

Date: 24 February 2020
Our ref: 304246
Your ref: [Click here to enter text.](#)



Stephen Kelly
Joint Director for Planning and Economic Development
for Cambridge and South Cambridgeshire

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

BY EMAIL ONLY

Localplan@greatercambridgeplanning.org

Dear Mr Kelly

Greater Cambridge Local Plan Issues and Options Consultation

Thank you for consulting Natural England on the above in your email of 20 December 2019.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

We support Cambridge City and South Cambridgeshire District Councils' preparation of a joint Local Plan to ensure a consistent approach to planning across the Greater Cambridge area, with policies aligned with the revised National Planning Policy Framework (NPPF).

We welcome the evidence being gathered to inform preparation of the Plan including further research on responding to climate change and the transition to net zero carbon, green infrastructure and biodiversity net gain, landscape and Habitats Regulations Assessment (HRA). The Councils continue to engage with Natural England in the preparation of the relevant aspects of the evidence base and we will be pleased to review and provide comments on the draft documents in due course.

Q1 and Q5 Stakeholder engagement and cross-boundary issues

We support the Councils' approach to stakeholder engagement and consideration of cross boundary projects including Oxford-Cambridge Arc, the Combined Authority Strategies, Greater Cambridge Partnership, County strategies and neighbouring Local Authorities. Natural England is satisfied that the Councils' approach meets the relevant duty to cooperate requirements.

We agree with the key cross-boundary issues identified including wildlife and green infrastructure, transport and water including supply, quality, waste water and flood risk. The Local Plan will need to take a strategic approach to these issues to ensure that the proposed scale of development is sustainable and will not adversely impact the natural environment. In particular the Local Plan should promote the delivery of a strategic green infrastructure network that is resilient to the scale of development proposed, capable of protecting designated sites and supporting habitat, and delivering the wider range of environmental services to meet development needs. This will require the delivery of a strategic GI network that contributes towards and complements the enhancement objectives of cross-boundary projects such as the Ox-Cam Arc Local Natural Capital Plan and landscape-scale priority areas such as the West Cambridgeshire Hundreds, Cambridgeshire Fens, the Chalk & Chilterns and the National Trust's Wicken Fen Vision Area.

Q2 Please submit any sites for green space and wildlife habitats you wish to suggest for consideration through the Local Plan

Whilst Natural England is unable to put forward any sites for consideration we would welcome the opportunity to provide early advice on any proposals for greenspace and wildlife habitat creation e.g. with regard to potential opportunities for enhancement.

We have provided some advice on the assessment of sites submitted for consideration as development or greenspace allocations at the end of Annex B.

Q6 and Q7 the 'big themes'

The Councils' visions seem appropriate and aligned with the three pillars of sustainable development. In our view the Plan's vision should be focused around the 'big themes' identified to influence how homes, jobs and infrastructure will be planned over the period to 2040, including climate change, biodiversity and green spaces, wellbeing and social inclusion. We support the big themes and note that they are strongly inter-related and are dependent upon a healthy and resilient natural environment. On this basis the overarching vision for the Plan should be the protection and enhancement of the natural environment, to deliver multi-functional benefits for people and wildlife, including biodiversity net gain, enhanced green infrastructure, soils, geodiversity & landscape, health & wellbeing, sustainable drainage and mitigation & adaptation to climate change.

Q8 – Q11 Climate change

We support the Councils' recognition of the severity of the climate change issue and recognition of the key issues and challenges of reducing our climate impact and the need to adapt to more extreme weather, a hotter climate and a changing ecology. We support key actions to address climate change including:

- Using renewable and low carbon energy generation;
- Promoting sustainable travel and discouraging car use where possible;
- Retrofitting existing buildings;
- Rooftop greening – this could be extended to generally extending and enhancing the ecological network

We generally support the promotion of climate change adaptation measures including:

- Managing flood risk and incorporating SUDS;
- Increasing biodiversity and tree planting;
- Improving water efficiency.

The Plan should prioritise avoiding key factors contributing to climate change (through more greenhouse gases) e.g. pollution, habitat fragmentation, loss of biodiversity and to protecting and enhancing the natural environment's resilience to change. Green Infrastructure and resilient ecological networks play an important role in aiding climate change adaptation. Development should be located and designed to remove/reduce reliance on car travel, promoting sustainable travel to improve air quality and its contribution to climate change. Development should incorporate multi-functional sustainable drainage and flood risk management measures in accordance with the SPD. Plan policies should focus on securing implementation of an enhanced and extended ecological network that will deliver climate change mitigation in addition to wider environmental services. This should be delivered through appropriate policy requirements.

