of Wild Birds.
Site of Specific Scientific Interest (SSSI)	Sites of Special Scientific Interest (SSSIs) are those areas of land and water that are considered to best represent our natural heritage in terms of their: flora (i.e. plants), fauna (i.e. animals), and geology (i.e. rocks).

Term	Definition
Supplementary Planning Document (SPD)	Documents that provide further detail to the Local Plan. Capable of being a material consideration but are not part of the development plan.
Unilateral Undertaking (UU)	Are types of planning obligation authorised by Section 106 of the Town and Country Planning Act 1990. They are legal agreements between the Local Planning Authority and applicant / developer that aim to balance the extra pressure created by new development with improvements to ensure that the new development makes a positive contribution to the local area and community.
Visit Britain	The official tourism body for Great Britain.
Wetland Bird Survey (WeBS)	Monitors non-breeding waterbirds in the UK. There is a WeBS Alerts system which provides a method of identifying changes in numbers of water birds at a variety of spatial and temporal scales and reports are written every 3 years.
The Wash and North Norfolk Marine Partnership (WNNMP)	The Wash and North Norfolk Marine Partnership works to coordinate and help deliver all Relevant Authority legal duties to the European Marine Site.
Zone of Influence (ZOI)	An evidenced distance that establishes where development is likely to have a significant effect on a Habitats Site.

APPENDIX 1

A1(1) Natural England interim advice letter to Norfolk LPAs

Figure 26: Interim advice letter to Norfolk LPAs from Natural England (12/08/2019)

Date: 12 August 2019
Our ref: 257629

Broadland District Council
Breckland District Council
Great Yarmouth Borough Council
King's Lynn & West Norfolk Borough Council
North Norfolk District Council
Norwich City Council
Norfolk County Council
South Norfolk Council
Broads Authority

NATURAL ENGLAND

Customer Services
Hornbeam House
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Emerging strategic approach relating to the Norfolk Recreational disturbance Avoidance and Mitigation Strategy and Green Infrastructure Strategy. Interim advice to ensure new residential development and any associated recreational disturbance impacts on European designated sites are compliant with the Habitats Regulations.

Dear Sir/Madam

Natural England welcomes that fact that Broadland District Council, Breckland District Council, Great Yarmouth Borough Council, The Borough Council of King's Lynn & West Norfolk, North Norfolk District Council, Norwich City Council, South Norfolk Council, Norfolk County Council and the Broads Authority are working in partnership on a countywide Recreational Avoidance Strategy (RAMS) and Mitigation and Green Infrastructure Strategy (GI).

The Norfolk RAMS and GI Strategy is a is a large scale strategic project which involves all of the Norfolk authorities working together to help mitigate the effects of recreational disturbance impacts on sensitive designated sites likely to arise as a result of increased housing over the respective local plan periods. This approach will build on the existing evidence included within the Norfolk Visitor Survey Report[1] which provides a comprehensive analysis of current and projected visitor patterns to European designated sites across Norfolk. Once finalised and adopted, the RAMS will comprise of strategic mitigation measures to address such effects, which will be costed and funded through developer contributions.

This strategy will form an evidence base for local plans to ensure that residential planning applications which have the potential to impact on European designated sites are compliant with the Habitats Regulations[2]. It specifically relates to additional recreational impacts that may occur on the interest features of the following European designated sites:

- Ouse Washes SPA, SAC and Ramsar
- Breckland SPA and SAC

1 Panter *et al* (2016) *Visitor Surveys at European Protected Sites across Norfolk during 2015 and 2016*, Footprint Ecology sites
2 Conservation of Habitats and Species Regulations 2017, as amended (commonly known as the 'Habitats Regulations'). Requirements are set out within Regulations 63 and 64 of the Habitats Regulations, where a series of steps and tests are followed for plans or projects that could potentially affect a European site. The steps and tests set out within Regulations 63 and 64 are commonly referred to as the 'Habitats Regulations Assessment' process. The Government has produced core guidance for competent authorities and developers to assist with the Habitats Regulations Assessment process. This can be found on the Defra website. http://www.defra.gov.uk/habitats-review/implementation/process-guidance/guidance/sites/
3 Taken from *Jenkinson, S., (2013), Planning for dog ownership in new developments: reducing conflict – adding value. Access and greenspace design guidance for planners and developers*

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- Roydon Common and Dersingham Bog SAC
- Roydon Common Ramsar
- Dersingham Bog Ramsar
- The Wash SPA and Ramsar
- The Wash and North Norfolk Coast SAC
- North Norfolk Coast SAC, SPA and Ramsar
- Overstrand Cliffs SAC
- River Wensum SAC
- Norfolk Valley Fens SAC
- Winterton - Horsey Dunes SAC
- Great Yarmouth North Denes SPA
- Broadland SPA
- Breydon Water SPA
- The Broads SAC
- Waveney and Little Ouse Valley Fens SAC
- Redgrave and South Lopham Fen Ramsar

For further information on these sites, please see the Conservation Objectives and Information Sheets on Ramsar Wetlands which explain how each site should be restored and/or maintained.

Zones of Influence

As part of the work to inform the Norfolk RAMS evidence base 'zones of Influence' (ZOI) have been calculated following the collation and analysis of the Norfolk Visitor Survey data to determine the distances within which residents of new housing are likely to regularly visit relevant designated sites for recreation.

Table 1 shows the calculated ZoI but does not include all of the above listed designated sites, specifically the Ouse Washes, Overstrand Cliffs, River Wensum, Waveney and Little Ouse Valley Fens and Redgrave and South Lopham Fen. The calculated ZoI cover the breadth of Norfolk County encompassing all designated sites, consideration should be given to determine if the strategy could include the required visitor data collection and site monitoring to determine site specific mitigation where there are gaps in evidence.

Table 1: Zones of Influence

Area	European Designated Sites	ZoI (km)
Breckland sites	Breckland SPA Breckland SAC	26
Broads sites	The Broads SAC Broadland SPA	25
East Coast sites	Breydon Water SPA Winterton-Horsey Dunes SAC Great Yarmouth and North Denes SPA	30
North Coast sites	North Norfolk Coast SAC North Norfolk Coast SPA The Wash and North Norfolk Coast SAC	42
Roydon and Desingham	Roydon Common and Dersingham Bog SAC Roydon Common Ramsar Dersingham Bog Ramsar	12
Norfolk Valley Fens	Norfolk Valley Fens SAC	15
The Wash	The Wash SPA The Wash Ramsar The Wash and North Norfolk Coast SAC	61

Once the ZoI have been finalised, it will be anticipated that any new residential development within an identified zone will constitute a likely significant effect (LSE) on the sensitive interest features of the above designated sites through increased recreational pressure, either when considered 'alone' or 'in combination'. The RAMS (or associated Supplementary Planning Document) will, once adopted, specify requirements for developer contributions via a per house tariff to an agreed and costed suite of measures which have been developed to mitigate impacts to these designated sites.

Consultation arrangements

It is recognised that a proportion of the residential allocations in your local plans will be coming forward as planning applications prior to the adoption of the Norfolk RAMS. In the interim period until the RAMS is in place and the necessary developer contributions are known, it is important that any recreational impacts from residential schemes such as these are considered in terms of the Habitats Regulations through a project level Habitats Regulations Assessment (HRA). All planning decisions should be able to show that impacts to designated sites can be adequately mitigated and this should be demonstrated through appropriate assessment. Those boroughs and districts with existing strategies should continue to follow their established process and seek consultation in accordance with agreed criteria.

Natural England has already developed a set of Impact Risk Zones (IRZs) which helps guide planning authorities on the types and scale of development that we should be consulted on. We advise that we should continue to be consulted in line with these arrangements (i.e. where there are other IRZs are triggered in addition to the Norfolk RAMS)

Once ZoI have been agreed, Natural England will refine residential IRZ's for the above designated sites to align with the Norfolk RAMS project and capture new residential development which falls within the ZoIs shown in Table 1 above; these will relate to the following development types:

- New dwellings of 1+ units (excludes replacement dwellings and extensions)
- Houses in Multiple Occupancy (HMOs)
- Student Accommodation
- Residential care homes and residential institutions (excludes nursing homes)
- Residential caravan sites (excludes holiday caravans and campsites)
- Gypsies, travellers and travelling show people plots

We advise that the applications in scope for consideration should include all new applications as well as those with outline planning permission where this issue has not previously been assessed through the HRA process.

Once strategic mitigation measures are agreed and costed, we will write to you again, as this will enable affected development projects to contribute in a standardised manner. We will then update our Impact Risk Zones to capture the majority of new residential housing development in this way.

Approach to avoidance and mitigation measures for recreational disturbance

We have included within Annex A of this letter a suggested HRA record template which can be used to record the conclusions of both the Screening and Appropriate Assessment stages of HRAs for planning applications within scope of the Norfolk RAMS for which recreational disturbance to the above sites is the only HRA issue. The use of this template is not mandatory but we have provided it in an attempt to streamline the process and make it as straightforward and consistent as possible for the authorities involved in the RAMS.

1 Panter *et al* (2016) *Visitor Surveys at European Protected Sites across Norfolk during 2015 and 2016*, Footprint Ecology sites

2 Conservation of Habitats and Species Regulations 2017, as amended (commonly known as the 'Habitats Regulations'). Requirements are set out within Regulations 63 and 64 of the Habitats Regulations, where a series of steps and tests are followed for plans or projects that could potentially affect a European site. The steps and tests set out within Regulations 63 and 64 are commonly referred to as the 'Habitats Regulations Assessment' process. The Government has produced core guidance for competent authorities and developers to assist with the Habitats Regulations Assessment process. This can be found on the Defra website. http://www.defra.gov.uk/habitats-review/implementation/process-guidance/guidance/sites/

3 Taken from *Jenkinson, S., (2013), Planning for dog ownership in new developments: reducing conflict – adding value. Access and greenspace design guidance for planners and developers*

Green Infrastructure
Natural England recommends that large developments (50+ houses) include green space that is proportionate to its scale to minimise any predicted increase in recreational pressure to designated sites, by containing the majority of recreation within and around the developed site. The Suitable Accessible Natural Green Space (SANGS) guidance can be helpful in designing this; it should be noted that this document is specific to the SANGS creation for the Thames Basin Heaths, although the broad principles are more widely applicable. Green infrastructure design should seek to achieve the Natural England Accessible Natural Greenspace Standards, detailed in Nature Nearby, including the minimum standard of 2ha informal open space within 300m of everyone's home. As a minimum, we advise that such provisions should include:

- High-quality, informal, semi-natural areas
- Circular dog walking routes of 2.7 km[1] within the site and/or with links to surrounding public rights of way (PRoW)
- Dedicated 'dogs-off-lead' areas
- Signage/information leaflets to householders to promote these areas for recreation
- Dog waste bins
- to the long term maintenance and management of these provisions

To provide adequate mitigation onsite GI should be designed to provide a multifunctional attractive space of sufficient size to reduce frequent visits to sensitive sites. It should facilitate a variety of recreational activities whilst supporting biodiversity. Evidence and advice on green infrastructure can be found on the Natural England Green Infrastructure web pages. We also recommend the Green Infrastructure Partnership as a useful source of information when creating and enhancing GI.

Local Planning Authorities may also wish to consider to benchmark standards for accessible natural greenspace, the TCPA have published Guides and Principles for Garden Communities, and Guide 7, Principal 9, references 40% green infrastructure as a target quantum. Whilst some larger housing allocations may not technically qualify for Garden Community status, nevertheless Natural England advises that this represents a quantum and quality standard which is aspirational in this context.

For individual schemes, Natural England would be happy to advise developers and/or their consultants on the detail of requirements at the pre-application stage through our charged Discretionary Advice Service, further information on which is available here.

For any queries relating to the specific advice in this letter only please contact Victoria Wight using the details given below . For any new consultations, or to provide further information on this consultation, please send your correspondences to consultations@naturalengland.org.uk.

Yours sincerely

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Norfolk and Suffolk Area Team

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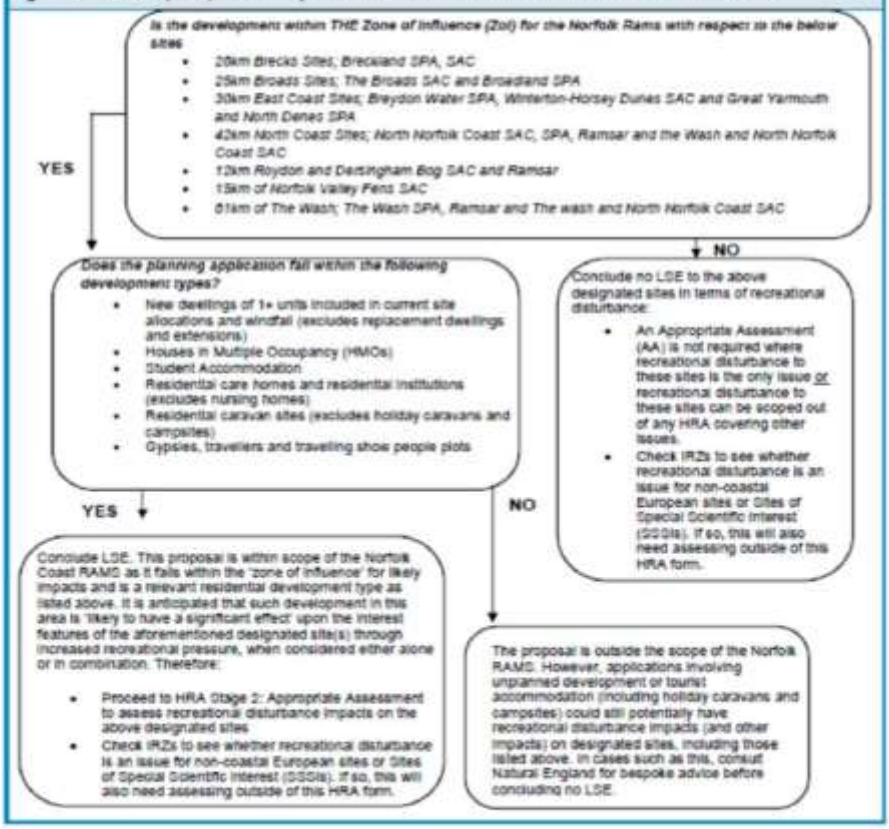
Cc: Sue Hooton, Essex Place Services

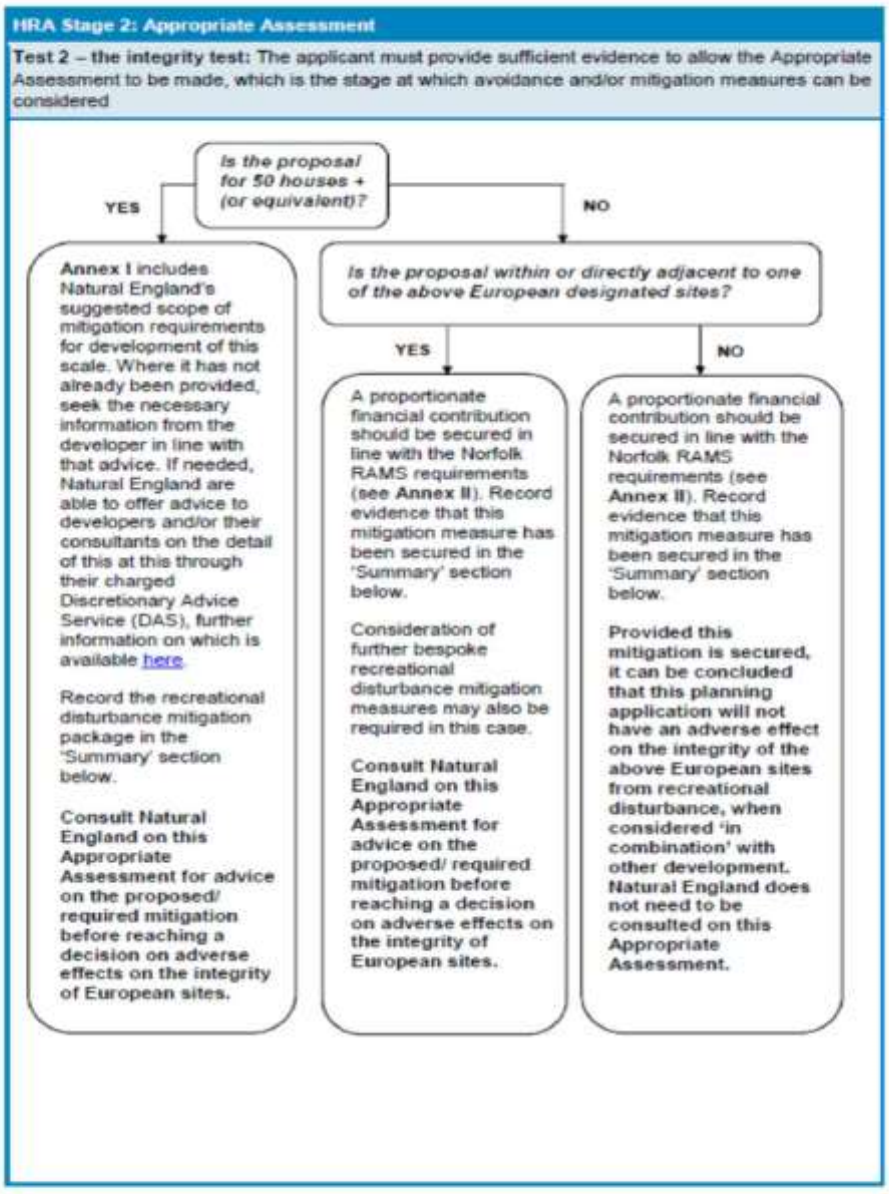
Annex A: Norfolk Recreational disturbance Avoidance and Mitigation Strategy (RAMS)
Habitat Regulation Assessment (HRA) Record

Application details	
Local Planning Authority:	
Case officer	
Application reference:	
Application description:	
Application address:	
Status of Application:	
Grid Ref:	

HRA Stage 1: screening assessment

Test 1 – the significance test: Based on the development type and proximity to European designated sites, a judgement should be made as to whether the development constitutes a 'likely significant effect' (LSE) to a European site in terms of increased recreational disturbance




HRA Stage 2: Appropriate Assessment
Test 2 – the integrity test: The applicant must provide sufficient evidence to allow the Appropriate Assessment to be made, which is the stage at which avoidance and/or mitigation measures can be considered
Is the proposal for 50 houses + (or equivalent)?
YES
NO
Annex I includes Natural England's suggested scope of mitigation requirements for development of this scale. Where it has not already been provided, seek the necessary information from the developer in line with that advice. If needed, Natural England are able to offer advice to developers and/or their consultants on the detail of this at this through their charged Discretionary Advice Service (DAS), further information on which is available here.
Record the recreational disturbance mitigation package in the 'Summary' section below.
Consult Natural England on this Appropriate Assessment for advice on the proposed/ required mitigation before reaching a decision on adverse effects on the integrity of European sites.
Is the proposal within or directly adjacent to one of the above European designated sites?
YES
NO
A proportionate financial contribution should be secured in line with the Norfolk RAMS requirements (see Annex II). Record evidence that this mitigation measure has been secured in the 'Summary' section below.
Consideration of further bespoke recreational disturbance mitigation measures may also be required in this case.
Consult Natural England on this Appropriate Assessment for advice on the proposed/ required mitigation before reaching a decision on adverse effects on the integrity of European sites.
A proportionate financial contribution should be secured in line with the Norfolk RAMS requirements (see Annex II). Record evidence that this mitigation measure has been secured in the 'Summary' section below.
Provided this mitigation is secured, it can be concluded that this planning application will not have an adverse effect on the integrity of the above European sites from recreational disturbance, when considered 'in combination' with other development. Natural England does not need to be consulted on this Appropriate Assessment.

Summary of the Appropriate Assessment : To be carried out by the Competent Authority (the local planning authority) in liaison with Natural England (where necessary)
Summary of recreational disturbance mitigation package [INSERT] **Conclusion** *Having considered the proposed avoidance and mitigation measures above, [INSERT LPA] conclude that with mitigation the project will not have an Adverse Effect on the Integrity of the European sites included within the Norfolk RAMS.* *Having made this appropriate assessment of the implications of the plan or project for the site(s) in view of that (those) site(s)'s conservation objectives, and having consulted Natural England and fully considered any representation received (where necessary), the authority may now agree to the plan or project under regulation 63 of the Conservation of Habitats and Species Regulations 2017.*
Local Planning Authority Case Officer comments, signed and dated:

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Annex I – Natural England's recommendations for larger scale residential developments within the identified Norfolk RAMS zone of influence (50 units +, or equivalent, as a guide)
Developments of this scale should include provision of well-designed open space/green infrastructure, proportionate to its scale. Such provisions can help minimise any predicted increase in recreational pressure to the European sites by containing the majority of recreation within and around the development site boundary away from European sites. We advise that the Suitable Accessible Natural Green Space (SANGS) guidance here can be helpful in designing this; it should be noted that this document is specific to the SANGS creation for the Thames Basin Heaths, although the broad principles are more widely applicable. As a minimum, we advise that such provisions should include:

- High-quality, informal, semi-natural areas
- Circular dog walking routes of 2.7 km[1] within the site and/or with links to surrounding public rights of way (PRoW)
- Dedicated 'dogs-off-lead' areas
- Signage/information leaflets to householders to promote these areas for recreation
- Dog waste bins
- A commitment to the long term maintenance and management of these provisions

Natural England would be happy to advise developers and/or their consultants on the detail of this at the pre-application stage through our charged Discretionary Advice Service (DAS), further information on which is available here.

However, the unique draw of the above European sites means that, even when well-designed, 'on-site' provisions are unlikely to fully mitigate impacts when all residential development within reach of the coast is considered together 'in combination'. We therefore advise that consideration of 'off-site' measures (i.e. in and around the relevant European designated site(s)) is also required as part of the mitigation package for predicted recreational disturbance impacts in these cases. Such measures are to be delivered strategically through the Norfolk RAMS to make the sites more resilient to increased recreational pressures. A proportionate financial contribution should therefore be secured from these developments in line with the Norfolk RAMS.

Annex II – Natural England's recommendations for smaller scale residential developments within the identified Norfolk RAMS zone of influence (0-49 units, or equivalent, as a guide) which are not within/directly adjacent to a European designated site
Whilst the provision of well-designed open space/green infrastructure on site or contributions towards strategic green infrastructure in your district is to be welcomed for developments of this scale, we advise that consideration of 'off-site' measures (i.e. in and around the relevant European designated site(s)) is required as mitigation for predicted recreational disturbance impacts in these cases as a minimum. Such measures are to be delivered strategically through the Norfolk RAMS to make the sites more resilient to increased recreational pressures. A proportionate financial contribution should therefore be secured from these developments in line with the Norfolk RAMS.

APPENDIX 2

A2(1) Strategic Green Infrastructure and Open Space Baseline

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Breckland's Local Plan (BLP) (Adopted 2019)

The BLP has GI integrated on a strategic level by ensuring GI has its own policy - *ENV01 Green Infrastructure*. It reads as follows:

New developments will be expected to exploit opportunities to incorporate green infrastructure and enhance existing connectivity; recognising the intrinsic value of the green infrastructure network and ensuring that the functionality of the network is not undermined as a result of development.

Through its layout and design, new development should respond to the location of existing green infrastructure and support appropriate uses and functions. Where it is considered that the development will have a detrimental effect on the quantity or function of existing green infrastructure, applications will be expected to demonstrate how the green infrastructure network will be enhanced as a result of the development. Developments that fail to exploit opportunities to integrate and enhance the existing local green infrastructure network will not be favourably considered.

This policy ensures that all new development incorporates GI and enhances the existing network. Additional policies within the Local Plan, such as ENV02 Biodiversity Protection and Enhancement, ENV 03 The Brecks Protected Habitats & Species, Policy ENV 04 Open Space, Sport & Recreation, ENV05 Protection and Enhancement of the Landscape and Policy ENV06 Trees, Hedgerows and Development. Reference is also made to Biodiversity net gain, protection and enhancement of sites nature conservation and existing features, which all help retain and enhance the wider GI network and help feed into the county strategy. Policy details below:

Policy ENV02 Biodiversity Protection and Enhancement

The highest level of protection will be given to European Sites, with development only permitted where the proposal is in accordance with the requirements of the Conservation of Habitats and Species Regulations 2017.

Where measures to mitigate for potential adverse effects on European sites are required, the proposed mitigation measures must be justified as fit for purpose with appropriate evidence, to inform the Council's Habitats Regulations Assessment.

Development likely to have an adverse effect (either directly or indirectly) on a site of national, regional or local biodiversity, or geological interest, as identified on the Policies Map, will not be permitted unless:

a. it can be clearly demonstrated that there are reasons for the proposal that outweigh the need to safeguard the special ecological / geological interest of the site, and;

b. it has been demonstrated, where development would result in significant harm, that it cannot be reasonably located on an alternative site that would result in less or no harm, and;

c. residual harm, after all measures to prevent and adequately mitigate have been applied, will be adequately compensated for.

Where the Council considers that a designated site, protected species or any species or habitat, particularly where listed as a Priority Habitat or Species under Section 41 of the Natural Environment and Rural Communities Act (2006), may be adversely affected by a development proposal, an ecological assessment (EcIA) will be required to be submitted with the planning application to assess effects on flora and fauna, commensurate with the scale of the impact and the importance of the species.

In accordance with the stepwise approach to protecting biodiversity (the mitigation hierarchy), all development with the potential to affect biodiversity should demonstrate how such effects have been considered, by firstly demonstrating how effects

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have been avoided, and then how effects that cannot be avoided have been minimised. Residual harm, after all measures to prevent and adequately mitigate have been applied, must be adequately compensated for.

All development should demonstrate how net gains for biodiversity are being secured as part of the development, proportionate to the scale of development and potential impacts (if any). Where development is permitted, the authority will consider the need for conditions or planning obligations to ensure the protection and enhancement of the site's nature conservation and / or geological interest.

Wherever a proposed development may have a detrimental impact upon a designated site or protected species, appropriate conditions and/or planning obligations will be used to ensure that the appropriate mitigation measures incorporated within the proposal are fully implemented, and monitored where required.

Policy ENV 03 The Brecks Protected Habitats & Species

The Council requires that a Habitats Regulations Assessment is undertaken on all proposals for development that are likely to have a significant effect on The Breckland Special Protection Area (SPA) which is classified for its populations of Stone Curlew, Woodlark and Nightjar, and/or Breckland Special Area of Conservation (SAC), which is designated for its heathland habitats. Development will only be permitted where it can be demonstrated that the proposal will not adversely affect the integrity of the SPA or the SAC.

Stone Curlew

Plan level Habitats Regulations Assessment has been undertaken to identify where built development is likely to significantly affect the Breckland SPA. Map 5.1 identifies a 1,500m buffer zone from the edge of those parts of the SPA that support, or are capable of supporting, Stone Curlew, where new built development would be likely to significantly affect the SPA population. The plan level Habitats Regulations Assessment also identifies areas that have a functional link to the SPA, because they support Stone Curlew outside, but in close proximity to the SPA boundary. These areas also have a 1500m buffer zone, within which new built development would be likely to significantly affect the SPA population.

A conclusion of no likely significant effect can be met where the proposed building is located further than 1500m away from the SPA boundary (red primary buffer) or the identified (blue secondary buffer) or possible (orange square cells) areas that have a functional link.

Development within the SPA boundary, or located less than 1500m away from the SPA boundary or identified areas that have a functional link will not normally be permitted.

Where a proposed building is outside the SPA but within 1500m of the SPA boundary or identified or possible areas that have a functional link, there may be circumstances where a project level Habitats Regulations Assessment is able to demonstrate that the proposal will not adversely affect the integrity of the SPA. For agricultural buildings, applicants must provide evidence to show how their proposal meets the criteria listed in Natural England's "Agricultural Buildings and the Breckland SPA Stone Curlew constraint zone" advice note, or successor document. Circumstances where the proposal is able to conclusively demonstrate that it will not result in an adverse effect on Breckland SPA may include where the proposal is:

- More than 1500m away from potential stone curlew inside the SPA;
- A new building that will be completely masked from the SPA by existing built development;
- A proposed re-development of an existing building that would not alter its footprint or increase its potential impact;
- A new agricultural building of less than 120 sqm;
- An extension to existing agricultural buildings of less than 120 sqm or 100% of the original, whichever is less.

Large developments adjacent to, or just outside the primary or secondary buffer, particularly where occurring in an isolated area with few other buildings, are likely to also require project level assessment.

Woodlark and Nightjar

Breckland

Development within 400m of the SPA that support, or are capable of supporting Woodlark and/or Nightjar will not normally be permitted. The Council will consider the need for a Habitats Regulations Assessment to determine the implications of development on Nightjar and Woodlark on a case by case basis, depending on the location and nature of the proposal.

Recreation pressure and urban effects

Plan level Habitats Regulations Assessment has identified the potential for increased disturbance to Nightjar, Woodlarkand Stone Curlew as a result of recreation, and the potential for other urban effects such as increased fire, litter and eutrophication to significantly affect Breckland SPA and SAC.

Monitoring and Mitigation Framework

The Council commits to a framework of measures that will enable it to coordinate the necessary monitoring and mitigation measures required to demonstrate that the increases in visitor pressure arising from new development in the District will be addressed before adverse effects on European sites occurs. These will include as a minimum the following measures to be implemented following adoption of the Plan:

- Creation of an advisory group;
- Production of a monitoring programme;
- Identification of mitigation measures; and
- Defining funding to support the above measures.

The Council will work with partners to develop a framework for managing and monitoring urban effects. Proposals for development where urban heaths at Thetford (Barnham Cross Common, Thetford Heath, Thetford Golf Club and Marsh), East Wretham or Brettenham are likely to be used as local greenspace will need to demonstrate the inclusion of mitigation measures that contribute to the framework to address the potential impact urban effects on Breckland SPA/SAC.

Policy ENV 04 Open Space, Sport & Recreation

Existing Provision

Development that would result in the loss of existing designated open space will only be permitted if:

a) it can be demonstrated (through a local assessment) that there is an excess of recreational or amenity open space in the settlement and the proposed loss will not result in a current or likely shortfall during the plan period; or

b) recreational facilities within the open space will be enhanced by the proposed development on an appropriate portion of the open space; or

c) the community would gain greater benefit from the developer providing a suitable alternative recreational or amenity open space in an equally accessible and convenient location.

The development of existing open space with an ecological value (a known biodiversity or nature conservation interest) will not be permitted.

New Provision

All new residential development is expected to provide a contribution towards outdoor playing space equivalent to 2.56 hectares per 1,000 population*, which equates to 25.6m² of outdoor playing space per person. As set out in the Open Space Assessment (2015), this 25.6m² is broken down to 17.6m² of outdoor sport area and 8m² of children's play space.

There is a presumption that for developments comprising of 25 dwellings or more that open space, sport and recreation facilities will be provided within the development site. Where on-site provision is provided, the space should be of an appropriate type to serve the needs of the development, well related to the proposed residential properties and in accordance with relevant standards.

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Within a residential development of 25 or more dwellings priority should be given to the provision of children's play areas since the facility is most likely to be required within an easy reach of dwellings and will be required to conform to the 0.8ha per 1000 people standard in provision of children's play area in accordance with the NPFA standard.

Major development sites comprising more than 10 dwellings, but less than 25 dwellings will be expected to make proportionate off-site contributions towards open space, sports and recreational facilities.

Policy ENV 05 Protection and Enhancement of the Landscape

The landscape of the District will be protected for the sake of its own intrinsic beauty, its benefit to the rural character and in the interests of biodiversity, geodiversity and historic conservation. Development should have particular regard to maintaining the aesthetic and biodiversity qualities of natural and man-made features within the landscape, including a consideration of individual or groups of natural features such as trees, hedges and woodland or rivers, streams or other topographical features.

Release of land in Breckland will have regard to the findings of the Council's Landscape Character Assessment (LCA) and Settlement Fringe Landscape Assessment to ensure land is only released in areas where the impact on the landscape is minimal. Development should also be designed to be sympathetic to landscape character and informed by the LCA.

High protection will be given to The Brecks landscape, reflecting its role as a regionally significant green infrastructure asset. Proposals within The Brecks Landscape Character Areas will not be permitted where these would result in harm to key visual features of the landscape type, other valued components of the landscape, or where proposals would result in a change in the landscape character.

High protection will also be given to the river valleys and chalk rivers in Breckland as identified in the Landscape Character Assessment, recognising their defining natural features, rich biodiversity and the undeveloped character of their shallow valleys.

Policy ENV 06 Trees, Hedgerows and Development

Trees and significant hedge and shrub masses form part of the green infrastructure network and should be retained as an integral part of the design of development except where their long-term survival would be compromised by their age or physical condition, or there are exceptional and overriding benefits in accepting their loss.

Development requiring the loss of a protected tree or hedgerow (including preserved trees, protected hedgerows, trees in Conservation Areas, ancient trees, aged and veteran trees and trees classified as being of categories A or B in value (BS5837:2012) will only be permitted where:

a) the removal of a tree or hedgerow will enhance the survival or growth of other protected trees or hedgerows, or;

b) it would allow for a substantially improved overall approach to the design and landscaping of the development that would outweigh the loss of any tree or hedgerow.

Where the loss of trees is accepted in these circumstances, developers will be required to retain enough space to ensure that at least one tree of a similar ultimate size to that removed is planted with sufficient room to reach maturity without future pressure for pruning or removal.

Reference is made to the GIMP Strategic GI corridors and habit core areas, as well as the Norfolk Trails. It states: *The network of green infrastructure in the District, including water bodies and the strategic green infrastructure corridors shown on the Policies Map, should be safeguarded, retained and, where opportunities arise, enhanced. Enhancement of the green infrastructure network will be sought through the promotion of positive action, and the development management process.*
This wording ensures that existing GI, and the enhancement of Strategic GI corridors will be expected at all levels of development management and therefore all new housing growth will have provision for adequate GI.

Open Space Assessment (2015)

Breckland

Audit Local Provision

The site audit for this study was undertaken during early to late winter 2014. The sites listed within the accompanying Open Space Parish Schedule 2015 detail each individual piece of open space across the district, by parish.

In total, 698 open spaces (including provision for children and young people) are identified, reviewed/plotted on GIS and assessed to evaluate site quality and quantity. For the purposes of Table 'Total Open Space Provision', each site is classified based on its primary open space purpose, so that each type of space is counted only once. The following typologies as detailed in Chapter 5 are used.

Total Open Space Provision:

Type	No of Sites	Total Area (ha)
Outdoor Sports	91	176
Children's Play (includes primary and secondary sites)	108	8
Parks and Gardens	3	3.2
Natural and semi-natural green space	74	519
Amenity green space	325	154
Green Corridors	12	30.3
Allotments	43	49.7
Cemeteries and Churchyards	128	69.7
Golf Courses	6	236
Civic Spaces	2	0.08
Local Green Space	See Section 7.11	
Total	792	1,245

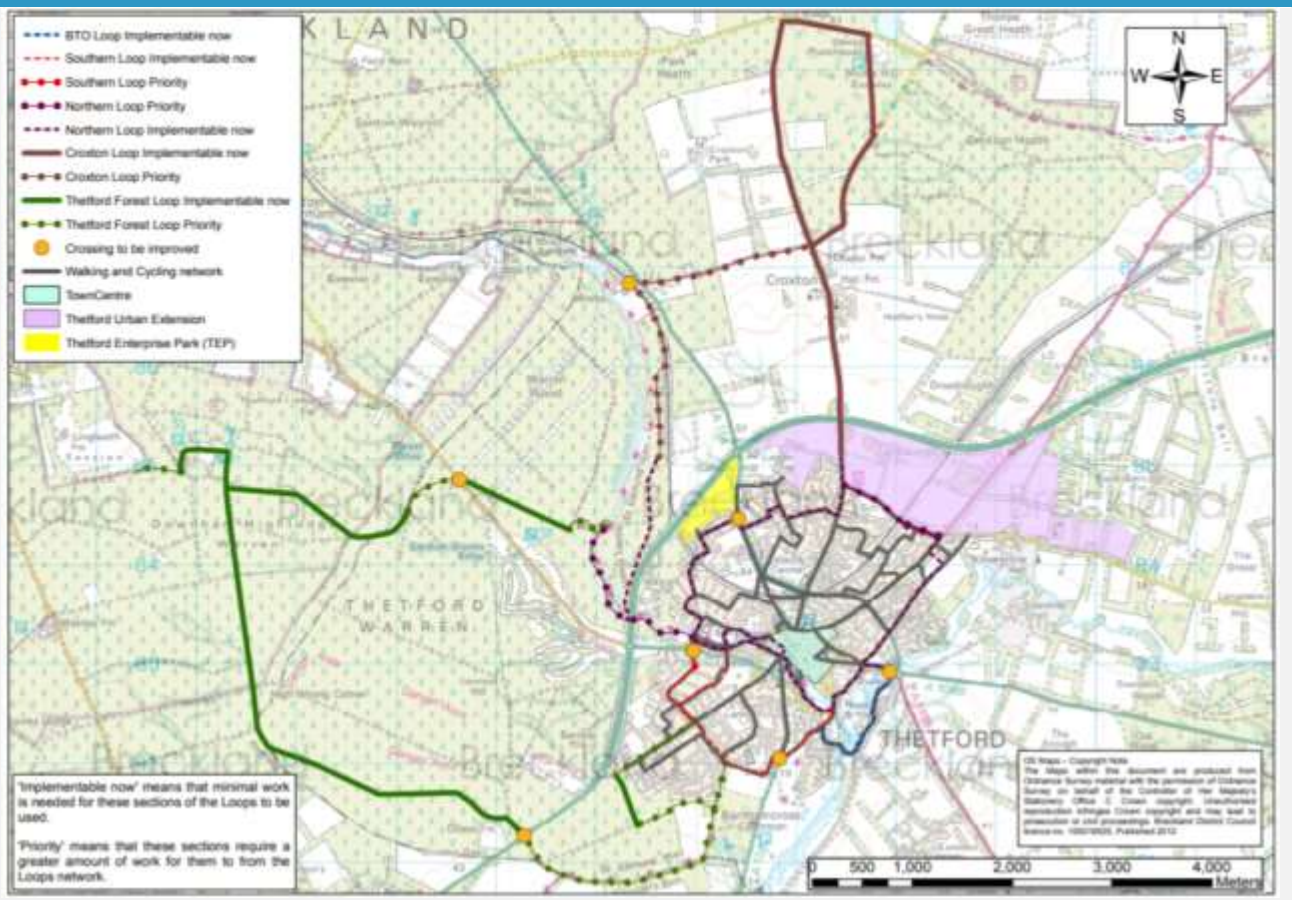
Whilst there are 698 sites within Breckland, the table above lists 792, this is due to the secondary use of children's play areas which are regularly located within outdoor sports facilities or amenity green spaces.

Thetford Area Action Plan (AAP) (Adopted 2012).

On a local level, implementation of this policy will be supported by consideration of more detailed local green infrastructure strategies such as those created for the market towns of Dereham and Thetford. For example, Thetford has its own GI Strategy as well as Area Action Plan (AAP) (Adopted 2012). The AAP refers to GI in detail, with policies and project initiatives that look to restore and enhance the GI network. For instance, Policy TH 12: The Thetford Loops.

Thetford Loops

Breckland



(Source: Thetford Area Action Plan, 2012)

The Thetford Loops are multi-purpose, high quality routes for pedestrians and cyclists for leisure and utility trips. Proposals/schemes for areas where parts of the Loops network runs through or are directly adjacent, will provide the Loops as part of the proposal/scheme. The Thetford Loops offer considerable potential to enhance the walking and cycling network by providing convenient and attractive paths for pedestrians and cyclists to move around the town and improve access to the surrounding countryside. The design and implementation of the Loops will ensure impacts from recreational use to the European Protected Sites surrounding Thetford are avoided.

The Loops also pick up the signed National Cycle Route 13 and the Two Rivers Regional Cycle Route 30, both of which make use of the quiet roads in the area. The Hereward Way (a National Trail) is also adjacent to the Loop proposals and available for walkers.

Development proposals should also be informed by made Neighbourhood Plans which often highlight significant green spaces of importance to the community in their policies and can also include new designations of local green space.

Greater Norwich

Greater Norwich Development Partnership (GNDP) Green Infrastructure Strategy (2007)

The GNDP GI Strategy sets out a vision for green infrastructure in the Greater Norwich Area for a "*multifunctional network of green spaces and green links, providing an environmental life support system for communities and wildlife".*

It seeks to "*ensure that pressures on important natural and historic aspects of green infrastructure in the Greater Norwich Area are minimised, and opportunities to enhance green infrastructure to meet the needs of people and biodiversity are maximised.*"

Greater Norwich

The Strategy sets out six core principles for GI planning and management to underpin relevant policies, plans and decisions with the Greater Norwich area:

- "Safeguard and protect valuable green infrastructure resources;
- Integrate green infrastructure into development schemes and existing developments;
- Enhance green infrastructure where of low quality, in decline or requiring investment to realise its potential to meet future demands;
- Mitigate potential adverse effects of development, new land uses and climate change;
- Create new green infrastructure where there is an identified deficit, or growth is planned and additional provision or compensatory measures are needed."

The document proposes and identifies a multi-functional GI network for the Greater Norwich area.

The green infrastructure network connects Norwich, other settlements and the countryside via green corridors, particularly along the river valleys, providing sustainable opportunities for communities in towns and villages to access, enjoy and appreciate a variety of greenspaces on their doorstep and in the wider countryside.

The network also connects a diverse range of wildlife habitats and provides important ecological corridors for species dispersal and migration.

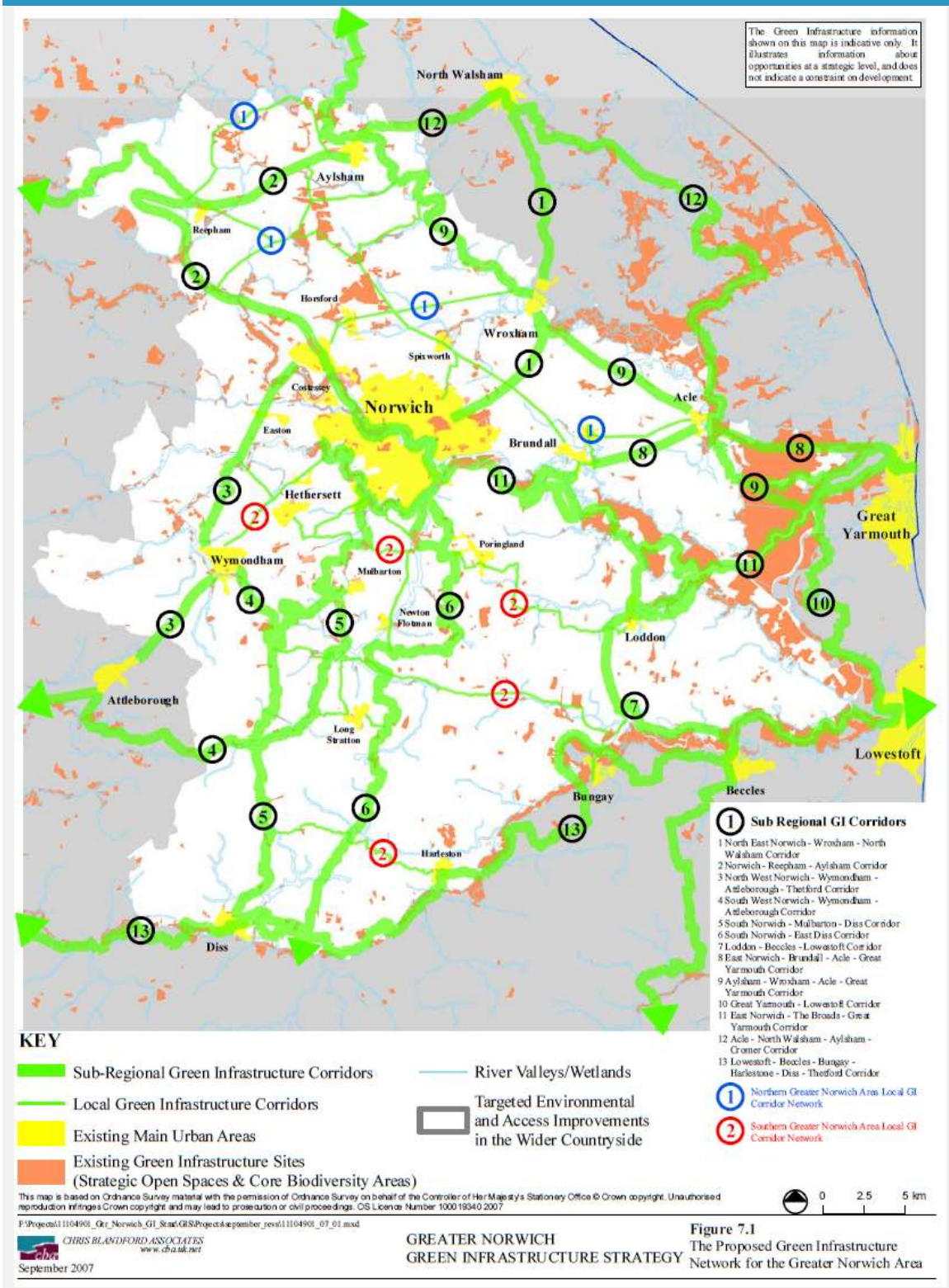
The green infrastructure approach should be regarded as a long-term framework for sustainable development, protecting the natural and historic environment and enhancing the distinctive qualities that give the Greater Norwich Area its special character.

Green infrastructure should be delivered, protected and managed through the commitment and involvement of the public, private and voluntary sectors across the Greater Norwich Area working in partnership.

Proposed GI Network for the Greater Norwich Area

(overleaf)

Greater Norwich

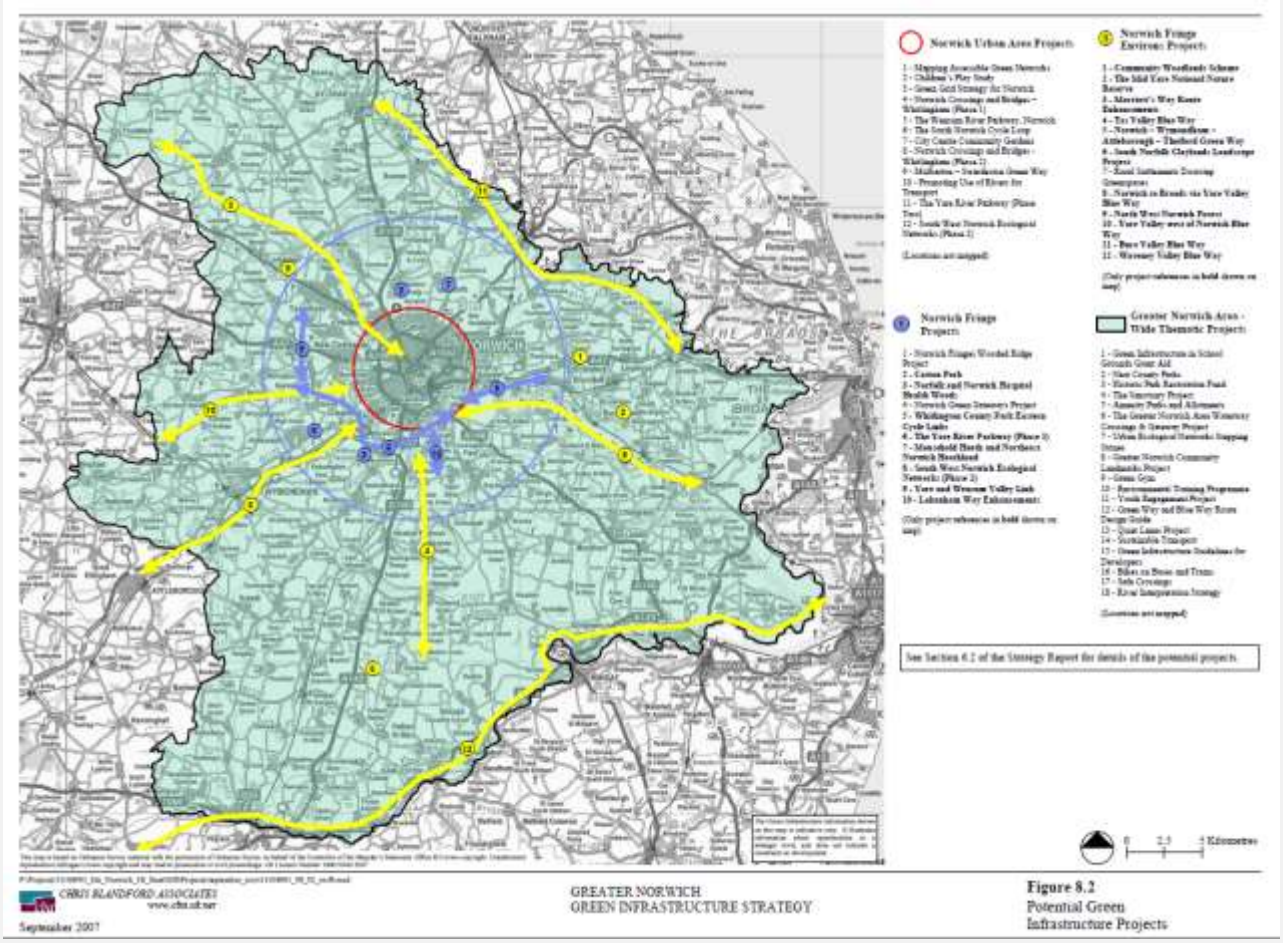


Source: GNDP GI Strategy (2007)

A number of potential green infrastructure projects are identified within the Action Plan including the New Country Parks project, Historic Park Restoration Fund and Green Gym project (see map below). These GI projects would contribute to the strategic GI network and address function and benefit deficits within the area.

Greater Norwich

Potential Green Infrastructure Projects



Source: GNDP GI Strategy (2007)

GNDP Green Infrastructure Delivery Plan (2009)

The JCS provides strategic policies that cover the Greater Norwich area. GI is embedded throughout the document. However, the one policy that highlights it most is Policy 1: Addressing climate change and protecting environmental assets. Details within this policy include:

"In areas not protected through international or national designations, development will:

- *minimise fragmentation of habitats and seek to conserve and enhance existing environmental assets of acknowledged regional or local importance. Where harm is unavoidable, it will provide for appropriate mitigation or replacement with the objective of achieving a long-term maintenance or enhancement of the local biodiversity baseline*
- *contribute to providing a multifunctional green infrastructure network, including provision of areas of open space, wildlife resources and links between them, both off site and as an integral part of the development*
- *help to make provision for the long-term maintenance of the green infrastructure network."*

Within this section of the JCS it also states "Investment and development will provide a multifunctional network of green spaces and green links, having regard to factors such as accessibility, existing and potential open spaces, natural and seminatural areas, protection of the water environment, landscape, geodiversity and the fundamental need to contribute to ecological networks. More detailed delivery of green infrastructure will be taken forward through delivery plans and other elements of

Greater Norwich

LDFs." This demonstrates that as well as the JCS and the Greater Norwich GI Strategy, individual LAs will have additional localised GI policies, projects and objectives.

Greater Norwich Infrastructure Plan (GNIP) (2020)

The GNIP was produced to co- ordinate and manage the delivery of strategic infrastructure to support growth, improve quality of life and enhance natural environment. The document is update annually to reflect the latest information available and how projects evolve. GI is one of the GNIP main priorities and are based on the need to mitigate the potential impacts on Habitats Sites under the Habitat Regulations. The document sets out over 100 projects of different scales across the Greater Norwich region, falling within different GI Priority Areas. Examples include Phases of Broadland Way and the Yare and Wensum Valleys Link. Details for both, and others, include status, estimated scheme cost, funding and current spend.

Habitats Regulations Assessment of Greater Norwich Regulation 18 Draft Plan

The assessment of Policy 7.1 'The Norwich urban area including the fringe Parishes', Policy 7.2 'The Main Towns' and Policy 7.3 'The Key Service Centres' states that "The scale of housing growth means that emphasis will need to remain on providing sufficient green infrastructure by developers directly or via the emerging Green Infrastructure and Recreational Impact Mitigation Strategy to provide sufficient recreational facilities to minimise any increase of visitor pressure on European sites."

The document also concludes that the Greater Norwich Local Plan Strategy would have no adverse effect upon the integrity of any European site acting alone if there is "satisfactory com of the Green Infrastructure and Recreational impact Avoidance Mitigation Strategy (Section 5) that provides:

- "a tariff-based payment taken from residential, and other relevant accommodation e.g. tourist accommodation, that will be used to fund a mixture of mitigation measures, most likely consisting of: soft and hard mitigation measures at the designated natural sites themselves to increase their resilience to greater visitor numbers.
- the provision of suitable alternative natural green space (SANGs), which would be large enough to meet a range of needs and sufficiently well publicised for effective mitigation. The current Broadland District Council Development Management DPD policy EN3 may be considered as a precedent for housing growth in the emerging Greater Norwich Local Plan, although consideration will need to be given to new evidence emerging as part of plan production.

Implementation of a wider programme of Green Infrastructure Improvements in accordance with current and emerging project plans so that residents of existing and proposed housing have an alternative to European sites for regular routine activities such as dog walking.

Topic Paper: Green Infrastructure and Recreation Open Space (2011)

This paper provides an estimation of the costs of green infrastructure required to support sustainable if the growth takes place as it has been predicted in the JCS.

Alternative delivery mechanisms such as providing open space facilities off site alongside other infrastructure projects are discussed as well as enhancing existing sites with improved facilities to accommodate more intensive use/providing alternative uses.

Given the growth planned in Greater Norwich will place additional pressure on the existing green infrastructure networks strategic GI projects and the associated funding are also reviewed. GI elements include:

- Walking and Cycle Routes - Improvement and new routes.
- Small Strategic Projects - A series of small strategic projects which have been prioritised for the next 5 years
- Larger Strategic Projects - Larger strategic projects as identified in the JCS

Greater Norwich

The funding summary is shown below:

Table 4 - Strategic Green Infrastructure costs 2008-2026

SUMMARY	
Project	**Total Cost**
Cycle Routes	£500,000
Existing walking access links to be improved (NE)	£2,160,000
New Access links needed (NE)	£1,340,000
Total cost for short term projects (5 Years) = £2,330,000 x 3 (for the 15 Year period) = £6,999,000)	£7,000,000
Long Term Strategic Projects	£1,000,000
Visitor Pressure	£1,000,000
Contingency	£5,000,000
Total	**£18,000,000**

Broadland (Greater Norwich)

Development Management DPD (2015)

The Development Management DPD (DMDPD) has its own GI policy - *Policy EN3 – Green Infrastructure*. It reads as follows:

All development will be expected to maximise opportunities for the creation of well-managed network of wildlife habitats.

Residential development consisting of five dwellings or more will be expected to provide at least 4ha of informal open space per 1,000 population and at least 0.16ha of allotments per 1,000 population.

Development will also be expected to make adequate arrangements for the management and maintenance of green infrastructure.

This policy is important as it refers to 'informal' open space, rather than 'formal' open space. It also states that improving the provision, quality and accessibility of informal open space will "mitigate the potential impacts of visitor pressure upon sensitivity international designated sites" (Habitats Sites). More importantly, if development sites are unable to provide adequate informal open space, off-site provision is necessary, and this can be provided through a viable alternative as part of the wider GI network.

Recreational Provision in Residential Development SPD (2016)

To build on the DMDPD, Broadland also produced a Recreational Provision in Residential Development SPD that sets out standards for formal and informal recreation space. In terms of Informal Recreational Space, it states that:

"*Informal open space areas created will need to be to a sufficiently high standard and quality to provide a viable alternative to visiting N2K sites or contribute to the provision of a viable alternative as part of a wider green infrastructure network. Regard should be had to the Green Infrastructure Study and Green Infrastructure Delivery Plan underpinning the JCS. This may include some of the priorities identified in the Greater Norwich Green Infrastructure Study, the Greater Norwich Green Infrastructure Delivery Plan (GIDP) and the Greater Norwich Infrastructure Plan (GNIP). Regard should also be had to priorities identified within the emerging Norfolk Green Infrastructure Strategy.*"

Broadland (Greater Norwich)

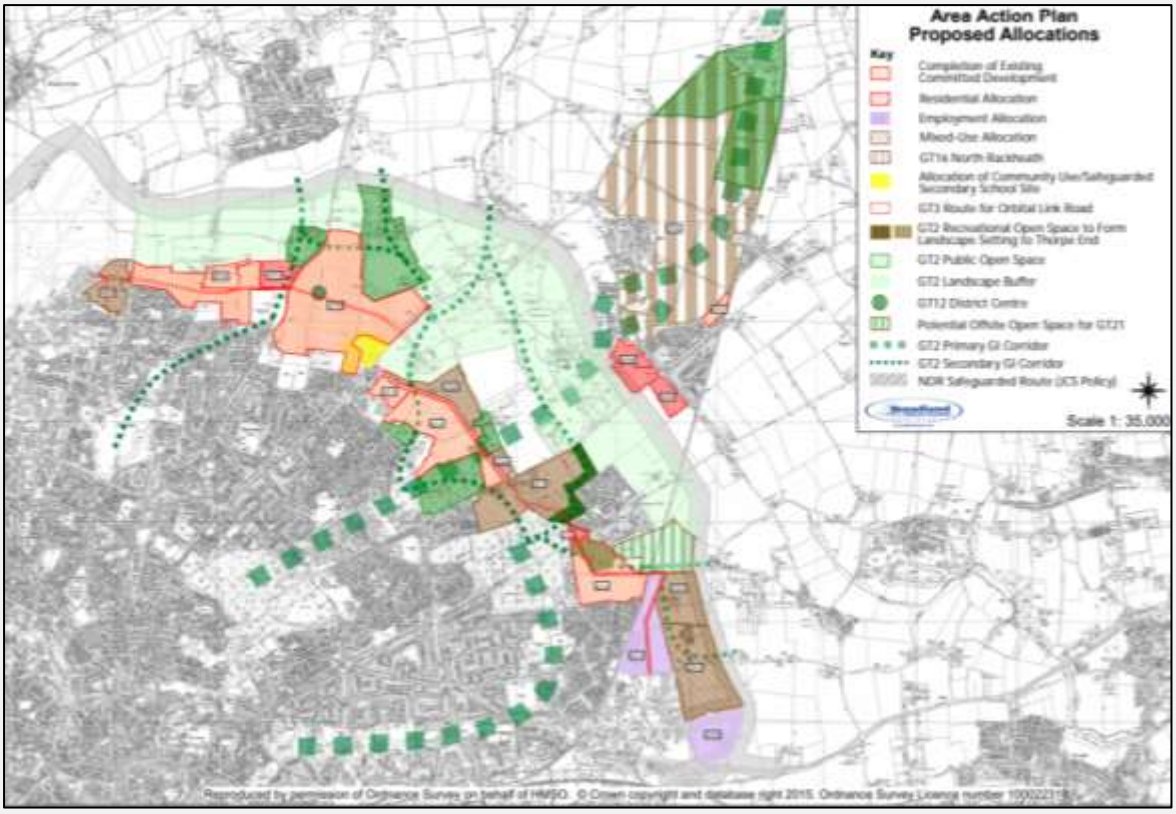
The Growth Triangle Area Action Plan (GTAAP) (Adopted 2016)

The GTAAP specifically applies to areas of Old Catton, Rackheath, Sprowston, Thorpe St Andrew and other parishes. The GTAAP has a strategic policy in place for GI:

Policy GT 2: Green Infrastructure

Primarily it is regarding an area of green space (landscape buffer) that has been identified as a landscape setting to the edge of Norwich (see Policy map below), preserving important elements of the landscape structure of the area, such as; woodland mature trees, intact hedgerows and historic parkland landscapes.

Policy Map (GTAAP)



(Source: Growth Triangle Area Action Plan (2016))

Parts of the policy read as follows:

"An area which will form the landscape setting to the future built edge of Norwich is identified on the Policies Map. Within this designated area development will be permitted for:

- *Extension or alterations to an existing building; and or*
- *Development that would result in a significant community benefit*"

"Biodiversity and Habitat connectivity will be achieved through the delivery of two primary and seven secondary green infrastructure corridors. The corridors are shown on the policies maps.

Three large areas of public open space assets, which will make an important contribution to the green infrastructure network, are identified on the proposal's maps. These are Beeston County Park, including Red Hall Farm, Harrisons Woodland Park and the North Rackheath Buffer Zone.

Broadland (Greater Norwich)

Formal and informal recreational open space and GI will be provided through development in accordance with the development management policies of the local plan. Informal and formal OS, sports pitches, play areas, walking and cycling routes, landscaping and SuDS will be located and orientated to support the delivery of the identified primary and secondary corridors.

Outside of areas allocated for development, or as POS, proposals for the provision of GI that require planning permission (such as POS) will be permitted unless the proposal would result in significant harm in terms of biodiversity, landscape or any other material consideration."

The primary green infrastructure corridors referred to in Policy GT2 are:

- Mousehold to the Broads; and,
- Thorpe Ridge.

The Seven secondary green infrastructure corridors to be delivered through Policy GT2 are:

- Catton Park to Spixworth
- Beeston Country Park to Spixworth Park
- Thorpe Woodlands to Broadwalk Plantation/Fir covert
- Thorpe Woodlands to Dobb Beck (via Harrisons Plantation)
- Thorpe Woodlands to Dobb Beck (via Rackheath Park)
- Thorpe Woodlands to Witton Run; and,
- Thorpe Woodlands to Smee Lane, Plumstead

These green infrastructure corridors will be delivered through a series of projects and proposals.

The other main policies relevant to green infrastructure and development include policies 11 and 12:

Policy 11: Conserving and enhancing the natural environment

In relation to determining planning applications, the policy states that "opportunities to incorporate biodiversity in and around developments should be encouraged" and that policies and decisions should "limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation" by encouraging good design.

Policy 12: Conserving and enhancing the historic environment

This policy summarises the process required for conservation of historic assets. In particular it states that planning applications should be required to "describe the significance of any heritage assets affected, including any contribution made by their setting" and that in determining planning applications, local planning authorities "should take account of:

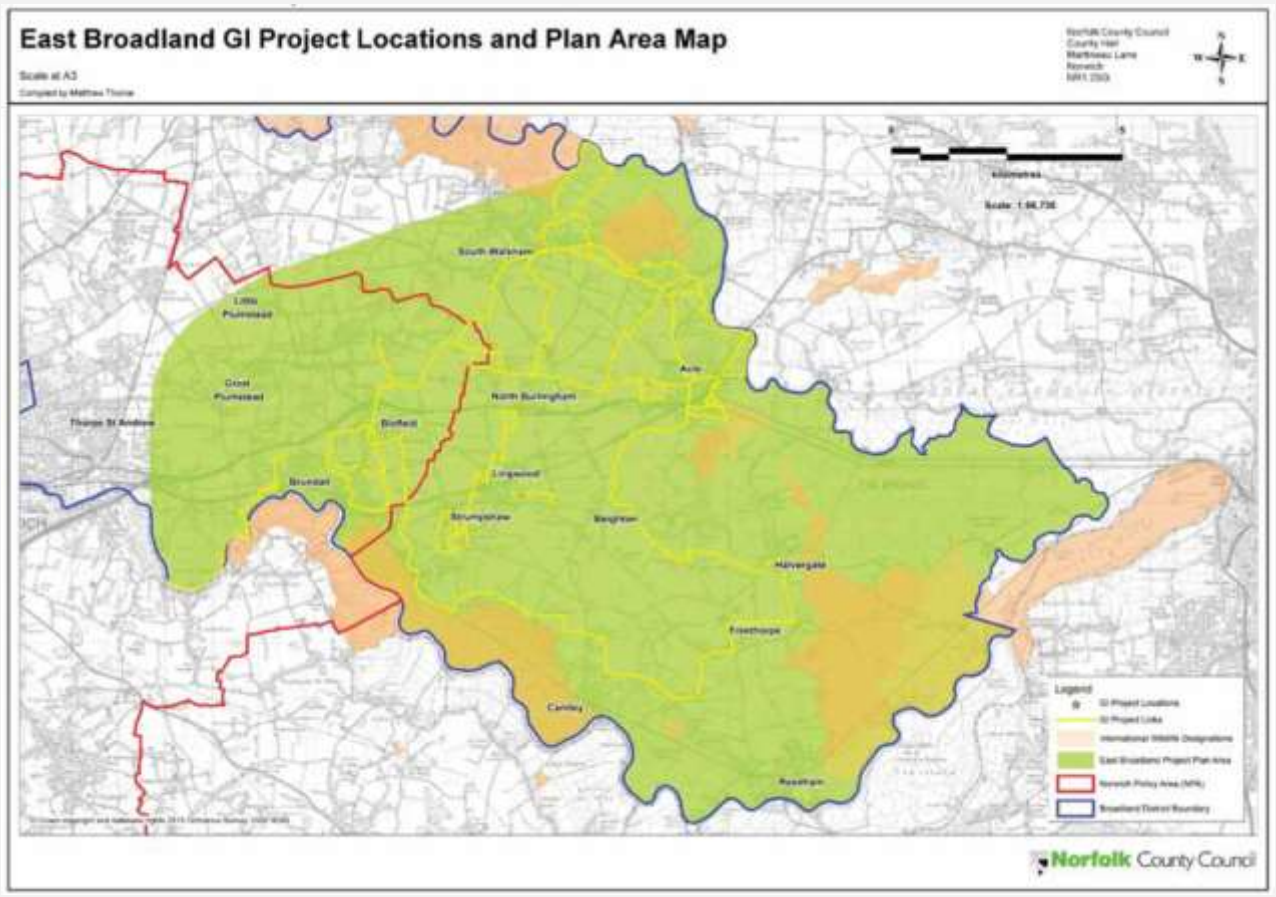
- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
- the desirability of new development making a positive contribution to local character and distinctiveness."

East Broadland Green Infrastructure Project Plan (EBGIPP) (2015)

The EBGIPP is a project plan that focuses on delivery of potential GI projects for the short-, medium- and long-term within the area of Great Plumstead and Acle. The map below shows the identified project locations and links where potential improvements can be made, or new GI projects can take place. Projects include; the Witton Run GI Project, Link from Blofield to Blofield Heath and A47 Safe Foot and Cycle Crossing. The details of each project are set out, along with the opportunities, risks and

Broadland (Greater Norwich)

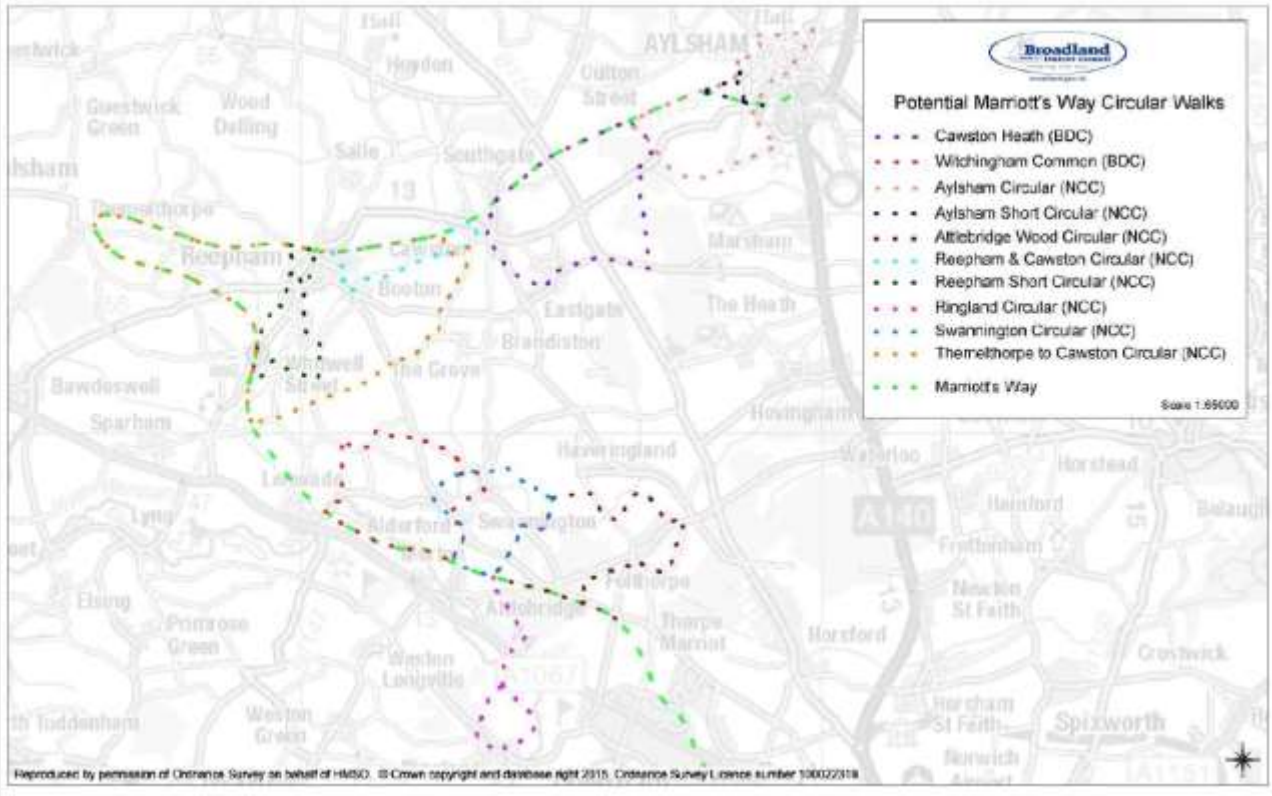
justification. As well as enhancing the GI network, great importance within this study is given to the protection of highly sensitive wildlife sites such as SSSIs and CWS.



West Broadland Green Infrastructure Project Plan (2018)

A similar approach was taken to the WBGIPP as the EBGIPP with a focus on delivery of potential GI projects within the West Broadland area. Projects include; the Thorpe Marriott Greenway, South Drayton Greenway and Marriott's Way Circular Walks (as shown on the map below). The details of each project are set out, along with the opportunities, risks and justification.

Broadland (Greater Norwich)



Kings Lynn and West Norfolk

Site Allocations and Development Management Policies Plan (Adopted 2016)

Given the importance of retaining and enhancing the boroughs GI network, along with the recreational pressures on Habitats Sites, it was identified that there is a need for monitoring and mitigation measures. For this reason, the Policy DM 19 - Green Infrastructure/Habitats Monitoring and Mitigation was adopted. The GI element of this policy is as follows:

"Opportunities will be taken to link to wider networks, working with partners both within and beyond the Borough.

The Council supports delivery of the projects detailed in the Green Infrastructure Study including:

- *The Fens Waterway Link- Ouse to Nene;*
- *The King's Lynn Wash/Norfolk Coast Path Link;*
- *Gaywood Living Landscape Project;*
- *The former railway route between King's Lynn and Hunstanton; and*
- *Wissey Living Landscape Project.*

The Council will identify, and coordinate strategic delivery, with relevant stakeholders, of an appropriate range of proportionate green infrastructure enhancements to support new housing and other development and mitigate any potential adverse effects on designated sites of nature conservation interest as a result of increased recreational disturbance arising from new development. All new development must ensure there is no adverse effect on a European Protected Site through the provision of appropriate measures. These enhancements will be set out in a Green Infrastructure Delivery Plan.

Kings Lynn and West Norfolk

Major development will contribute to the delivery of green infrastructure, except:

- *Where it can be demonstrated the development will not materially add to the demand or need for green infrastructure.*

Where such a contribution would make the development unviable, the development will not be permitted unless:

- *It helps deliver the Core Strategy; and*
- *The relevant contribution to that Strategy could not be achieved by alternative development, including in alternative locations or in the same location at a later time;*
- *or Unless the wider benefits of the proposed development would offset the need to deliver green infrastructure enhancements.*

More detailed local solutions based on the Green Infrastructure Strategy will be developed for Downham Market and Hunstanton, particularly in relation to the main growth areas and King's Lynn and surrounding settlements."

This then leads to Habitats Regulations Assessment monitoring and mitigation section, which looks to ensure adequate provision of informal open space to avoid an adverse effect on Habitats Sites. These reads as follow:

"In relation to Habitats Regulations Assessment monitoring and mitigation the Council has endorsed a Monitoring and Mitigation Strategy including:

- *Project level HRA to establish affected areas (SPA, SAC, RAMSAR) and a suite of measures including all/some of:*
- *Provision of an agreed package of habitat protection measures, to monitor recreational pressure resulting from the new allocations and, if necessary, mitigate adverse impacts before they reach a significant threshold, in order to avoid an adverse effect on the European sites identified in the HRA. This package of measures will require specialist design and assessment, but is anticipated to include provision of:*
  - *i. A monitoring programme, which will incorporate new and recommended further actions from the Norfolk visitor pressure study (anticipated to be completed in Spring 2016) as well as undertaking any other monitoring not covered by the County-wide study.*
  - *ii. Enhanced informal recreational provision on (or in close proximity to) the allocated site [Sustainable Accessible Natural Greenspace], to limit the likelihood of additional recreational pressure (particularly in relation to exercising dogs) on nearby relevant nature conservation sites. This provision will be likely to consist of an integrated combination of:*
    1. *Informal open space (over and above the Council' s normal standards for play space);*
    2. *Landscaping, including landscape planting and maintenance;*
    3. *A network of attractive pedestrian routes, and car access to these, which provide a variety of terrain, routes and links to the wider public footpath network.*
  - *iii. Contribution to enhanced management of nearby designated nature conservation sites and/or alternative green space;*
  - *iv. A programme of publicity to raise awareness of relevant environmental sensitivities and of alternative recreational opportunities."*

This section is important as it acknowledges the need for "enhanced informal recreational provision", rather than just amenity space. By making this commitment, there is a guarantee that GI enhancements will be provided on site that will improve the borough and county GI network, rather than just green space.

Borough Council of Kings Lynn and West Norfolk Green Infrastructure Study: Stage Two (GISS2) (2010)

Kings Lynn and West Norfolk

The GISS2 was completed in 2010 and provides a borough wide analysis of; existing provision, deficits, potential improvements, policies to deliver GI and high, medium and low priority projects. The Stage Two document specifically provides a strategy, action plan and business plan to promote and support the delivery of GI in the borough. Plans were produced to highlight projects which support the delivery and inclusion of GI focusing primarily upon the creation of new habitats, new access/recreation routes, residential development and the extension/enhancement of industrial sites.

The vision for the borough was identified following discussions with key stakeholders at workshops and meetings. It draws on the Sustainable Community Strategy, Core Strategy and other GI related strategies. The vision is as follows:

King's Lynn and West Norfolk's GI Vision (2009-2029)

"We want to safeguard our justly famous natural and historic environment, at the same time making sustainability a central part of our vision. We want to build connections with other local and regional economies, reduce reliance on the car, and prepare ourselves for the challenges of climate change.

In 2030…

West Norfolk has undergone regeneration and growth that complements its high quality historical and natural inheritance;

communities in West Norfolk benefit from quality public spaces and parks with access to the coast and countryside that make the area special;

West Norfolk is meeting the challenges of climate change;

people will be less reliant on the motor car to access places and services; and

West Norfolk still feels like somewhere unique in its own right, based on its own local distinctiveness".

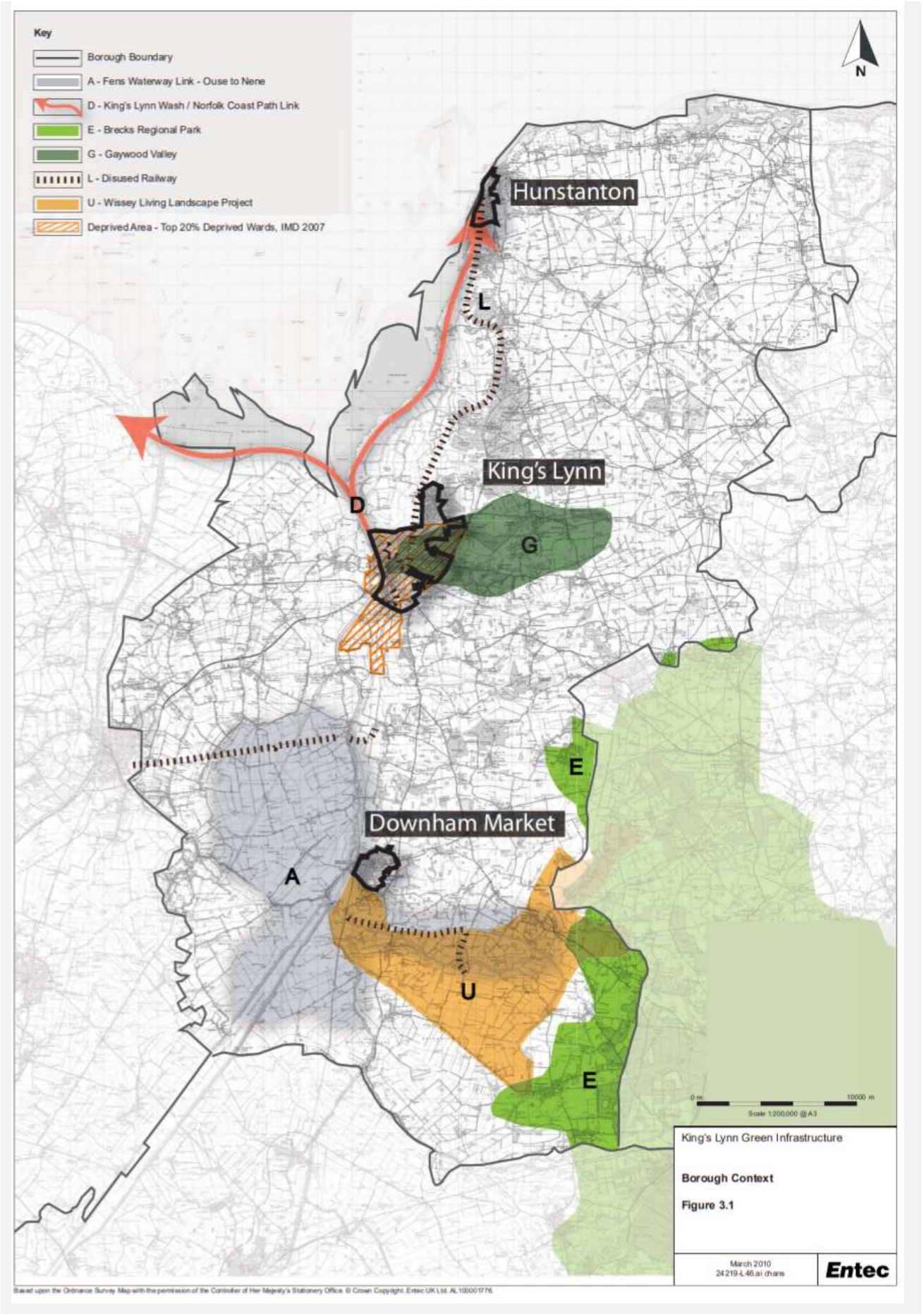
(Source: West Norfolk's Sustainable Community Strategy and Core Strategy Regulation 25 Local Development Framework).

This study highlights GI plans for the borough, and more specifically, three main towns; Hunstanton, Kings Lynn and Downham Market. Together they act as a spatial framework of how the GI vision will be delivered. The plans have been developed to demonstrate existing GI assets and potential new projects.

The Borough wide masterplan (see Borough Context Plan below) indicates a number of key strategic, large projects identified to be of regional/county significance. To the north of the Borough a number of potential GI projects have been identified, they include the King's Lynn Wash/Norfolk Coastal Path, which will increase linkages between the Borough's primary town, and the linkages along the East coast, supporting both the movement of wildlife and opportunities for recreation. There is also potential to develop further links to the Coast through the enhancement of the existing disused railway, which runs between King's Lynn and the Coast.

Three other significant conservation projects identified include; the Living Landscapes projects of Gaywood Valley and the Wissey and the development of a circular waterway supporting movement around the Fens Waterways.

Borough Context Plan


Key
Borough Boundary
A - Fens Waterway Link - Ouse to Nene
D - King's Lynn Wash / Norfolk Coast Path Link
E - Brecks Regional Park
G - Gaywood Valley
L - Disused Railway
U - Wissey Living Landscape Project
Deprived Area - Top 20% Deprived Wards, IMD 2007
N
Hunstanton
L
King's Lynn
D
G
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Downham Market
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Scale 1:200,000 @A3
King's Lynn Green Infrastructure
Borough Context
Figure 3.1
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Kings Lynn and West Norfolk

(Source: Borough Council of Kings Lynn and West Norfolk Green Infrastructure Study: Stage Two (2010))

Kings Lynn & West Norfolk Site Allocations and Development Management Policies Plan (2016)

Policy DM 16 – Provision of Recreational Open Space for Residential Developments

All new residential development will be expected to make adequate provision for open space to the following standards:

Schemes of up to 19 units will ensure that their schemes contain sufficient space to ensure a high standard of layout and amenity to the residents of the proposed development and to ensure that the scheme integrates into the wider landscape setting. On windfall sites the requirement to provide open space will apply where the Council considers that the proposed development forms part of a larger site which, if developed, would result in a requirement for a proportion of (or contribution to) open space.

Schemes of 20 units or greater will provide 2.4 hectares of open space per 1000 population comprising approximately:

- 70% for either amenity, outdoor sport, and allotments (see below) and
- 30% for suitably equipped children's play space

On sites allocated for residential development through the Local Plan process, and where development of the whole site results in a requirement for a proportion of (or contribution to) open space, the requirement to provide open space will apply to the whole of a single allocated site, even if it is developed incrementally (through sub-division etc.)

All proposals involving the provision of publicly accessible areas of open space must include robust arrangements for the management and future maintenance of that open space. The Council may take on and adopt areas of public open space within developments, subject to bringing the scheme up to an appropriate standard and the payment of an appropriate fee.

The Council will adopt a flexible approach to the types of open space required within a particular scheme only where it can be demonstrated:

- that there is excess provision available in the locality, or
- where opportunities exist to enhance existing local schemes, or
- the townscape or other context of the development is such that the provision of open space is not desirable.

The Council will provide full details on the provision and maintenance of open space within Supplementary Planning Guidance.

North Norfolk

North Norfolk Green Infrastructure Background Paper 5 (2019)

This GI Background Paper is a non-technical guide explaining the approach to Green Infrastructure and further guiding principles to inform planning proposals and the site allocations in the emerging North Norfolk Local Plan 2016-2036. The following are the interim overarching strategic objectives for the delivery of green infrastructure in North Norfolk.

- Green Infrastructure in North Norfolk will be a network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.
- The Green Infrastructure network will be protected and enhanced taking into account the unique characteristics of North Norfolk.
- Habitats will be created, connected and enhanced with particular focus on the sensitive and protected habitats.

- Green Infrastructure provision will take into account visitor pressures and the recreational impact of visitors on sensitive sites.
- Development Proposals will deliver benefits to the Green Infrastructure network including the provision of new green infrastructure.
- New green spaces and open spaces will be created as part of the network of green infrastructure taking into account the principles of the Open Space Study.
- The Trail network, public rights of way and access routes will be protected and enhanced including the provision of new routes and links, particularly in the west of the district, which is poorly served by access routes.
- Rights of way and access routes will be provided through attractive green corridors. Access routes will be available for walkers and cyclists and those with mobility challenges.

This Background Paper provides a high level outline of green infrastructure and environmental considerations in North Norfolk. The final published Green Infrastructure Strategy will provide the detail on the district wide approach – highlighting the district wide corridors and how green infrastructure in the district can be enhanced and where new green infrastructure should be provided.

A key part of the Background Paper is the initial focused work that has sought to identify green infrastructure opportunities in the 3 Major Growth Towns of Cromer, Fakenham and North Walsham, given the proposed growth in these locations.

Potential Project List

Cromer:

- Coastal Path Access
- Overstrand Cliffs SAC & SSSI
- Happy Valley Area
- Weavers Way Corridor
- Improve connection to the coast path
- Enhance east west access connections
- Town wide biodiversity improvements
- Green space enhancements

Fakenham:

- River Wensum Ecological Corridor
- Great Eastern Corridor
- Town wide green infrastructure improvements

North Walsham

- Weavers Way Corridor
- Paston Way Corridor
- Witton Heath and Bacton Corridor
- Canal Corridor
- Habitats (town wide)
- Access and green spaces (town wide)

Although these projects are potential, it is clear that further detailed assessment will be carried out to produce an Action Plan and associated funding and implementation plan to enhance the GI network and establish additional GI corridors within the North Norfolk area.

Open Space Standards

Public Park Provision

Overall there is adequate public park provision within the District, with an average of 19.7ha per 1,000 population. This does not include the large areas of the District with public access, such as National Trust properties or National Nature Reserves, which could easily add 5,000ha to the amount of accessible open space. This provision is not evenly distributed, however, and there are many areas that are deficient in public park provision, especially access to small local parks.

If a proposed development is located in an area deficient in public park provision (in terms of quantity, quality, or accessibility) it will be necessary for either additional land to be brought into public park use or for contributions towards the enhancement of existing public park provision, such as the range of facilities and their condition.

The following park requirements were identified:

Settlement	Park requirement (number)	Park requirement (ha)
Cromer	1	3
Fakenham	2	6
Holt	1	3
North Walsham	2	6
Sheringham	2	6
Stalham	1	3
Wells next the Sea	0	0

Core Strategy Policies

CT2 Developer Contributions

“On schemes of 10 or more dwellings and substantial commercial development where there is not sufficient capacity in infrastructure, services, community facilities or open space improvements which are necessary to make that development acceptable will be secured by planning conditions or obligations, and these must be phased so as to be in place in accordance with an agreed timeframe or prior to the occupation of an agreed number of units.

Planning obligations may also be required for maintenance payments, to meet the initial running costs of services and facilities and to compensate for loss or damage caused by development. The Council will work with developers to secure the necessary improvements and determine the appropriate range and level of provision / contributions. A Supplementary Planning Document (SPD) will provide further guidance on the detailed nature of any financial or other contributions.”

SS4 Environment

All development proposals will contribute to the delivery of sustainable development, ensure protection and enhancement of natural and built environmental assets and geodiversity and be located and designed so as to reduce carbon emissions and mitigate and adapt to future climate change.

Renewable energy proposals will be supported where impacts on amenity, wildlife and landscape are acceptable.

Opportunities to improve river water quality and minimise air, land and water pollution will be taken where possible.

Open spaces and areas of biodiversity interest will be protected from harm, and the restoration, enhancement, expansion and linking of these areas to create green networks will be encouraged through a variety of measures such as:

- maximising opportunities for creation of new green infrastructure and networks in sites allocated for development;
- creating green networks to link urban areas to the countryside;
- the designation of Local Nature Reserves and County Wildlife Sites;
- appropriate management of valuable areas, such as County Wildlife Sites;
- minimising the fragmentation of habitats, creation of new habitats and connection of existing areas to create an ecological network as identified in the North Norfolk ecological network report;
- progress towards Biodiversity Action Plan targets; and
- conservation and enhancement of Sites of Special Scientific Interest (SSSI) in accordance with the Wildlife and Countryside Act 18

New development will incorporate open space and high-quality landscaping to provide attractive, beneficial environments for occupants and wildlife and contribute to a network of green spaces. Where there is no conflict with biodiversity interests, the quiet enjoyment and use of the natural environment will be encouraged and all proposals should seek to increase public access to the countryside.

The Built Environment and designated Public Realm areas will be conserved and enhanced through the protection of buildings and structures which contribute to their surroundings, the encouragement of high-quality maintenance and repair and enhancement of public spaces. Innovative and locally distinctive design will be encouraged in all new development.

The Council will minimise exposure of people and property to the risks of coastal erosion and flooding and will plan for a sustainable shoreline in the long-term that balances the natural coastal processes with the environmental, social and economic needs of the area. Sustainable Drainage Systems will be encouraged, to reduce flood risk, promote groundwater recharge and improve water quality, enhance biodiversity and provide amenity benefit.

Open Space Review

The Council is currently undertaking an open space review and has commissioned a new Open Space Study to be produced. This study is still in early draft form and the findings of the study will update the policies in regard to Public Park Provision and policies regarding the provision of new open space. The draft findings of the emerging open space study are broadly consistent with the current open space standards section in terms of Public Park provision and overarching policy aspirations

First Draft Local Plan (Part 1)

The Draft Local Plan provides the overarching strategic approach to development and how it should be delivered (through suitable development policies). The Plan ensures that good quality, sustainable development takes place in suitable locations which respects the landscape, environment and heritage of North Norfolk. The Local Plan sets out policies to conserve and enhance the natural and historic environment, promote healthy communities and meet the challenges of climate change, flooding and coastal change. As part of the comprehensive suite of environmental policies, the First Draft Local Plan also contains a specific proposed policy on Green Infrastructure in order to safeguard, retain and enhance the network of green infrastructure. The proposed policy is as follows:

Policy ENV 5 Green Infrastructure

All development will fully incorporate green infrastructure principles into proposals, including the enhancements and opportunities identified in the Green Infrastructure Background Paper, and will provide a detailed scheme for:

1. the provision and delivery of new green infrastructure, and;
2. the mitigation and enhancement of existing green infrastructure, and;
3. improving green infrastructure connectivity.

Where it can be clearly demonstrated that green infrastructure cannot be delivered on site then contributions will be required to deliver enhancements and mitigation to existing green infrastructure close to the site.

This policy ensures that all new development incorporates GI into its layout and design. This will help mitigate recreational pressures on Habitats Sites and improve the wider GI network.

Other relevant policies include:

- **Policy ENV 1:** Norfolk Coast Area of Outstanding Natural Beauty & The Broads Authority: The purpose of this policy is to ensure appropriate protection is given to the conservation and enhancement of the special qualities of the Norfolk Coast Area of Outstanding Natural Beauty and the Broads Authority.
- **Policy ENV 2:** Protection and Enhancement of Landscape & Settlement Character: The purpose of this policy is to protect the distinctive landscape character, qualities and sensitivities of the area. It applies to all landscapes, not just those which are subject to specific designations.
- **Policy ENV 3:** Heritage and Undeveloped Coast: The purpose of this policy is to protect the appearance and character of the coast.
- **Policy ENV 4:** Biodiversity & Geology: The purpose of this policy is to protect and enhance biodiversity and geodiversity.
- **Policy ENV 6:** Trees & Hedgerows: The purpose of this policy is to protect trees, hedgerows and other natural features from harm, including loss and deterioration and to provide compensatory replacement provision where necessary
- **Policy ENV 7:** Open Space & Local Green Spaces: The purpose of this policy is to protect, enhance and provide open spaces of various types
- **Policy ENV 8:** Public Rights of Way & Access: The purpose of this policy is to protect, enhance and promote Public Rights of Way and access and to ensure that the creation and maintenance of a continuous signed and managed route around the English coast is not hindered

Great Yarmouth

Great Yarmouth Local Plan – Core Strategy (December 2015)

The overall vision for Great Yarmouth is:

"be a more attractive and aspirational place to live, work and play, with strong links to Lowestoft, the Broads, Norwich, rural Norfolk and the wider New Anglia (Norfolk and Suffolk) Local Enterprise Partnership area.
The borough's important natural and historic areas and buildings that help to create the distinctive identity of the Borough will have been protected and enhanced, with Heritage Assets at Risk brought back into a beneficial state of use (as appropriate).
New Green Infrastructure will have enhanced the open space provision and network of green corridors linking settlements to the Broads and the open countryside providing greater opportunities for healthy lifestyles."

From this, it is clear that Green Infrastructure plays an important role in the strategy for the district. In terms of implementation, the District has identified that the environment will be protected and enhanced by:

- Enhancing the quality of the borough's built environment through by improving the character of its townscapes and promoting local distinctiveness
- Protecting and enhancing the Broads, the Norfolk Coast Area of Outstanding Natural Beauty and other sites of national and international importance and where appropriate, improving or managing access to these
- Positively managing the borough's biodiversity and geodiversity resources, protecting existing resources of high biodiversity and/or geodiversity value, strengthening green infrastructure and promoting Core Strategy – Publication (Regulation 19)
- Manage the borough's developed and undeveloped coastline in a sustainable way, taking into consideration the impact on the natural environment and the need to reduce flood and erosion risks
- Conserving and enhancing heritage assets, promoting heritage led regeneration and where viable bringing heritage assets at risk back into use

Policy CS15 of the Local Plan relates to providing and protecting community assets and green infrastructure. It reads as follows:

"Everyone should have access to services and opportunities that allow them to fulfil their potential and enjoy healthier, happier lives. The effective planning and delivery of community and green infrastructure is central to achieving this aim; as such the Council will:

a) Resist the loss of important community facilities and/or green assets unless appropriate alternative provision is made of equivalent or better quality in a location accessible to current and potential users or a detailed assessment clearly demonstrates there is no longer a need for the provision of the facility in the area

b) Ensure that all new development is supported by and has good access to a range of community facilities. In some circumstances developers will be required to provide and/or make a contribution towards the provision of community facilities. The process for securing planning obligations is set out in Policy CS14

c) Take a positive approach to the development of new and enhanced community facilities including the promotion of mixed community uses in the same building, especially where this improves choice and reduces the need to travel

d) Work with our partners to deliver essential strategic community facilities; this include supporting projects such as the continuing development of the James Paget University Hospital to meet current and future needs

e) Promote healthy lifestyles by addressing any existing and future deficiencies in the provision, quality and access to sports facilities, playing pitches, play spaces and open spaces throughout the borough

f) Ensure that all new developments contribute to the provision of recreational green space and to incorporate improvements to the quality of, and access to, existing green infrastructure in accordance with local circumstances

Safeguard the natural beauty, openness and recreational value of the borough's beaches and coastal hinterland"

Great Yarmouth Borough Council Infrastructure Plan (IP) (2014)

The IP identifies the green infrastructure needed to support the borough's growth ambitions set out in the emerging Local Plan over the plan period (2014 - 2029). It includes details of enhancements to existing GI provision, along with there long-term management. Estimated costs, funding sources and delivery leads have been set out within the document with the aim to progress the projects within the Local Plan period. For example, it states that "Beacon Park Extension Key Site will provide an appropriate amount and mix of open space on site. Given its close proximity to key public parks such as the award winning St Georges Park (Green Flag Status) the Great Yarmouth Waterfront Key Site is anticipated to focus more on providing small amenity spaces on site, with contributions sought towards the enhancement of existing public parks where appropriate".

The Broads

Local Plan for The Broads (Adopted 2019)

Vision

The natural environment and the beneficial goods, services and cultural values it provides, from food and energy to landscape character and recreation, are in good condition, are used fairly and sustainably, and are valued by society. In particular, the precious nature of clean, fresh water as a fundamental resource is understood and respected by all.

The past and present importance of the waterways for navigation, biodiversity and recreation is recognised and cherished, and the asset is protected, maintained and enhanced. Wildlife flourishes and habitats are maintained, restored, expanded and linked effectively to other ecological networks. Land and water are managed in an integrated way, with local and landscape scale management creating resilience and enabling flexible approaches to meet changing environmental, economic and social needs.

This living, working, 'big skies' landscape is notable for its natural beauty, distinctive local character and historic significance. People of all ages, abilities and circumstances experience and enjoy it as a place of escape, adventure, enjoyment, work, learning and tranquillity, and as a source of national pride and identity".

Policy DM8: Green infrastructure

There is an expectation that new development proposals will enhance, and integrate with, the local green infrastructure network. Development shall contribute to the delivery and management of green infrastructure that meets the needs of communities and biodiversity, both within and beyond the proposal's boundaries, including establishment of new and enhancement of existing green infrastructure.

Through its layout and design, new development shall respond to the existing local green infrastructure network and help connect areas of green infrastructure. Where it is considered that the development will have a detrimental effect on the quantity, quality or function of existing green infrastructure, then the development will not be permitted unless it can be demonstrated that an assessment has been made and suitable mitigation measures proposed. Any mitigation measures should be of equal or greater value than that which is to be compromised or lost through development.

Development that compromises the integrity of green infrastructure assets or the delivery of green infrastructure strategies, and/or that conflicts with the findings of relevant studies of the Authority or its constituent districts and county councils without suitable justification and mitigation, will not be permitted.

Green infrastructure proposals shall:

a) Protect and enhance existing natural and historic environments;

b) Strengthen connectivity and resilience of ecological networks;

c) Be locally distinctive through reflecting and enhancing landscape character;

d) Maximise opportunities to mitigate and adapt to climate change;

e) Improve quality of life through provision of benefits for health and wellbeing, including opportunities to access open space and enjoyment of the Broads and its special qualities; and

f) Ensure long-term beneficial maintenance and management of green infrastructure.

Other relevant policies include:

Policy DM7: Open space on land, play space, sports fields and allotments

Existing Provision (See open space map bundle and various Inset Maps)

Development that would result in the loss of existing sport, recreational, allotment or amenity open space as identified on the policies maps and identified by the Authority's constituent district councils in their evidence base will only be permitted if it can be demonstrated (through a local assessment) that:

i. There is an excess of recreational or amenity open space in the catchment area (in and out of the Broads) and the proposed loss will not result in a current or likely shortfall during the plan period; or

ii. The proposal is for ancillary development on an appropriate portion of the open space which enhances the recreational facilities and their setting; or

iii. The open space which would be lost as a result of the proposed development would be replaced prior to the commencement of the development by an open space of equivalent or better quality and equivalent or greater quantity, in an equally accessible and convenient location subject to equivalent or better management arrangements which continue to meet the needs of the existing community; and

iv. The proposal would not cause significant harm to the amenity or biodiversity value of the open space

New Provision

The Broads Authority will have regard to the approach and/or standards set by the relevant constituent district council. Any contribution will need to be towards a specific deliverable scheme, in consultation with the relevant parish or district council and having regard to the developer contributions policy in this document. The contribution will be required to name a specific scheme (site and type of provision). Open space provision may also be required to reduce recreation pressure on sensitive designated wildlife sites.

South Norfolk (Greater Norwich)

South Norfolk Local Plan Development Management Policies Document (LPDMPD) (2015)

As well as the Policies, Projects and Strategies promoted through the Greater Norwich Joint Core Strategy. South Norfolk also currently has an adopted LPDMPD. Within this document, those policies that refer to GI include Policy DM 1.4 and Policy DM 4.4. These policies are as follows:

Policy DM 1.4 Environmental quality and local distinctiveness

a) The Council will work with developers to promote and achieve high quality and positive environmental improvement from all development. All development proposals must demonstrate an understanding and evaluation of the important environmental assets including locally distinctive characteristics, and justify the design approach.

b) Designated assets will be protected in accordance with their natural and historic significance, as detailed in the Development Management Policies.

c) A net environmental improvement will always be sought and all proposals should avoid environmental harm or where this is not possible, adequately mitigate and compensate for the adverse environmental effects of development.

d) All development should take all reasonable opportunities to:

i. Make a positive contribution to local character and distinctiveness;

ii. Enhance biodiversity to achieve a net gain for nature;

iii. To improve the resilience of ecosystems to environmental change including through the provision of improvements to enhance identified environmental sites; stepping stones and corridors;

iv. Protect environmental and water resources and enhance their efficient use;

v. Deliver the provision of essential infrastructure including water and wastewater network upgrades, waste facilities', flood defences and green infrastructure;

vi. Enhance, re-use and better reveal the significance of heritage assets;

vii. Re-use buildings rather than demolish, recycle building materials and select materials to maximise environmental sustainability and minimise impact on scarce resources and environment;

viii. Generate and utilise renewable energy in appropriate ways; and

ix. Work with the characteristics of the location to ensure that the necessary mitigation measures are not disproportionate to the benefits of the scale of development proposed.

Policy DM 4.4 Natural environmental assets - designated and locally important open space

a) The highest status natural environmental assets are identified on the Policies Map and in supporting evidence, and will be protected from any significant harmful impact arising from new development. New development impacting on these designated sites will be required to contribute positive improvement of these natural environmental assets where opportunities arise. International, National and County-wide level sites will be accorded the highest levels of priority.

b) At the Important Local Open Spaces identified in paragraphs 4.32 – 4.44 and on Maps 4.4 (1) – (6) and on the Proposal Map, development will only be permitted where it retains the open character and appearance of the site, where it respects the contribution which the identified open site or open frontage makes to the form and character of the Settlement and where there is no significant adverse impact on the setting of any existing building. New development impacting on these designated sites will be required to contribute positive improvement of these natural environmental assets where opportunities arise.

c) Developers will need to work with partners to evolve strategies to enable individual new development sites to contribute most effectively to the opportunities for the establishment and positive improvement of coherent ecological networks, Biodiversity Enhancement Areas and multi-functional Green Infrastructure Networks.

Long Stratton Area Action Plan (AAP) (2016)

On a local level, implementation of the policies stated above will be supported by consideration of more detailed local green infrastructure strategies such as those created for Long Stratton and Wymondham within their AAP's. Both these towns sit along a County-wide Strategic Green Infrastructure corridor, therefore the provision of high quality GI within future development is important.

The Long Stratton AAP provides an Indicative Green Infrastructure Plan that identifies the green infrastructure necessary to deliver the requirements of the AAP. The area includes a network of public access routes and existing common land, linking across to the long distance Norfolk Trails. The document states that "Development will be instrumental in integrating locally characteristic greens, hedgerows, woodlands and ponds in to development east and west of Long Stratton." In turn, the AAP also incorporates GI within its local policies. Such as:

Policy LNGS1 Land East, South-East And North-West Of Long Stratton

Open Space and Green Infrastructure

- Provision of open space, including children's playspace and older children/adult open sufficient to meet the needs of residents of the development;
- Links between the village and the countryside to the east of the bypass corridor will be enhanced for the benefit of public access and to contribute to green infrastructure;
- Provision of a significant buffer to the Long Stratton Waste Water Recycling Centre to be utilised for green infrastructure.

Policy LNGS5 General Green Infrastructure Requirements For New Developments Within Long Stratton AAP Area

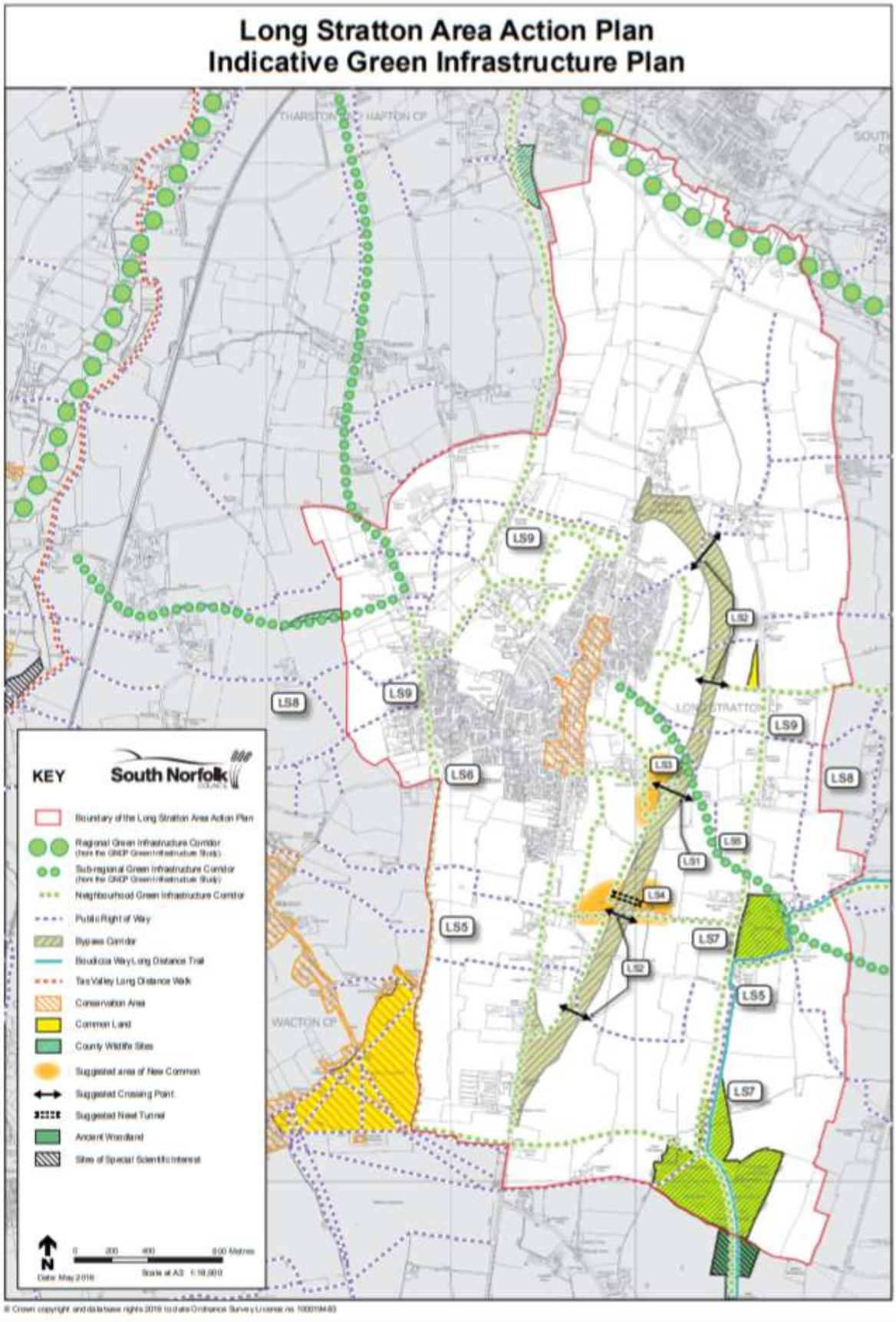
New development in Long Stratton will be required to maintain, protect and enhance green infrastructure, and developers will be expected to contribute towards green infrastructure requirements. New developments will be required to enable and where appropriate provide:

- safe public access to the countryside and between Long Stratton and surrounding villages; • retention of habitat features and creation of new habitats;
- functional ecological connections between Priority (Section 41) species and habitats8 and designated sites in the vicinity of Long Stratton;
- an enhanced landscape setting for Long Stratton which reflects distinctive local landscape character, including in particular the landscape character and qualities of the existing historic commons;
- improved recreational provision to alleviate visitor pressure on sensitive areas.
- sensitively designed mitigation of any barriers to this green infrastructure provision; and
- protection of the best and most versatile agricultural land (Grades 1, 2 and 3a) All new developments should deliver a net biodiversity gain and any planning proposals should be accompanied by detailed ecological assessment, where appropriate. The cumulative impact of developments on biodiversity assets should be taken into account as part of the planning application process.

Local Policies such as these are integral to development management and ensuring we provide high quality green infrastructure for new communities, as well as enhance the wider network.

Indicative GI Plan

(overleaf)



Source: Long Stratton Area Action Plan (2016)

Wymondham AAP (2016)

Similarly to Long Stratton, the Wymondham AAP provides an Indicative Green Infrastructure Plan that identifies the green infrastructure necessary to deliver the requirements of the AAP. Elsewhere in the AAP document, some allocations for development have specific policies which will address green infrastructure issues particular to those sites. The policies are aspirational in nature and the ability and necessity to deliver the projects listed will depend on the particular location and nature of the development, although the Council will seek new or enhanced green infrastructure through new development where appropriate (e.g. through on-site works secured through S106 agreements).

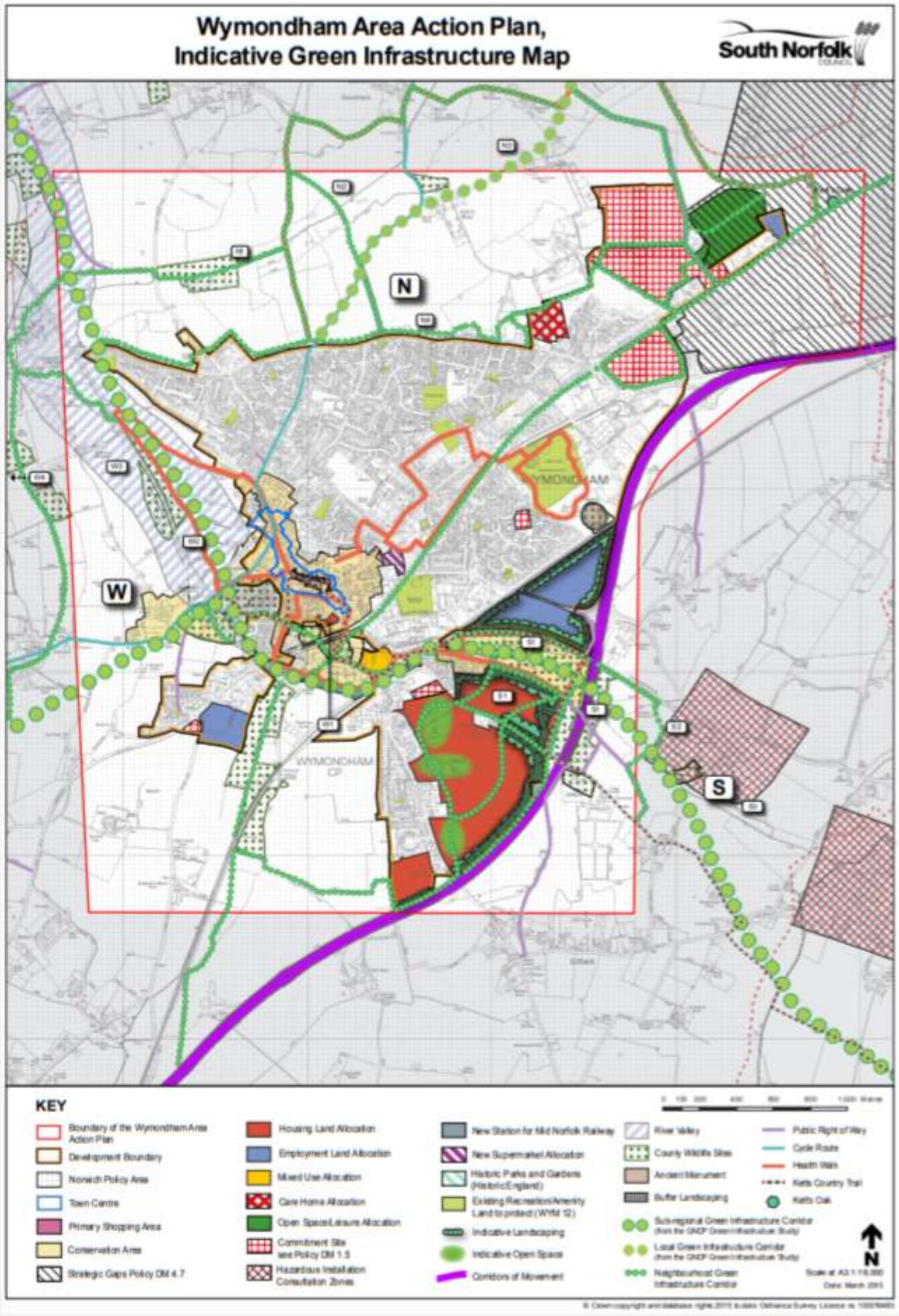
Policy WYM 8 General Green Infrastructure Requirements For New Developments Within Wymondham AAP Area

New development in Wymondham will be required to maintain, protect and enhance green infrastructure, and developers will be expected to contribute towards green infrastructure requirements through s106 contributions and/or CIL as appropriate. Where appropriate new developments will be required to provide ecological links to the nearest green infrastructure and provide effective ecological buffers, the design of which to be negotiated with South Norfolk Council and other relevant bodies to ensure adequate protection of important ecological sites and maintenance of habitat connectivity.

In particular it will be important for new development to consider the following (where relevant):

1. Improved habitat connectivity
2. Improved public access to the countryside
3. Improved recreational provision to alleviate visitor pressure on sensitive areas
4. Improve the quality of local County Wildlife Sites All new developments should aspire to net biodiversity gain and planning proposals should be accompanied by detailed ecological assessment where appropriate. The cumulative impact of developments on biodiversity assets should be considered.

(map overleaf)



Source: Wymondham Area Action Plan (2016)

Norwich

Development Management Policies Local Plan (DM policies plan)

Within this document, there are policies that refer to GI, such as Policy DM6: Natural Environmental Assets. This policy is as follows:

"Development will be expected to take all reasonable opportunities to avoid harm to and protect and enhance the natural environment of Norwich and its setting, including both sites and species, taking particular account of the need to avoid harm to the adjoining Broads Authority area and other identified areas of natural environmental value immediately adjoining the City. Appropriate proposals which deliver significant benefits or enhancements to local biodiversity or geodiversity will be strongly supported and encouraged. Opportunities should be taken to incorporate and integrate biodiversity, green infrastructure and wildlife friendly features in the design of individual schemes.

Where, in exceptional circumstances, development is accepted which is likely to result in substantial and unavoidable harm to or loss of priority habitats and species populations identified through local biodiversity action plans, developers will be required to provide for the re-creation and recovery of such populations through biodiversity offsetting.

Nationally protected sites of special scientific interest (SSSI)

Development having a significant adverse impact on SSSIs not subject to an international designation will only be permitted in exceptional circumstances where the benefits of the development clearly and substantially outweigh the impacts that it is likely to have. Such proposals must be accompanied by an environmental statement, showing clearly how the development would mitigate any effects on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs.

Regional and local sites

Development affecting sites of regional and local importance for nature conservation, biodiversity, geodiversity or geological interest will only be permitted where it would not result in significant and demonstrable harm to the particular interest and value of the site, taking account of:

The effectiveness of any proposals to mitigate the environmental impact of the development, any overriding benefits arising from that development in achieving the wider objectives of the JCS and any opportunities for local enhancements to biodiversity, geodiversity or green infrastructure associated with the proposal.

The sites to which this part of the policy applies include local nature reserves, County Wildlife Sites, County Geodiversity Sites, Roadside Nature Reserves (RNRs), and significant areas of woodland identified on the Policies map which are not covered by the above designations. Where development results in some impact the proposal must be accompanied an assessment of that impact and specify the appropriate mitigating measures that will be undertaken.

Yare Valley character area

Within the Yare Valley character area, as defined on the Policies map, development will only be permitted where it would not damage the environmental quality, biodiversity or character of the area and where it is for:

a) agriculture or forestry purposes; or

b) facilities ancillary to outdoor sport and recreation or other uses appropriate to the purpose of this policy; or

c) the limited extension of or alteration to existing buildings."

The Yare Valley provides a green corridor to the south of Norwich, separating the city from suburbs and employment areas in South Norfolk and providing a green urban edge. However, there are parts of the Yare Valley which are not covered by any national or local landscape designation and some areas which are partially developed. The Yare Valley character area has

therefore been defined in recognition of the vulnerability of certain parts of the valley to potentially unsympathetic development which could otherwise compromise the character of this important natural environmental resource.

The Greater Norwich Green infrastructure delivery plan (GIDP) identifies five green infrastructure priority areas, two of which extend into Norwich. These are 'Norwich to the Broads' and 'Water City' (the rivers Yare and Wensum). Green Infrastructure refers to networks of protected sites, nature reserves, green spaces, waterways and green linkages. The approach to green infrastructure is set out within three policies within this plan. Policy DM3 addresses the issue of the safeguarding and enhancement of green infrastructure within development proposals, DM6 considers those elements of the green infrastructure priority network which are also natural environmental assets and DM8 deals with the recreational and amenity considerations for open space, including allotments.

The green infrastructure priority areas are safeguarded for the most part either through national protection (Sites of Special Scientific Interest), through regional and local landscape designations of various types and through established policy protection of other areas of community open space which have recreational or amenity value. These green areas are indicated collectively on the Policies map and may overlap.

The River Wensum Strategy (2018)

The River Wensum Strategy is a long-term strategy aimed at enabling change and regeneration in the river corridor by improving public access, providing high quality public realm and, enhancing the city's environmental, cultural and historic offer in a manner that contributes to Norwich's regeneration. The strategy covers the river corridor from the city council boundary at Hellesdon to the west, through to Whitlingham Country Park in the east. It was established by the River Wensum Strategy Partnership (RWSP), which is led by Norwich City Council, alongside the Broads Authority, Norfolk County Council, the Environmental Agency and the Wensum River Parkway Partnership.

The vision is to: *'Breathe new life into the river by enhancing it for the benefit of all and increasing access to, and greater use of, this important asset. An enhanced river corridor, with its unique natural and historic environment, will once again play an important part in the growth and vitality of the city, strengthening the visitor economy and helping to give the city a competitive advantage in attracting inward investment'.*

The objectives are for delivering the vision are:

- improving the management of the river corridor and its surroundings for the benefit of the city, residents of the wider Norwich area, and visitors;
- increasing access to, and use of, the area by all, including enhanced connectivity with the Norfolk Trails network;
- enhancing the natural environment, including water quality, biodiversity and green infrastructure;
- enhancing the city's environmental, cultural and historic offer in a manner which maximises the attractiveness of the area as a location to do business;
- enhancing the historic environment, ensuring its long-term conservation where practicable, and making the most of the unique and significant heritage assets within the river corridor;
- addressing social deprivation and inequalities;
- maximising the efficiency of public expenditure in the river corridor, where possible reducing the pressure on stretched public sector budgets; and
- identifying and exploiting external funding opportunities including private sector investment.

APPENDIX 3

A3(1) Deficiencies/gaps in GI provision & enhancement opportunities identified at Workshops

Org.	Key Principles and *Themes*	*Deficiencies /gaps* in Green Infrastructure provision and areas in need of enhancement	Potential *constraints* to protection /enhancement of the resource	Strategic *opportunities* to create new GI provision based on predicted housing growth	Other comments
Norwich City Council (NCC)	▪ Relationship to biodiversity net gain ▪ SANGs localised strategically to serve housing growth ▪ Connectivity ▪ Accessibility - Public Transport, sustainable travel, close to home ▪ Long-term management in place - well-designed	N/A	Long term management User expectations - facilitates types of users e.g. Dogs vs children	Bawburgh Pits on the boundary of the city within the Yare Valley.	N/A
Forestry England	▪ Attractive environments - subjective nature - AONB? Personal opinion? ▪ Education and understanding of what we already have and how to sustain it - financially and environmentally ▪ Health and wellbeing (mental and physical) ▪ Linked to enabling access, fitness and contact with nature Long term	▪ Identifying the hot spot locations of populations and potential growth rather than corridors? Finer detail mapping has incorporated elements of this.	▪ Saturation levels in terms of users demands on Green Space. ▪ Lack of provision of planning for increased use and the implications on land management and sustainability. ▪ Financing for enhancement /development	▪ Provision of accessibility in/around hot spots of housing to countryside. ▪ The proximal argument to green space. ▪ There also needs to be a commercial viewpoint on the creation of GI spaces - sustainability education Investment opportunities in existing sites	

Org.	Key Principles and *Themes*	*Deficiencies /gaps* in Green Infrastructure provision and areas in need of enhancement	Potential *constraints* to protection /enhancement of the resource	Strategic *opportunities* to create new GI provision based on predicted housing growth	Other comments
	management linked to sustainability ▪ Missing adaptation versus mitigation option				
Norwich Fringe Project	▪ Biodiversity ▪ Community involvement - friend groups and their role ▪ Connections places - wild life corridors ▪ Cycle and pathways ▪ Sustainability of how sites are managed ▪ The role of volunteers ▪ Revenue source - charging for car parks ▪ Business plan or model - need to bring in an income for the site/GI	▪ Cycle and paths linking villages, towns and cities together ▪ Country parks in key locations ▪ Smaller green spaces/natural areas on the door step of where people live/ developments are ▪ Protection habitats, creating and developing new habitats ▪ Biodiversity ▪ New woodlands, wild flower meadows ▪ Wet woodlands, heathland sites	▪ Funding - resources not there to manage existing GI, natural areas, countryside sites ▪ How is the new GI funded, managed and maintained (maintenance costs)? ▪ Damaging existing biodiversity ▪ Educating people using the GI, issues around anti-social behaviour, rubbish, dogs damaging river banks and wildlife. ▪ Conflict between user groups - how sites are managed, using grazing stock manage sites	Cingleford area - Lots of housing in this are	One of the big issues is that the Greater Norwich Local Authorities are all applying for the same CIL funding. One organisation set up to manage all the GI, for example Milton Keynes, Peterborough and Northampton pocket parks and Parks Trust. Look at these types of models for managing all the sites. Need to be realistic about how projects are funded and where the revenue comes from to continue to manage and maintain the GI/natural areas

Org.	Key Principles and *Themes*	*Deficiencies /gaps* in Green Infrastructure provision and areas in need of enhancement	Potential *constraints* to protection /enhancement of the resource	Strategic *opportunities* to create new GI provision based on predicted housing growth	Other comments
Great Yarmouth Borough Council	N/A	N/A	▪ Winterton - Horsey Dunes SAC - Significant existing recreational pressure	N/A	N/A
Norfolk County Council	N/A	▪ In Norwich (see River W--- strategy for more details on CC website) ▪ Key missing link in Riverside Walk between Duke Street and St Georges Street bridges (City Centre) ▪ Need for new bridge pedestrian cycle link to connect city centre to Whithingham country park ▪ Improved connectivity needed upstream of new Mills including completion of same missing links of Riverside walk and the better links to Marriots Way	▪ Lack of feasibility funding to properly develop projects Lack of funding for ongoing maintenance. ▪ This means that many strategically important projects don't get off the ground and may affect delivery of the future GI strategy	Burlingham GI corridors west of Norwich	N/A

Org.	Key Principles and *Themes*	*Deficiencies /gaps* in Green Infrastructure provision and areas in need of enhancement	Potential *constraints* to protection /enhancement of the resource	Strategic *opportunities* to create new GI provision based on predicted housing growth	Other comments
South Norfolk	N/A	N/A	N/A	N/A	A lot of thought needs to be given to the future funding of this GI. Revenue funding is always an issue. District councils are increasingly not taking on assets – responsibility Is it worth considering a trust where all money is placed, and an investment portfolio is created to generate income going forward? Worth looking at how Milton Keynes manages its open spaces.
NFU	▪ Vision: bring out understanding/learning - what is an attractive environment? ▪ Principles/themes - Link between food production and biodiversity/landscape ▪ Climate change - adaption and mitigation ▪ Long term management link to sustainability	N/A	N/A	Link into opportunities within the new ELMS (Environmental Land Management Scheme) to consider land margin corridors and access - providing access to proximal unlimited countryside as opposed to ANGST criteria	What conceptually is a Green Corridor? Seems spatially need to think in terms of population hotspots that radiate out globally (circle) or directionally (spokes)

Org.	Key Principles and *Themes*	*Deficiencies /gaps* in Green Infrastructure provision and areas in need of enhancement	Potential *constraints* to protection /enhancement of the resource	Strategic *opportunities* to create new GI provision based on predicted housing growth	Other comments
NNDC	▪ A network of well-designed, well-maintained multi-functional green space, urban and rural, which is capable of delivering a wide-range of environmental and quality of life benefits for local communities. ▪ Provide biodiversity net gain for the wider landscape. ▪ Off-setting impacts on designated European sites ▪ Connects communities to high quality natural environment Net gain on wider landscape scale. ▪ See also vision expressed in the NNDC GI position statement. No5 on the NNDC website. ▪ Connectivity with nature, between areas and between LPAs ▪ Provision of high-quality well-maintained GI	Need new country park South West of N. Walsham to make provision for the new growth	N/A	North of Fakenham - need links across main road and/or link to east Pensthorpe	N/A

In addition to the above, the Steering Group were also informed that there could also be scope for improvements to the quality of the Country Park at the Sandringham Estate to be included within the GI network or as a strategic SANGS if required. Discussions are at an early stage and not included in this Strategy as there is no certainty that anything would be forthcoming at the time of writing.

APPENDIX 4

A4(1) Site Quality Checklist – for a suite of SANGS

This guidance is designed as an Appendix to the full guidance on Suitable Accessible Natural Greenspaces (SANGS) to be used as mitigation (or avoidance) land to reduce recreational use of the Habitats Sites.

The wording in the list below is precise and has the following meaning:

- Requirements referred to as "must" are essential in **all** SANGS
- Those requirements referred to as "should haves" should all be represented **within the suite** of SANGS, but do not all have to be represented in every site.
- All SANGS should have at least one of the "desirable" features.

Must haves

- For all sites larger than 4ha there must be adequate parking for visitors, unless the site is intended for local use, i.e. within easy walking distance (400m) of the developments linked to it. The amount of car parking space should be determined by the anticipated use of the site and reflect the visitor catchment of both the SANGS and the SPA.
- It should be possible to complete a circular walk of 2.7km around the SANGS.
- Car parks must be easily and safely accessible by car and should be clearly sign posted.
- The accessibility of the site must include access points appropriate for the particular visitor use the SANGS is intended to cater for.
- The SANGS must have a safe route of access on foot from the nearest car park and/or footpath/s
- All SANGS with car parks must have a circular walk which starts and finishes at the car park.
- SANGS must be designed so that they are perceived to be safe by users; they must not have tree and scrub cover along parts of the walking routes
- Paths must be easily used and well maintained but most should remain unsurfaced to avoid the site becoming too urban in feel.
- SANGS must be perceived as semi-natural spaces with little intrusion of artificial structures, except in the immediate vicinity of car parks. Visually-sensitive way-markers and some benches are acceptable.
- All SANGS larger than 12 ha must aim to provide a variety of habitats for users to experience.
- Access within the SANGS must be largely unrestricted with plenty of space provided where it is possible for dogs to exercise freely and safely off lead.
- SANGS must be free from unpleasant intrusions (e.g. sewage treatment works smells etc

Should haves

- SANGS should be clearly sign-posted or advertised in some way.
- SANGS should have leaflets and/or websites advertising their location to potential users. It would be desirable for leaflets to be distributed to new homes in the area and be made available at entrance points and car parks.

Desirable

- It would be desirable for an owner to be able to take dogs from the car park to the SANGS safely off the lead.
- Where possible it is desirable to choose sites with a gently undulating topography for SANGS
- It is desirable for access points to have signage outlining the layout of the SANGS and the routes available to visitors.
- It is desirable that SANGS provide a naturalistic space with areas of open (non-wooded) countryside and areas of dense and scattered trees and shrubs. The provision of open water on part, but not the majority of sites is desirable.
- Where possible it is desirable to have a focal point such as a view point, monument etc. within the SANGS.

A4(2) Site Quality Checklist – for an individual SANGS

The wording in the list below is precise and has the following meaning:

- Requirements referred to as “must” or “should haves” are essential
- The SANGS should have at least one of the “desirable” features.

Must / Should haves

- For all sites larger than 4ha there must be adequate parking for visitors, unless the site is intended for local use, i.e. within easy walking distance (400m) of the developments linked to it. The amount of car parking space should be determined by the anticipated use of the site and reflect the visitor catchment of both the SANGS and the SPA.
- It should be possible to complete a circular walk of 2.7km around the SANGS.
- Car parks must be easily and safely accessible by car and should be clearly sign posted.
- The accessibility of the site must include access points appropriate for the particular visitor use the SANGS is intended to cater for.
- The SANGS must have a safe route of access on foot from the nearest car park and/or footpath/s.
- All SANGS with car parks must have a circular walk which starts and finishes at the car park.
- SANGS must be designed so that they are perceived to be safe by users; they must not have tree and scrub covering parts of the walking routes.
- Paths must be easily used and well maintained but most should remain unsurfaced to avoid the site becoming too urban in feel.
- SANGS must be perceived as semi-natural spaces with little intrusion of artificial structures, except in the immediate vicinity of car parks. Visually-sensitive way-markers and some benches are acceptable.
- All SANGS larger than 12 ha must aim to provide a variety of habitats for users to experience.
- Access within the SANGS must be largely unrestricted with plenty of space provided where it is possible for dogs to exercise freely and safely off lead.
- SANGS must be free from unpleasant intrusions (e.g. sewage treatment works smells etc).
- SANGS should be clearly sign-posted or advertised in some way.
- SANGS should have leaflets and/or websites advertising their location to potential users. It would be desirable for leaflets to be distributed to new homes in the area and be made available at entrance points and car parks.

Desirable
▪ It would be desirable for an owner to be able to take dogs from the car park to the SANGS safely off the lead. ▪ Where possible it is desirable to choose sites with a gently undulating topography for SANGS ▪ It is desirable for access points to have signage outlining the layout of the SANGS and the routes available to visitors. ▪ It is desirable that SANGS provide a naturalistic space with areas of open (non-wooded) countryside and areas of dense and scattered trees and shrubs. The provision of open water on part, but not the majority of sites is desirable. ▪ Where possible it is desirable to have a focal point such as a view point, monument etc. within the SANGS.

A4(3) SANGS Information Form

This form is designed to help you gather information about any potential SANGS.

Natural England, Local Planning Authorities, and other organisations will then be able to consider the potential suitability of the proposed SANGS based on this initial information.

A4(3.1) Background information

Name and location of proposed SANGS	Name: Address: Grid reference: (Please attach a map of the site with the boundaries clearly marked)
Size of the proposed SANGS (hectares), excluding water features	‹INSERT›
Any current designations on land - e.g. LNR / SNCI	‹INSERT›
Current owners name and address. (If there is more than one owner then please attach a map)	‹INSERT›
Who manages the land?	‹INSERT›
Legal arrangements for the land – e.g. how long is the lease?	‹INSERT›
Is there a management plan for the site? (if so, please attach)	‹INSERT›

A4(3.2) Current visitor arrangements

Is the site currently accessible to the public?	‹INSERT›

Does the site have open access?	‹INSERT›
Has there been a visitor survey of the site? (If so, please attach)	‹INSERT›
If there has been no visitor survey, please give an indication of the current visitor levels on site	High / Medium / Low
Does the site have existing car parking?	Yes / No How many car parks? How may car parking spaces? (Please mark car parks and numbers of car parking spaces on the site map)
Are there any existing routes or paths on the site?	Yes / No (Please mark these on the map)
Are there signs to direct people to the site? (Please indicate where and what type of sign)	‹INSERT›

A4(3.3) Site quality checklist

This checklist is intended to help identify what is already present on the site and what needs to be developed for the SANGS to be suitable.

Must/should haves – these criteria are essential for all SANGS			
Criteria		**Current**	**Future**
1	Parking on all sites larger than 4ha (unless the site is intended for use within 400m only)	‹INSERT›	‹INSERT›
2	Circular walk of 2.7km	‹INSERT›	‹INSERT›
3	Car parks easily and safely accessible by car and clearly sign posted	‹INSERT›	‹INSERT›
4	Access points appropriate for particular visitor use the SANGS is intended to cater for	‹INSERT›	‹INSERT›
5	Safe access route on foot from nearest car park and/or footpath	‹INSERT›	‹INSERT›
6	Circular walk which starts and finishes at the car park	‹INSERT›	‹INSERT›
7	Perceived as safe – no tree and scrub cover along part of walking routes	‹INSERT›	‹INSERT›
8	Paths easily used and well maintained but mostly unsurfaced	‹INSERT›	‹INSERT›
9	Perceived as semi-natural with little intrusion of artificial structures	‹INSERT›	‹INSERT›

10	If larger than 12 ha, then a range of habitats should be present	‹INSERT›	‹INSERT›
11	Access unrestricted – plenty of space for dogs to exercise freely and safely off the lead	‹INSERT›	‹INSERT›
12	No unpleasant intrusions (e.g. sewage treatment smells etc.)	‹INSERT›	‹INSERT›
13	Clearly sign posted or advertised in some way	‹INSERT›	‹INSERT›
14	Leaflets or website advertising their location to potential users (distributed to homes and made available at entrance points and car parks)	‹INSERT›	‹INSERT›
Desirable features			
Criteria		**Current**	**Future**
15	Can dog owners take dogs from the car park to the SANGS safely off the lead	‹INSERT›	‹INSERT›
16	Gently undulating topography	‹INSERT›	‹INSERT›
17	Access points with signage outlining the layout of the SANGS and routes available to visitors	‹INSERT›	‹INSERT›
18	Naturalistic space with areas of open (non-wooded) countryside and areas of dense and scattered trees and shrubs. Provision of open water is desirable	‹INSERT›	‹INSERT›
19	Focal point such as a view point or monument within the SANGS	‹INSERT›	‹INSERT›

APPENDIX 5

A5(1) Workshop Attendees

A5(1.1) RAMS Workshop 1 - attendees

Name	Organisation
Ann Sommazzi, Ben Burgess	Broadland DC
Alan Gomm	Borough of Kings Lynn and West Norfolk
Natalie Beal, Adrian Clarke, Erica Murray	Broads Authority
Iain Withington	North Norfolk DC
Kerys Witton, Martha Moore	North Norfolk DC
Martin Horlock	Norwich CC
Simon Majoram	South Norfolk C
Philip Pearson	RSPB
Neal Armour-Chelu	Forestry England
Estelle Hook	Norfolk Coast AONB
Louise Oliver, Victoria Wight, Jesse Timberland, Thomas Bolderstone, John Jackson	Natural England
Sam Lew	The Wash and North Norfolk
Trevor Wiggett, Judith Davison	Norwich City Council

A5(1.2) GI Workshop 1 - attendees

Name	Organisation
Ann Sommazzi, Paul Harris, John Walchester	Broadland DC
Alan Gomm	BC of Kings Lynn and West Norfolk
Nick Fountain	Great Yarmouth BC
Natalie Beal, Adrian Clarke	Broads Authority
Iain Withington, Kerys Witton, Cathy Batchelar, Martha Moore	North Norfolk DC

Helen Sibley, Robin Taylor	South Norfolk DC
Judith Davison, Matthew Davies, Trevor Wiggett, Eleanor Larke	Norwich City Council
Martin Horlock	Norfolk CC
Philip Pearson	RSPB
Victoria Wight, John Jackson	Natural England
Rob Wise	National Farmers Union
Estelle Hook	Norfolk Coast AONB
Matthew Jeffery	Forestry England

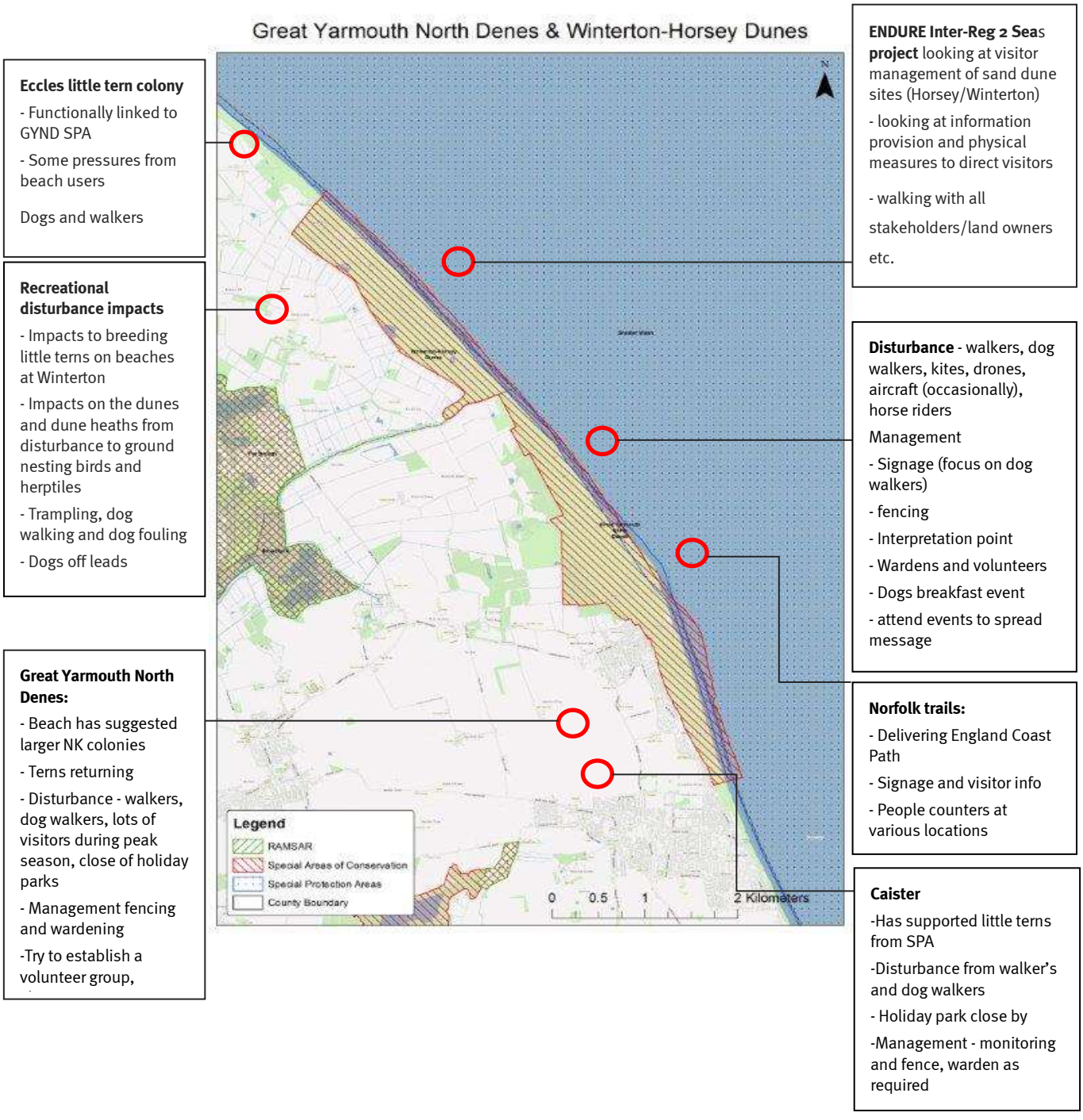
A5(1.3) GI & RAMS Workshop 2 - attendees

Name	Organisation
Alan Gomm	BC of Kings Lynn and West Norfolk
Andrew Parnell	Great Yarmouth Borough Council
Ben Burgess, Paul Harris	Broadland District Council
Cathy Batchelar, Iain Withington, Kerys Witton, Tim Mellors	North Norfolk District Council
Estelle Hook	Norfolk Coast AONB Partnership
Georgie Sutton	Marine Management
Helen Sibley	South Norfolk Council
Louise Oliver	Natural England
Martin Horlock	Norfolk County Council
Matthew Davies	Norwich Fringe Countryside Management Project
Matthew Jeffery	Forestry England
Mike Auger	Norfolk County Council
Mike Edwards	Norfolk FWAG
Mike Jones	Norfolk Wildlife Trust
Natalie Beal	Broads Authority
Philip Pearson	RSPB

Name	Organisation
Tony Howes	Broads Hire Boat Federation
Trevor Wiggett	Norwich City Council

A5(2) RAMS Workshop Annotated Maps

The following maps should be read in conjunction with the various GI Strategy documents for each LPA as these remain the primary source of detailed information on GI Projects.

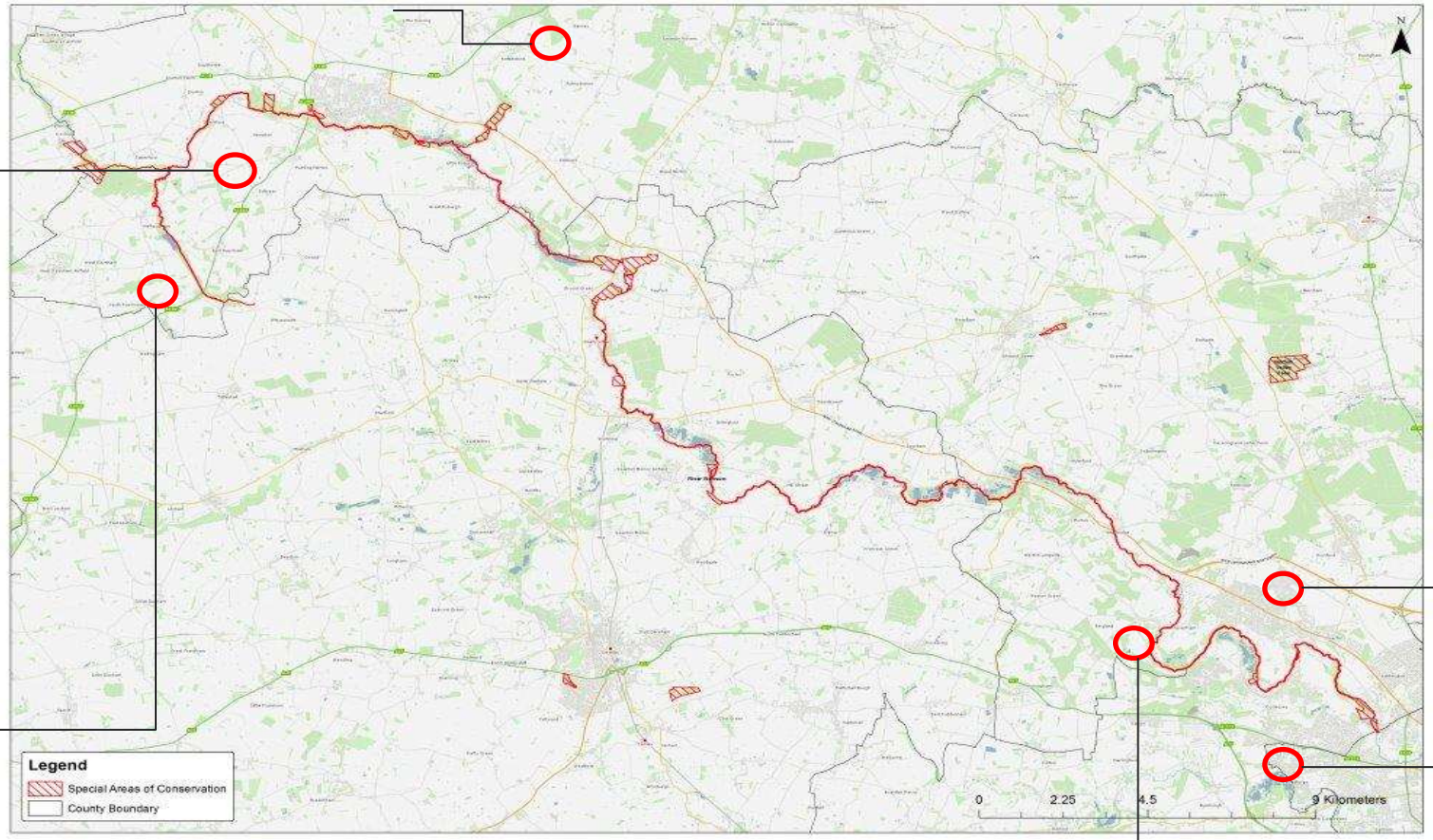


Local Plan seeking to improve access through new proposed site FIO

-Pensthorpe Park is Private (paid access)

-Little Ryburgh/Great Ryburgh undertakes a neighbourhood plan seeking to include designation of local green space and improved connectivity- walking with all stakeholders/land owners

River Wensum



-Access to River Wensum at Goggs Mill and car park near to former gas works

- Public footpath alongside river to the south of town centre continuing to former railway track/heath lane

- Some damage to river bank and work to restore footpath and bank (faggets)

- River Wensum restoration strategy - have done some work reconnecting flood plain

-Limited impacts from recreational disturbance due to a lack of public access.

-Very few PRoWs follow alongside the Wensum for any distance. Access restricted to commons.

Marriots Way - Popular walking and cycling route

Water skiing club

Ringland Hills - Popular dog walking area

Info via FC GIS

1 - Access points inc gateways

2 - Fenced Heaths (attractive to dog walkers)

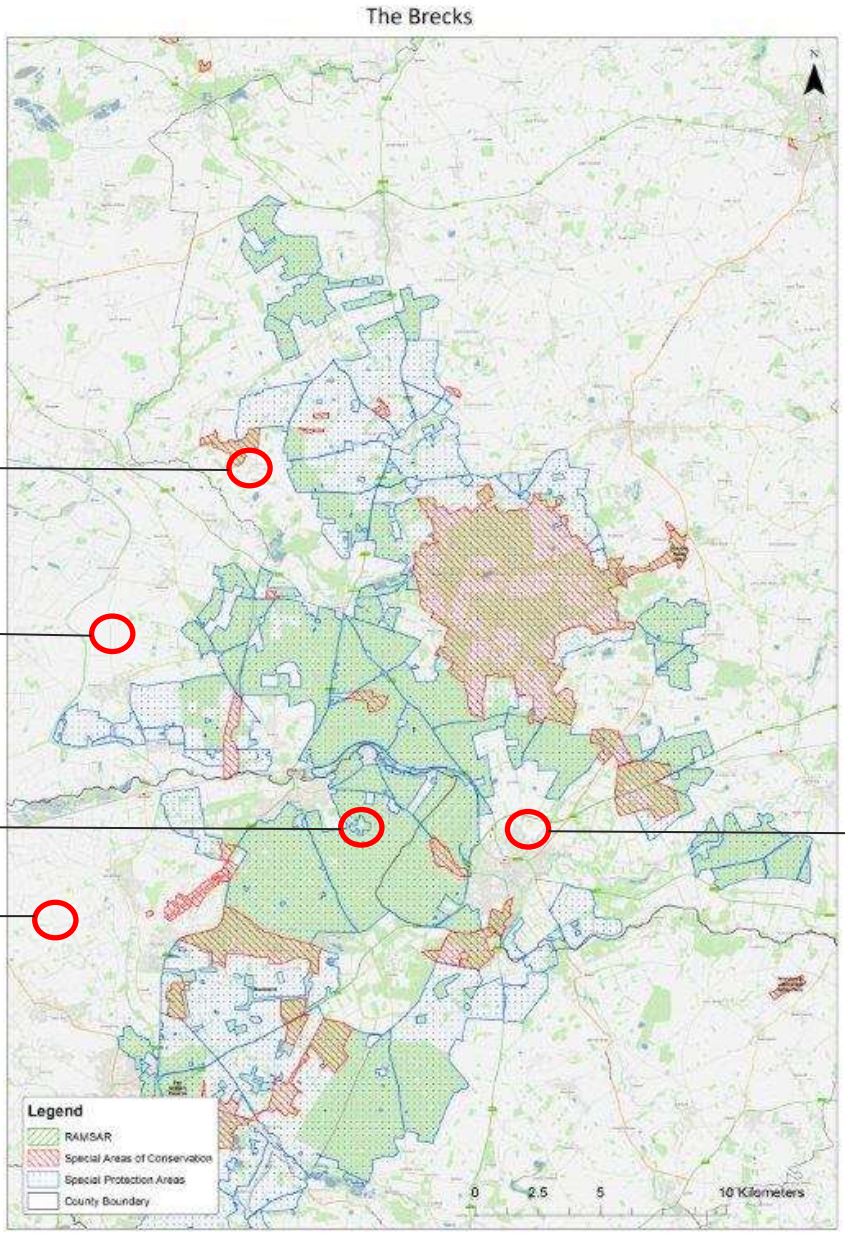
Monitoring of NL and NJ outside forest? - STANTA ESTATES - WT Health Reserves

See NA-C Briefing note

Cut off channel? Ask EA. Flood alleviation areas?

High Lodge

Open Habitats Plan



5000 dwellings – Outline Permission

Horse riding disturbance pressures on beach

Little tern site profiles have collated info on management issues, management measures and opportunities

Partnerships

Prowad - looking at regional designations for The Wash and NN Coast

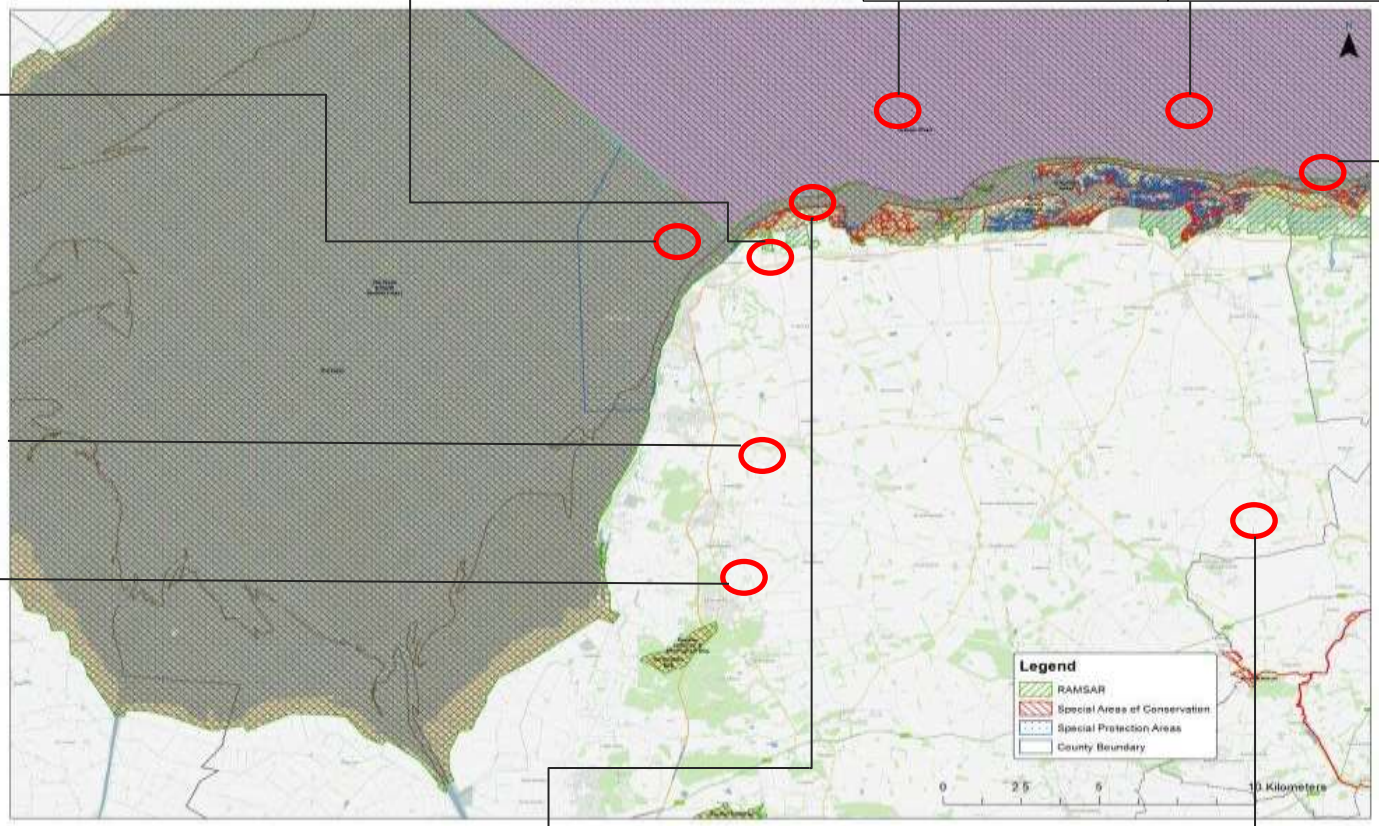
Norfolk Little Tern Group

Site Managers Group

Coast path

Norfolk trails people counter data available

The Wash and North Norfolk Coast



Holkham - Lady Annes Drive Beach

- Major visitor attraction inc. /local residents dog walking (can get season car parking pass - opportunities to influence)
- Erosion of primary salt marsh habitat for access to beach/erosion of dune habitats
- Disturbance to breeding little terns/ringed plover - existing bird exclusion areas on beach
- Partly managed by Holkham Estate (NNR) and NE (but this may change)
- New visitor centre supposed to be there to educate visitors of potential impacts

Suggestions for future management

- Joined up management on a landscape scale - group of wardens for the sites
- Joined up signage and provision to fund fencing and signage

Dersingham Bog NNR

-Open access on part of site

-Pressure from increased visitors and increasing range of recreational activities

Roydon Common and Dersingham Bog impacts

- dog walking
- dogs off lead

-jogging

-walkers

-Roosting Waters

-Holme NNR Natterjack hotspot

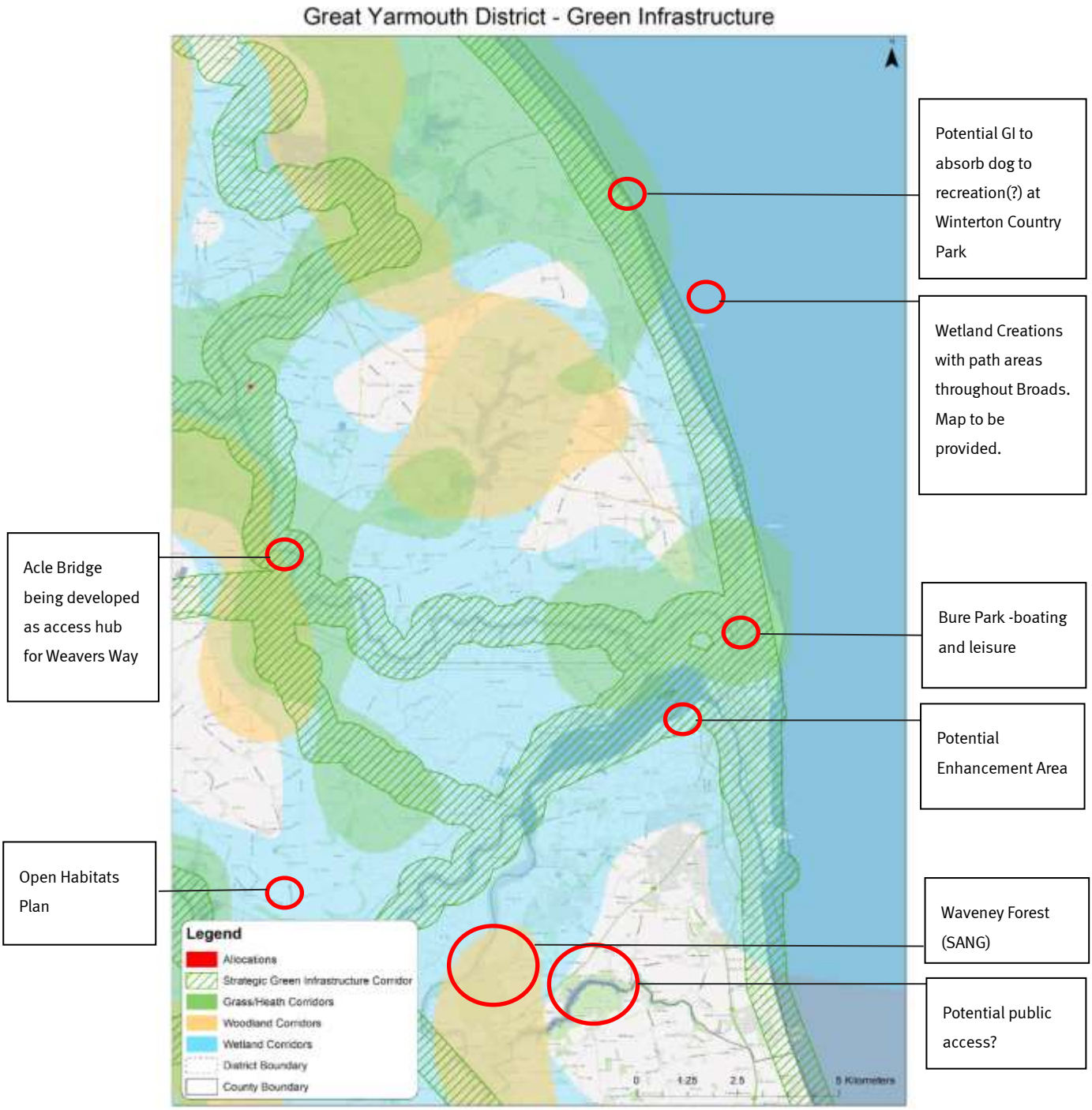
Holkham NNR - Foreshore NE

Current management

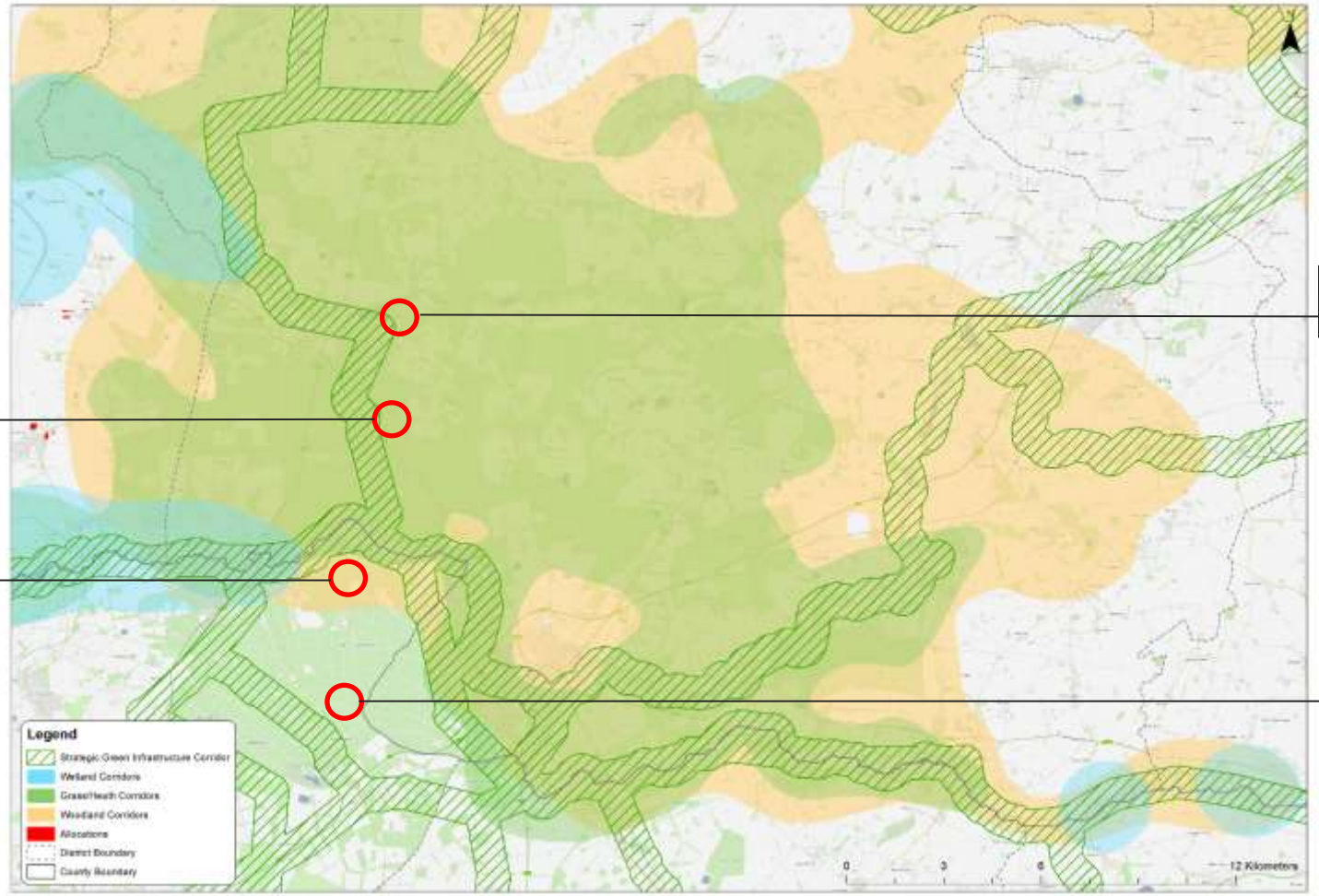
- Tern fencing and signage
- Staff cover site
- Visitor Numbers increasing - disturb breeding and terns and shorebirds

APPENDIX 6

A6(1) Green Infrastructure (GI) Workshop Annotated Maps



Breckland District – Green Infrastructure (South)*



Lyndford Arboretum

Lyndford Stag Forestry

High Lodge Forest Centre

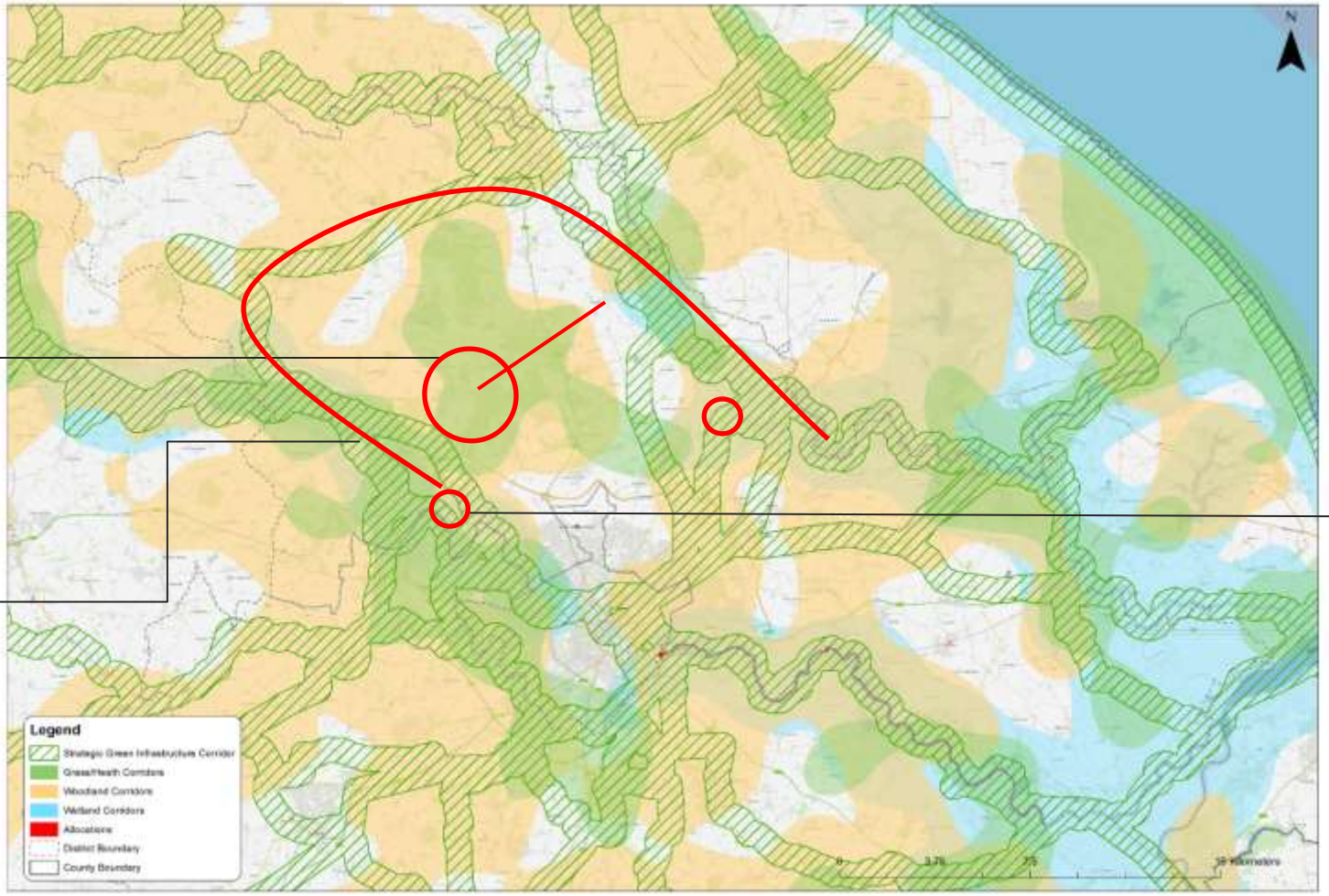
Forestry England -The Forestry Commission has andraft open Habitats Policy and Forestry England has a draft plan which forms part of its management strategy for the Forest.

New winter site in the forest?

Signage

*No comments on Breckland (North) were made at the Green Infrastructure workshop

Greater Norwich – Green Infrastructure



North West Woodlands Country Park (missing link)

BVR Green Loop

Links with Greater Norwich Green Infrastructure Plan

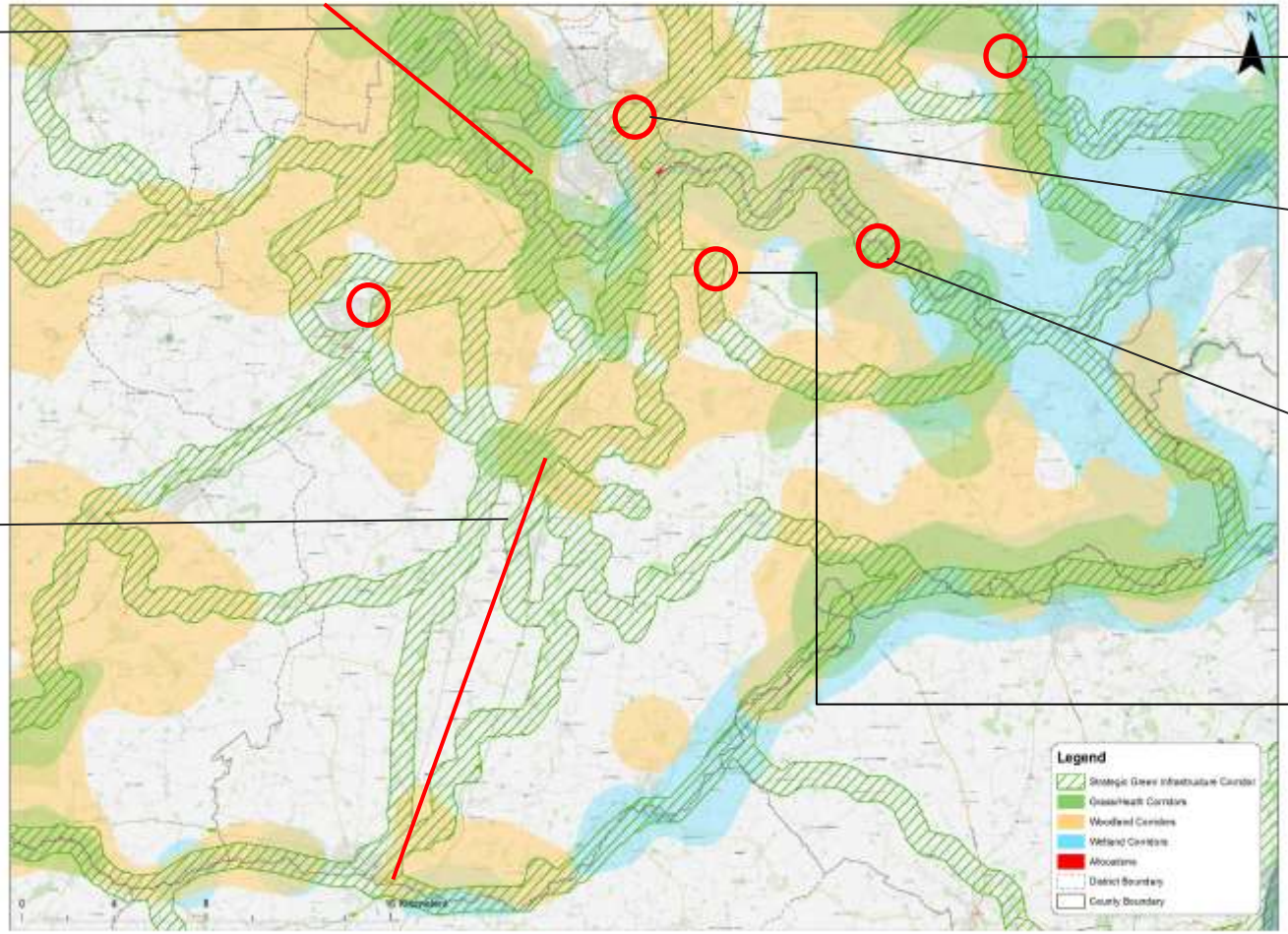
Greater Norwich – Green Infrastructure

Marriots Way and West Broadland

Finishing off cycle footpath link - Colney Lane and to Watton Rd

Create green lanes for cycling throughout SNC. A140 running through the middle is a barrier

Express cycleway North South linking Norwich and Diss



Complete 3 Rivers Way route from Horring to Potter Higham

Need for enhanced connectivity of riverside walk and Marriots Way

Upstreamn of New Mills (within city)

Footpath/cycle route Stoke Holy Cross to upon Stoke. Stoke Holy Cross via Caistor St Edmund to Lakenham City Centre

Upstreamn of New Mills

Wesum Riverside walk - missing link Duke Street Bridge - George Street Bridge

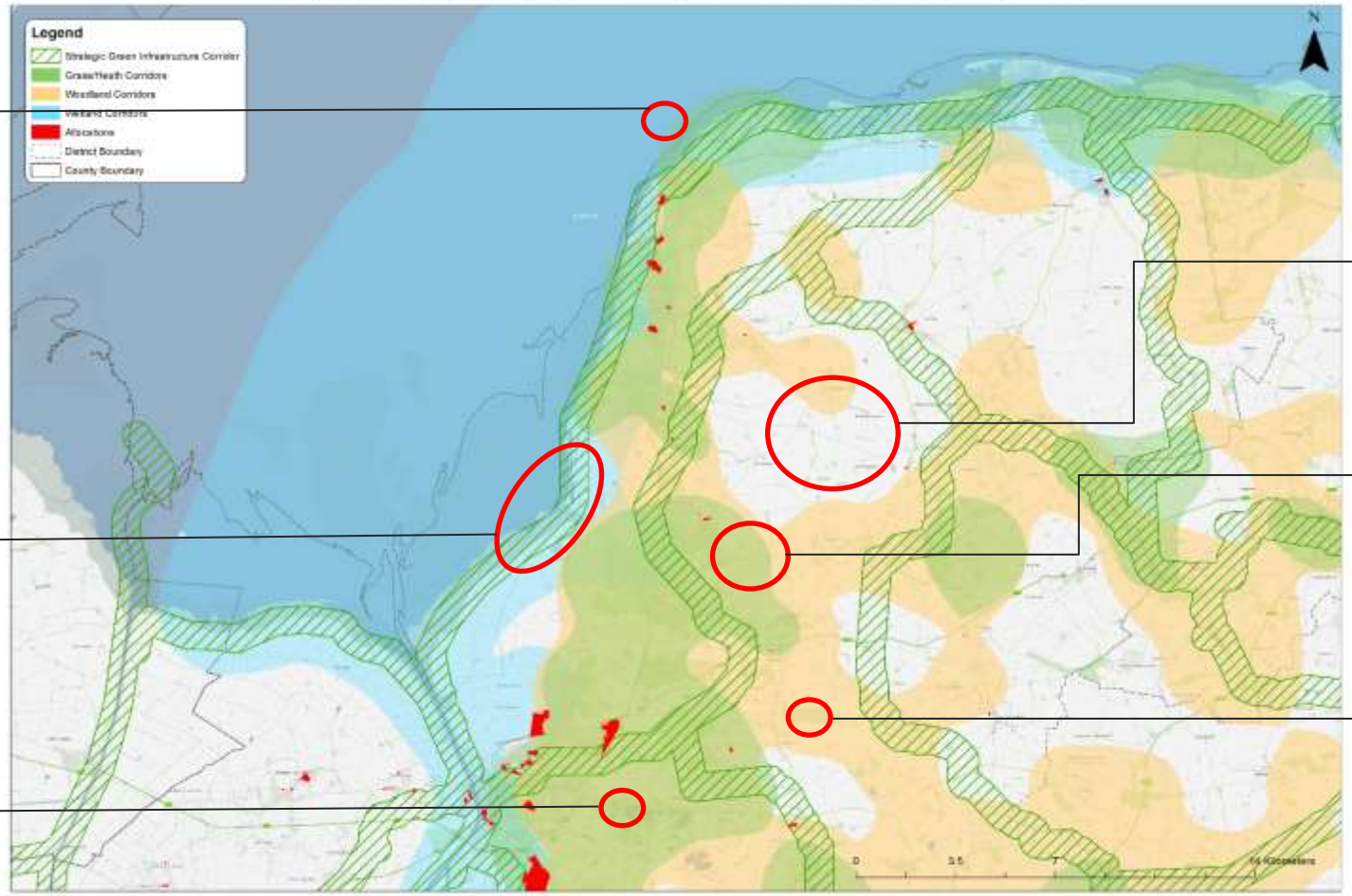
Need for bridges from city to Whithingham

Role of reserves in supporting visitors
Need to understand pressures
Resources to ensure they can accommodate increased visitors without adversely affecting habitats and species

Inaccessible – Out of Bounds

Bawsey Pits
- Significant Opportunity
--A47 Access is poor, people wall on dangerous route
- Former Dilapidated country park

King's Lynn and West Norfolk District - Green Infrastructure (North)



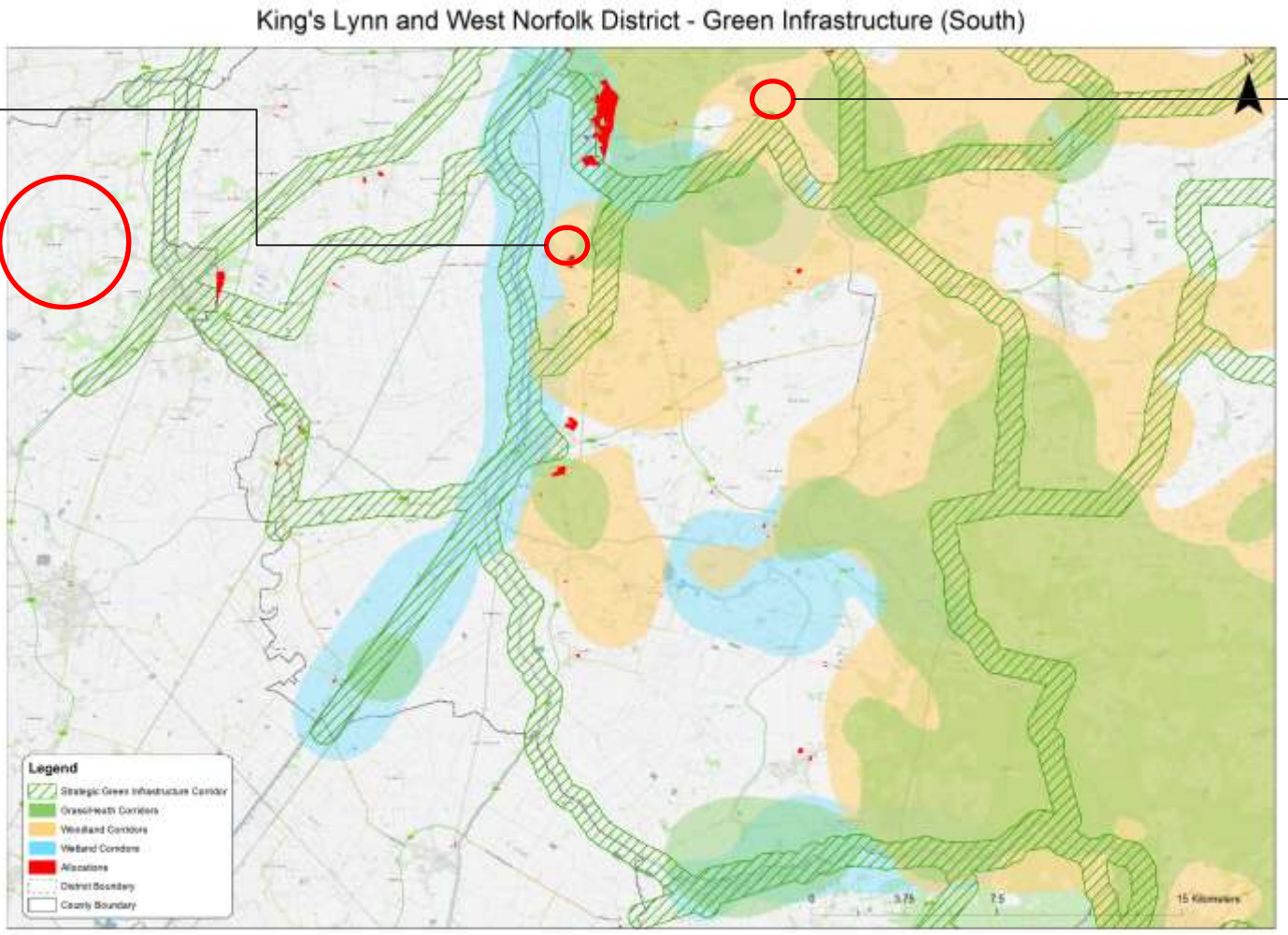
Possible Recreational

Sandringham - Can we make more aware of it? New Estate Manager

Former Railway Line: Kings Lynn to Fakenham

Permission granted for a safari park

Can Ministry of Defence land be used?



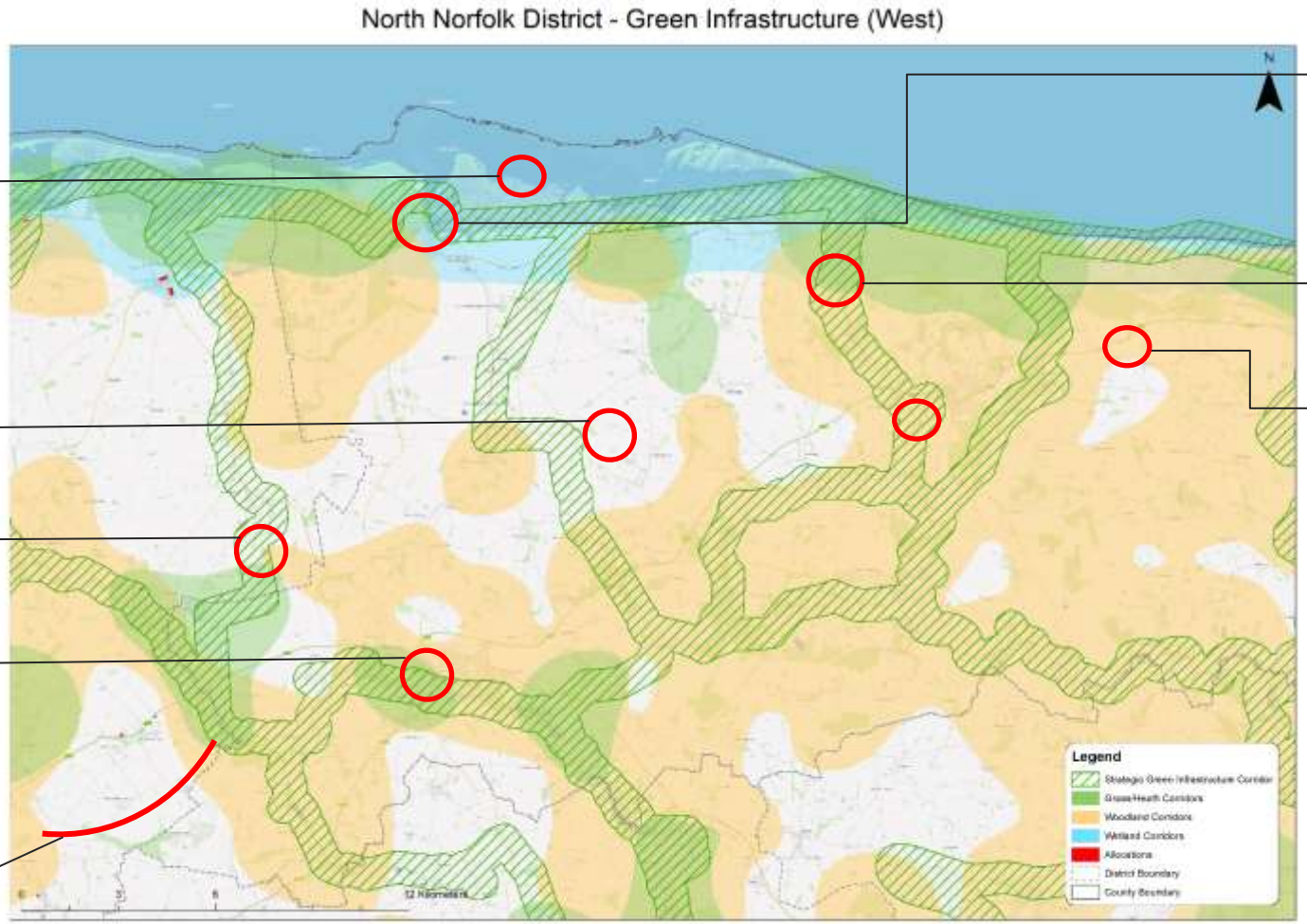
Minerals extraction sites
- Restoration for nature and people
- Longer term vision

Former railway tracks should be considered district wide

No park run in North Walsham

Green Pilgrimage route (NCC)

NCC Greenways Route



Parking issues at Wells

Major draw for visitors and residents in summer and winter for dog walking - impacts on breeding birds/seals/overwinter birds

Glaven Valley River Corridor

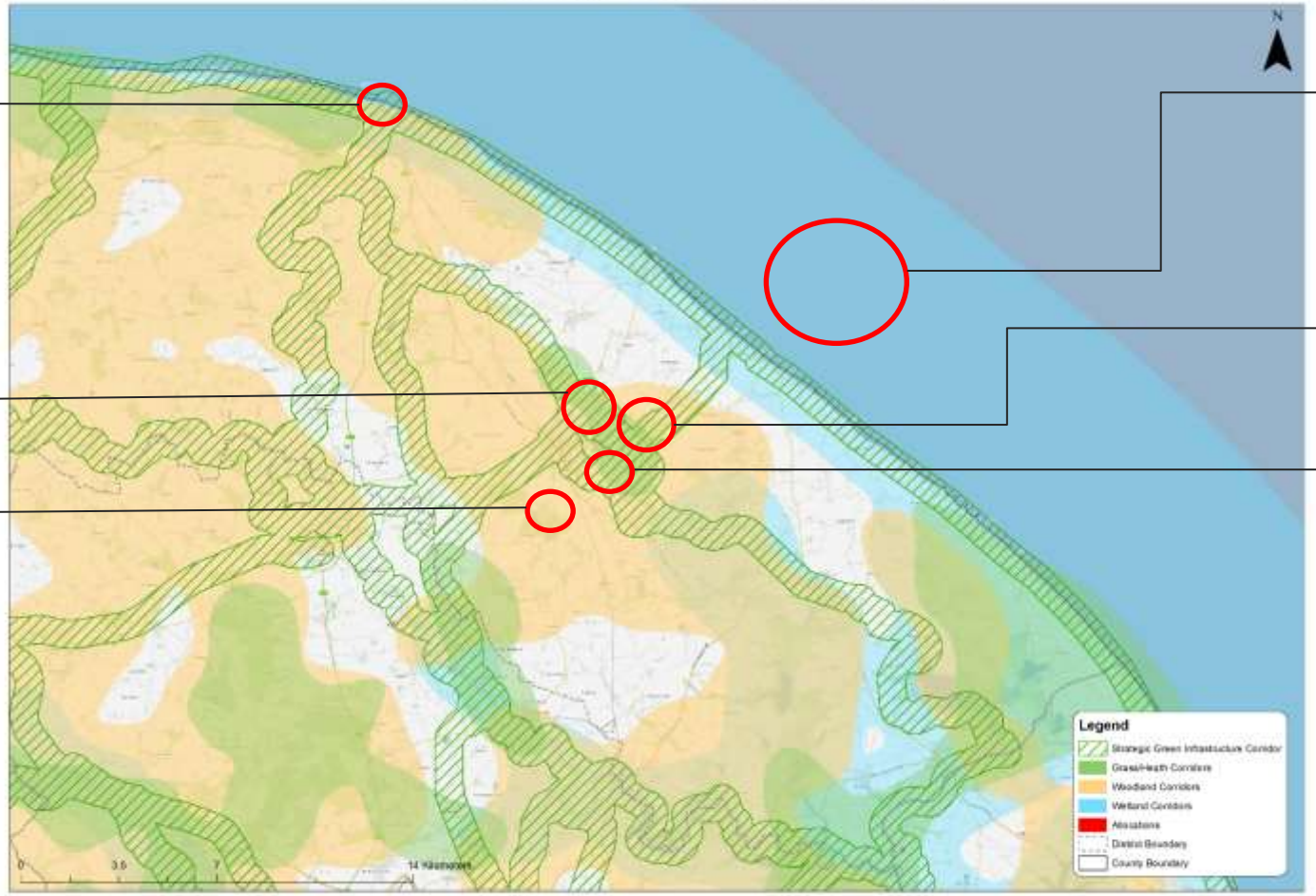
Sheringham Park - circular routes

North Norfolk District - Green Infrastructure (East)

lack of publicly accessible GI/open space in Cromer (other than beach) - parkrun size

No park run in North Walsham

Lack of GI provision this side of North Walsham considering the amount of housing growth



Possible Recreational Uses

Bacton Woods existing GI - opportunity

Lord Anson's wood - private remnany heath - possible opportunity

APPENDIX 7

A7(1) Essex Coast RAMS Guidelines for proposals for student accommodation

Essex Coast RAMS Guidelines for proposals for student accommodation

Introduction

The Essex coast Recreational disturbance Avoidance and Mitigation Strategy (the "Essex coast RAMS") aims to deliver the mitigation necessary to avoid significant adverse effects from in-combination impacts of residential development that is anticipated across Essex; thus protecting the Habitats (European) sites on the Essex coast from adverse effects on site integrity. All new residential developments within the evidenced Zones of Influence where there is a net increase in dwelling numbers are included in the Essex Coast RAMS. The Essex Coast RAMS identifies a detailed programme of strategic mitigation measures which are to be funded by developer contributions from residential development schemes.

This note includes guidance for proposals for student accommodation to help understand the contribution required. It has been agreed by the Essex Coast RAMS Steering Group. The purpose of this note is to ensure that a consistent approach is taken across Essex when dealing with proposals for student accommodation within the Zones of Influence of the Essex Coast RAMS.

Student Accommodation

In their letter to all Essex local planning authorities, dated 16 August 2018, Natural England included student accommodation as one of the development types that is covered by the Essex Coast RAMS.

It would not be appropriate to expect the RAMS tariff of £122.30 for each unit of student accommodation. This would not be a fair and proportionate contribution. Nevertheless, Natural England has advised that there needs to be a financial contribution towards the RAMS as there is likely to be a residual effect from student accommodation development even though it will only be people generated disturbance rather than dog related. Natural England has advised that the tariff could be on a proportionate basis. It may also be possible for the on-site green infrastructure provision to be proportionate to the level of impact likely to be generated by the student accommodation, particularly as one of the main reasons for having on site green infrastructure is to provide dog walking facilities, which wouldn't be needed for student accommodation. The general model for calculation, set out below, explains how to obtain a fair and proportionate contribution for student accommodation.

In the first instance, 2.5 student accommodation units will be considered a unit of residential accommodation.

Secondly, it is recognised that due to the characteristics of this kind of residential development, specifically the absence of car parking and the inability of those living in purpose built student accommodation to have pets, the level of disturbance created, and thus the increase in bird disturbance and associated bird mortality, will be less than dwelling houses (use class C3 of the Use Classes Order b).

Research from the Solent Disturbance Mitigation Project showed that 47% of activity which resulted in major flight events was specifically caused by dogs off of a lead. As such, it is considered that level of impact from student accommodation would be half that of C3 housing and thus the scale of the mitigation package should also be half that of traditional housing.

So, a scheme for 100 student accommodation units would be considered 40 units. 40 units would then be halved providing that future occupiers are prevented from owning a car and keeping a pet:

100/2.5 = 40
40/2 = 20
20 x £122.30 = £2,446

Please note that the calculation outlined above is to be used as a guide. The level of contribution would also need to consider the proximity of the accommodation to the Habitats sites in question and the total number of units being built.

Chelmsford City Council

Proposals for student accommodation in Chelmsford will have a de minimis effect. Unlike Colchester and Southend, Chelmsford only has a small area of Habitats sites in the far south-eastern part of its administrative area. Purpose built student accommodation generally includes restrictions preventing students from owing a car or a pet. These restrictions will make it extremely unlikely that a student will visit a Habitats site, owing to the difficulty in accessing Essex coast Habitats sites from Chelmsford by public transport. Consequently, proposals for purpose built student accommodation in Chelmsford will not lead to likely significant effects on Habitats sites from increased recreational disturbance.

APPENDIX 8

A8(1) County-wide Projects

A8(1.1) Norfolk Trails

In addition to its statutory duties as the local Highways Authority (including Public Rights of Way), Norfolk County Council (NCC) is committed to investing in GI. They deliver and promote a network of routes across the county that meet the revised National Trails quality standards in England (April 2013) which connect main settlements and provide a good level of green infrastructure; currently 70% of Norfolk's residents are served by the network of 13 long distance trails with short & circular walking and cycling routes across Norfolk for local use[12].

Given the planned growth across Norfolk, NCC is continuing to expand the scale and scope of this GI network and adding more trails based on disused railway lines & designated Quiet Lanes. These are in addition to the Peddar's Way and Norfolk Coast Path[13], one of the 'family' of National Trails, which is managed locally within a national framework of guidance and support. Natural England is responsible for setting standards and investing in trail maintenance at the national level, while the local trail partnerships take collective responsibility for local delivery. This will incorporate the England Coast Path when it comes on stream in Norfolk. Natural England's vision for National Trails is that they are a family of "the highest quality recreational routes connecting our finest landscapes for extensive off-road journeys. National Trails provide pubic enjoyment and they bring local economic benefit through tourism as well as opportunities for improving the environment and for getting communities involved in caring for them."

One of the projects that is currently being undertaken by Norfolk CC which aims to reduce deficits in GI provision is the Greenways project. This has attracted Government grant aid (under the Rural Development Programme for England) and NCC is keen to further develop a greenway network (otherwise known as a Green Infrastructure network) across the county.

The proposed project/target areas will link in with the sustainable transport network and the existing Norfolk Trails aiming to deliver a GI network for 100% of Norfolk residents. As sustainability is key to this provision, candidate routes which can meet the National Trails criteria will be considered where they are not likely to result in significant effects on Habitats Sites.

Greenways offer a safe route for people and animals to travel and is focused on the benefits of health, wellbeing, economy, increased biodiversity, alleviation of congestion and air quality improvements. This project will help fill the gaps in the strategic network of ANG across Norfolk and with continued investment from NCC and growth; the Norfolk Trails network will provide a strategic level of GI across the county.

Work has already started on strategic Greenways projects such as:

- Weavers' Way between Aylsham and Stalham
- King's Lynn to Fakenham
- King's Lynn to Hunstanton

[12] Norfolk Trails: https://www.norfolk.gov.uk/out-and-about-in-norfolk/norfolk-trails
[13] Peddar's Way and Norfolk Coast Path: https://www.nationaltrail.co.uk/peddars-way-and-norfolk-coast-path

These are all disused railways that can be reinvented as strategic green links across the county. The aim is to make Norfolk's Greenways as accessible as possible for all user groups, for example disabled users or horse riders, but access for different groups may depend on each specific landowner. NCC will be looking at a range of different options for costs across the proposed areas and developer contributions towards GI could be used where there is insufficient GI available on an individual development site. For the purpose of this Strategy, Norfolk's Greenways are considered part of the existing GI network existing on a County-wide scale.

Figure 27: The Norfolk Trails Network

Unfortunately, many habitats have been lost and fragmented over the years due to intensification of agriculture and urban expansion, which has put flora and fauna across the county at risk. NWT has identified a number of priority areas where they will be focussing on restoration and expansion of existing sites along with new wild areas that will benefit wildlife and people. This approach is moving away from simply trying to conserve what remains and instead restoring and creating habitats at a landscape scale to revive ecological networks as proposed in the principles of 'better, bigger, more, and joined', as described by Professor Sir John Lawton in his report Making Space for Nature (2010). Current Norfolk Living Landscape Project Areas include; North Norfolk, Bure and Thurne, Claylands, The Brecks, Wissey and Gaywood Valley, as shown in the figure below:

Figure 28: The Living Landscape Projects

Source: Norfolk Wildlife Trust, 2020

A8(1.2) Norfolk Tree Planting and Resilience Strategy (Draft)

The Draft Norfolk Tree Planting and Resilience Strategy focuses on increasing the resilience of tree, woodland and hedged landscapes across Norfolk, with the aim of helping Norfolk adapt to future climate change, pests and diseases. It will help identify where the greatest gains can be made through tree and hedge planting through an Action Plan for planting across the Norfolk County Council estate and other key landowners, stakeholders and community groups across Norfolk. Ultimately, its value in terms of GI will be dependent on ensuring that any tree and hedgerow planting is undertaken strategically.

APPENDIX 9

A9(1) Written comments from stakeholders

Royal Society for the Protection of Birds (RSPB)	Phil Pearson

RSPB have been heavily involved in visitor management measures to protect sensitive nesting birds in both Breckland with their Stone Curlew project and the Little Terns on the Norfolk coast.

The Norfolk Breck Heaths are not currently being hugely impacted by recreational disturbance as most are closed to public access during the breeding season. However, there are some concerns about the effect of recreational disturbance outside the breeding season on the rabbit populations that are vital to maintain the quality of the heaths. Recreational activity, particularly involving dogs, may adversely affect rabbits and cause spread of disease. Otherwise, recreational disturbance to stone-curlews is most likely to occur where there is a PROW close to stone-curlew nesting locations on heaths or arable land. Ongoing monitoring of stone-curlews currently receives no government or grant funding in the region.

There is clearly a need to also coordinate the different actions outlined within a RAMS to dovetail with existing teams of RSPB volunteers (e.g. stone-curlews or beach-nesting birds) that are already in place to undertake annual monitoring. This will be necessary to integrate with the RSPB's Little Tern management in east Norfolk. RSPB would be happy to be part of an oversight group to help manage this issue in the same way as we sit on the mitigation and monitoring groups for KLWN and GYBC.

Forestry Commission (FC)	Neal Armour-Chelu, Ecologist

Details of the current monitoring have been provided where this has been undertaken within the Breckland Forest for Breckland SPA Designated Features i.e. Woodlark, Nightjar and Stone Curlew (where this species is a regular breeding bird on heathland sites within the forest albeit in small numbers) Potential disturbance to Stone Curlew is managed via Countryside and Rights of Way (CRoW) Act 2000 access control.

Breckland Forest provides breeding and feeding habitat of varying quality for woodlark and nightjar. These two ground nesting species breed almost exclusively in plantation restocks. Woodlark will also use open short turf grassland (Breck heath).

Recreational access has been demonstrated to have the potential to create disturbance that affects the breeding behaviour of woodlark and nightjar (e.g. Murison 2002; Liley & Clarke 2003 and Liley et al 2006). Mallord et al (2007) demonstrated that this interaction can have a population level effect.

Recreational impacts on breeding behaviour can be expressed in two ways:-

1. Areas become too disturbed for birds to settle in and are therefore unsuitable as breeding habitat.
2. Birds settle to breed in an area, but their productivity is decreased, or they fail to produce any viable young.

The effect of disturbance on breeding behaviour can be through direct mechanisms (e.g. trampling of nest or birds are repeatedly flushed, so that clutch or brood chills) and also indirect mechanisms (e.g. littering increases predator activity in the area or birds are flushed and their unguarded clutch or brood is predated).

Present access levels at wider Breckland Forest SSSI sites appear relatively low (Dolman et al 2008 and Hornigold 2017). However, low current visitor rates do not necessarily mean that there is no current impact from access or that future increases in recreation will not have an impact. The report of Dolman (2010) suggested no impacts, were found in 2008 to 2009, but given the scale of future change predicted by Panter et al (2016), impacts may occur in the future. It is also important to note

that the study of Dolman (2010) only looked at post-settlement interactions and did not study territory settlement patterns for the three SPA birds within Breckland Forest SSSI.

In order to understand any potential recreational impacts on the integrity of the SPA and the breeding success of woodlark, nightjar and stone curlew, several ecological factors surrounding the birds and their habitat and recreational activity need to be spatially quantified. Habitat quantity, quality and distribution datasets are updated annually by Forestry England with monitoring costs for these surveys estimated at £6-8k pa. Distribution and productivity for the three SPA birds are regularly updated with nest checks and weekly monitoring for woodlark and nightjar and productivity data held by Breckland DC.

It is important to understand the mechanisms and how the factors interact to affect bird productivity and the integrity of Breckland SPA. This understanding will determine which mitigation options are most appropriate.

There are also two Breckland Forest SSSI designated features of plant and invertebrate assemblages which may also be damaged by increased residential development and recreation. Trampling, canine eutrophication and fly-tipping of invasive plant species are a concern (Shaw et al 1995 and Taylor et al 2005).

Norfolk Wildlife Trust (NWT)	**John Hiskett (Senior Conservation Officer), Mike Jones (Conservation Officer) and Matt Jones (Living Landscapes officer)**

As none of the NWT officers were able to attend either of the workshops held in May 2019, the consultants arranged to meet them separately at their offices.

NWT manage parts of 11 Habitats Sites across Norfolk with a “no dogs” policy or most of the reserves except Public Rights of Way:

- North Norfolk Coast SPA, SAC and Ramsar site (Holme Dunes National Nature Reserve; Cley and Salthouse Marshes reserve)
- Broadland SPA & Ramsar site and the Broads SAC (Alderfen Broad and Marshes; Barton Broad and Marshes; Cockshoot Broad; Hickling Broad and Marshes; Martham Broad and Marshes; Ranworth Broad and Marshes; Trinity Broads; Upton Broad and Marshes)
- Norfolk Valley Fens SAC (Buxton Common; Holt Lowes; Scarning Fen; Swangey Fen; Thompson Common)
- Breckland SPA and SAC (East Wretham Heath; Thetford Heath; Weeting Heath)
- Roydon Common and Dersingham Bog SAC & Roydon Common Ramsar (Roydon Common)

This was very helpful in capturing information they had on visitor activities and disturbance impacts on the Habitats Sites and their suggestions into the future management of their sites. Discussion also included potential alternative locations for visitors e.g. accessible non-designated woodlands, new “broads” created by minerals extraction and use of cut-off channels. This information has been included on the maps used at the workshops (Appendix 5).

APPENDIX 10

A10(1) Example s106 Unilateral Undertaking Norfolk RAMS Contribution

UNILATERAL UNDERTAKING

Made under Section 106 of the Town and Country Planning Act 1990 (as amended)

relating to land at: ‹INSERT ADDRESS›

IN FAVOUR OF

‹INSERT› DISTRICT/BOROUGH/CITY COUNCIL

‹INSERT SIGNATORY›
‹INSERT COUNCIL›
‹INSERT ADDRESS›

DATE ‹INSERT dd/mm/yr›

PARTIES

By INSERT NAME AND ADDRESS
the “Owner”

To ‹INSERT COUNCIL›
the “District/Borough/City /Borough/City Council”

INTRODUCTION

1. The District/Borough/City Council is the local planning authority for the purposes of the Act for the area in which the Site is situated.
2. The Owners are the freehold owners of the Site which is part of the land registered at the Land Registry under title number ‹insert›
3. The District/Borough/City Council has not yet determined the Planning Application and the Owner enters into this Deed to secure the planning obligations which will take effect following a grant of the Planning Permission for the Development

NOW THIS DEED WITNESSES AS FOLLOWS:

OPERATIVE PART

1 DEFINITIONS

For the purposes of this Deed the following expressions shall have the following meanings and shall be read in conjunction with the definitions set out in the Third Schedule:

“Act”	the Town and Country Planning Act 1990 as amended;
“Application Site”	the land described in the First Schedule as shown edged red for identification purposes only on the Application Site Plan;
“Application Site Plan”	the plan attached to this Deed
“Commencement of Development”	the date on which any material operation (as defined in Section 56(4) of the Act) forming part of the Development begins to be carried out on the Site other than (for the purposes of this Deed and for no other purpose) operations consisting of archaeological investigations, investigations for the purpose of assessing ground conditions, remedial work in respect of any contamination or other adverse ground conditions, diversion and laying of services, erection of any temporary means of enclosure, the temporary display of site notices or advertisements or the erection of temporary fences and “Commence Development” shall be construed accordingly;
“Development”	the development of the Site as described in the Planning Application and in accordance with the Planning Permission
“Dwelling”	any dwelling (including house, flat or maisonette) or unit of tourist accommodation to be constructed pursuant to the Planning Permission
“Recreational impact Avoidance and Mitigation Contribution”	means the sum of £‹INSERT TOTAL› (Index Linked) calculated using the Recreational impact Avoidance and Mitigation Contribution Calculation to be paid by the Owner to the District/Borough/City Council as a contribution towards

"Recreational impact Avoidance and Mitigation Contribution Calculation"	the sum of £‹INSERT› x the total number of new dwellings proposed pursuant to the Planning Permission to calculate the Recreational impact Avoidance and Mitigation Contribution.
"Index"	means the All-in Tender Price Index published by the Building Costs Informative Service from time to time
"Index Linked"	the sum referred to in the Second Schedule of this Deed shall be increased or decreased by an amount equivalent to the increase or decrease in the Index from the date of the grant of Planning Permission until the date on which the Habitat Mitigation Contributions is payable using the formula A=B x C/D A – the sum payable under this Deed B – the original sum calculated C – the Index for the month 2 months before the date on which the Recreational impact Avoidance and Mitigation Contribution is payable D – the Index for the month of the grant of the Planning Permission
"Interest"	In the event of any delay in the payment of the Recreational impact Avoidance Mitigation Contribution required to be paid to the District/Borough/City Council under this Deed then interest shall be payable thereon the annual rate of 4% above base rate for the time being of the Bank of England base from the date that the Recreational impact Avoidance and Mitigation Contribution fell due until the date of actual payment
"Planning Application"	means the application for Planning Permission for ‹INSERT DESCRIPTION OF DEVELOPMENT AS INCLUDED ON THE PLANNING APPLICATION› at ‹INSERT ADDRESS OF DEVELOPMENT› submitted to the District/Borough/City Council on ‹INSERT DATE›
"Planning Permission"	The ‹INSERT TYPE› planning permission subject to conditions to be granted by the District/Borough/City Council pursuant to the Planning Application substantially as set out in the draft as set out in the Second Schedule;
"Section 106 Officer"	the officer so designated by the District/Borough/City Council and any notice required to be served on the Section 106 Officer must be sent or delivered to the District/Borough/City Council at

	the address aforesaid marked for the attention of the Section 106 Officer (unless otherwise agreed with the District/Borough/City Council);
"Site"	the land described in the First Schedule against which this Deed may be enforced as shown edged red for identification purposes only on the Application Site Plan;
"Working Days"	Monday to Friday (inclusive) except Good Friday, Christmas Day and public or bank holidays from time to time in England.

2 CONSTRUCTION OF THIS DEED

2.1 Where in this Deed reference is made to any clause, paragraph or schedule or recital such reference (unless the context otherwise requires) is a reference to a clause, paragraph or schedule or recital in this Deed.

2.2 Words importing the singular meaning where the context so admits include the plural meaning and vice versa.

2.3 Words of the masculine gender include the feminine and neuter genders and words denoting actual persons include companies, corporations and firms and all such words shall be construed interchangeable in that manner.

2.4 Wherever there is more than one person named as a party and where more than one party undertakes an obligation all their obligations can be enforced against all of them jointly and severally unless there is an express provision otherwise.

2.5 Any reference to an Act of Parliament shall include any modification, extension or re-enactment of that Act for the time being in force and shall include all instruments, orders, plans regulations, permissions and directions for the time being made, issued or given under that Act or deriving validity from it.

2.6 Any references to any party to this Deed shall include the successors in title to that party and to any person deriving title through or under that party and in the case of the District/Borough/City Council the successors to its respective statutory functions.

2.7 The headings are for reference only and shall not affect construction.

2.8 Any covenant by the Owners not to do an act or thing shall be deemed to include an obligation to use all reasonable endeavours not to permit or suffer such act or thing to be done by another person where knowledge of the actions of the other person is reasonably to be inferred.

2.9 Any notices required to be given under the terms of this Deed may (in addition to any other valid method of service) be given or served by sending the same by recorded delivery post addressed to the party to or upon whom it is to be given or served at the address for that party given in this Deed or such other address in the United Kingdom as that party may by notice to the other parties hereto or their agent stipulate as that party's address for service of notice pursuant to this Deed or if not such address is given or stipulated at that party's last known

address and any notice so given or served shall be deemed to be received and the date on which it is given or served shall be deemed to be 48 hours after posting.

3 LEGAL BASIS

3.1 This Deed is made pursuant to Section 106 of the Act and to the extent that it does not contain planning obligations Section 111 of the Local Government Act 1972 and Section 1 of the Localism Act 2011 and all other enabling powers.

3.2 The covenants, restrictions and requirements imposed upon the Owners under this Deed that are planning obligations pursuant to Section 106 of the Act are enforceable by the District/Borough/City Council as the local planning authority against the Owners and their successors in title.

3.3 Any variation of this Deed is to be by way of a formal variation by deed between all the parties unless there is express provision in this Deed otherwise.

4 CONDITIONALITY

The provisions set out in this Deed are conditional upon:

(i) the grant of the Planning Permission; and

(ii) the Commencement of Development

save for the provisions of this Clause and Clauses ..... which shall take effect immediately upon completion of this Deed.

5 THE OWNERS' COVENANTS

5.1 The Owners hereby covenants with the District/Borough/City Council as set out in the Second Schedule so as to bind the Site and each and every part thereof.

5.2 The Owners warrant that they are the freehold owners of the Site and have full power and capacity to enter into this Deed and that there is no other party or person having a charge or any other interest in or over the Site whose consent is necessary to make this Deed binding on the Site and all estates and interests therein.

6 MISCELLANEOUS

6.1 No provisions of this Deed shall be enforceable under the Contracts (Rights of Third Parties) Act 1999.

6.2 This Deed shall be registrable as a local land charge by the District/Borough/City Council.

6.3 It is acknowledged that following the performance and satisfaction of all the obligations contained in this Deed the District/Borough/City Council shall forthwith on the written request of the Owners mark accordingly all entries made in the Register of Local Land Charges in respect of this Deed.

6.4 Insofar as any clause or clauses of this Deed are found (for whatever reason) to be invalid illegal or unenforceable then such invalidity illegality or unenforceability shall not affect the

validity or enforceability of the remaining provisions of this Deed.

6.5 This Deed shall cease to have effect (insofar only as it has not already been complied with) if the Planning Permission shall be quashed, revoked or otherwise withdrawn or (without the consent of the Owners) it is modified by any statutory procedure or expires prior to the Commencement of Development.

6.6 No person shall be liable for any breach of any of the planning obligations or other provisions of this Deed after it shall have parted with its entire interest in the Site (or that part of the Site in respect of which such breach occurs) but without prejudice to liability for any subsisting breach arising prior to parting with such interest AND FOR THE AVOIDANCE OF DOUBT neither the reservation of any rights or the inclusion of any covenants or restrictions over the Site in any transfer of the Site (or any part or parts of the Site) shall constitute an interest for the purposes of this Clause.

6.7 Subject to clause 2.8.1 nothing in this Deed shall prohibit or limit the right to develop any part of the Site in accordance with a planning permission (other than the Planning Permission) granted (whether or not on appeal) after the date of this Deed

6.7.1 In the event that any new planning applications are made in respect of the Development pursuant to section 73 of the Act then with effect from the date that the new planning permission is granted pursuant to section 73 of the Act

6.7.1.1 the obligations in this Deed shall in addition to binding the Site in respect of the Planning Permission relate to and bind the Site in respect of any planning permission granted pursuant to section 73 of the Act

6.7.1.2 the definitions of Development Planning Application and Planning Permission shall be assumed to include references to any applications under section 73 of the Act, the planning permissions granted thereunder and the development permitted by such subsequent planning permissions PROVIDED THAT nothing in this clause shall fetter the discretion of the Council in determining any applications under section 73 of the Act and the appropriate nature and/or quantum of section 106 obligations in so far as they are materially different to those contained in this Deed and required pursuant to a determination under section 73 of the Act whether by way of a new deed or supplemental deed pursuant to section 106 of the Act or a modification pursuant to section 106A of the Act

6.8 Nothing contained or implied in this Deed shall prejudice or affect the rights, discretions, functions, powers, duties and obligations of the District/Borough/City Council under all statutes by-laws statutory instruments orders and regulations in the exercise of their functions as a local authority.

6.9 The Owners covenant from the date that this Deed takes effect to allow the District/Borough/City Council, and its respectively duly authorised officers or agents at all reasonable times following at least three days' prior notice to enter into and upon the Site for the purposes of monitoring compliance with the provisions of this Deed.

6.10 The Owners hereby agree that any rights to claim compensation arising from any limitations or

restrictions on the planning use of the Site under the terms of this Deed are hereby waived.

6.11 The Owners covenant to pay the District/Borough/City Council's reasonable legal costs incurred in the preparation and negotiation of this Deed on completion of this Deed.

7 WAIVER

No waiver (whether expressed or implied) by the District/Borough/City Council or the Owners of any breach or default in performing or observing any of the covenants terms or conditions of this Deed shall constitute a continuing waiver and no such waiver shall prevent the District/Borough/City Council or the Owners from enforcing any of the relevant terms or conditions or for acting upon any subsequent breach or default.

8 CHANGE IN OWNERSHIP

The Owners agree with the District/Borough/City Council to give the District/Borough/City Council written notice within 10 Working Days of any change in ownership of any of its interests in the Site occurring before all the obligations under this Deed have been discharged such notice quoting the Planning Application reference number and to give details of the transferee's full name and registered office (if a company or usual address if not) together with the area of the Site purchased by reference to a plan and the title number or numbers thereof PROVIDED THAT this obligation shall not apply to any disposal to any of the statutory utilities for their operational purposes or to any mortagee or charge of the Site.

9 JURISDICTION

This Deed is governed by and interpreted in accordance with the law of England and Wales and the parties submit to the non-exclusive jurisdiction of the courts of England and Wales.

10 DELIVERY

The provisions of this Deed (other than this clause which shall be of immediate effect) shall be of no effect until the Planning Permission is granted

FIRST SCHEDULE

Details of the Owners' Title, and description of the Site

Freehold land at ‹INSERT ADDRESS›

within registered title number ‹INSERT› shown edged red for identification only on the Application Site Plan.

SECOND SCHEDULE

Recreational impact Avoidance and Mitigation Contribution

The Owners for themselves and their successors in title to the Site covenant as follows:-

1.1 Not to cause or permit Commencement of Development until the Recreational impact Avoidance and Mitigation Contribution have first been paid to the District/Borough/City Council

1.2 To advise the District/Borough/City Council within 5 (five) Working Days of Commencement of Development

1.3 In the event that the Recreational impact Avoidance and Mitigation Contribution remains unpaid within 30 (thirty) days of a request for payment or invoice being issued the Recreational impact Avoidance Mitigation Contribution shall accrue Interest

IN WITNESS whereof this Deed has been duly executed as a Deed on the date and year first written

Executed as a deed by

( )

and

( )

in the presence of:

Signature of Witness:……

Name of Witness:……

Address of Witness:……..

Place Services

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