We are aware that an Integrated Water Management Study, incorporating a Water Cycle Study and Strategic Flood Risk Assessment, is being progressed as a key evidence document to inform preparation of the Local Plan. We welcome this and urge for a strong focus /recommendation for the implementation of integrated drainage including multi-functional SUDs in all development, where possible. It should also identify and promote delivery of benefits and opportunities associated with climate change, for example to create more extensive wetland habitats and to protect and enhance the degraded peat soils remaining in the Greater Cambridge area.

Without appropriate measures new development will harm Greater Cambridge's natural

environment. Measures to avoid impacts must be prioritised. Cambridgeshire is especially dependent on its groundwater which is currently being pumped dry with knock-on effects for the natural environment including water quality and biodiversity. In addition to new buildings climate change requires retrofitting of existing buildings. Revised and more ambitious water consumption targets are also needed. The Plan should include appropriate policies to secure delivery of the recommendations identified through the Integrated Water Study.

We would also advise that consideration be given to updating the existing Flood and Water Supplementary Planning Document to reflect current BNG and climate / net zero carbon targets.

The Local Plan and relevant policies should reflect the importance of remaining peat soils as a significant carbon store that can help to improve air quality and mitigate against climate change. The development strategy and relevant policies should seek to protect Best and Most Versatile Land, including peat soils, and contribute towards enhancement of degraded peat to deliver a wide range of environmental services including biodiversity, open space, flood risk and drainage benefits, in addition to helping to mitigate climate change.

With regard to tree planting for carbon offsetting Natural England advises that planting of trees needs to be considered in the context of wider plans for nature recovery. Tree planting should only be carried out in appropriate locations, taking into consideration potential impacts on existing ecology and the opportunities to create alternative habitats that could deliver better enhancements for people and wildlife, and also store carbon effectively. Where woodland habitat creation is appropriate, consideration should be given to natural regeneration for the economic and ecological benefits this can achieve. Any tree planting should use native and local provenance tree species suitable for the location. Natural England advocates an approach which seeks to increase biodiversity and green infrastructure generally, not simply planting of trees, and protecting / enhancing soils, particularly peat soils.

Q12 – Q15 Biodiversity and green spaces

Natural England fully supports recognition of continued biodiversity decline and pressure on Greater Cambridge's biodiversity and green spaces from water shortage, pollution and development pressure. We welcome the Councils' commissioning of an evidence based study to inform how the Local Plan can achieve an enhanced and expanded green infrastructure network to guide where development is planned and to deliver new and improved wildlife areas and green spaces. We are pleased that this is being considered in the context of the Natural Cambridgeshire Local Nature Partnership's (LNP) vision to 'double nature' across the County, natural capital investment within the Ox-Cam Arc and the LNP's Developing with Nature Toolkit.

Through our early engagement with the Councils we have already indicated the potential risks to designated wildlife sites associated with increased visitor pressure from new development. We are pleased that this issue will be addressed through the Local Plan Green Infrastructure & Biodiversity evidence base. We have provided the Council's with detailed advice on this through our previous correspondence. The effects of recreational pressure will need to be fully assessed through the HRA and Sustainability Appraisal (SA). Mitigation to address any adverse impacts will need to be identified. Consideration should be given to the findings and recommendations of the recent Footprint Ecology Visitor Survey¹ commissioned by the National Trust which predicts significant increases in recreational pressure to Wicken Fen Site of Special Scientific Interest (SSSI) and Ramsar site, part of the Fenland Special Area of Conservation (SAC) and the Vision Area associated with nearby development such as Waterbeach New Town. The findings also indicate risks to other nearby sites such as the adjoining Cam Washes SSSI; this nationally important site is already at risk from recreational pressure and disturbance to the notified bird interest by people and dogs.

As discussed above it is crucial that the Integrated Water Study tackles the issue of decreasing water resources and pressure on the natural environment including chalk streams and other

¹ Saunders P., Lake S., Lily D., Panter C., (2019) Visitor Survey of the National Trust's Wicken Fen 100 Year Vision Area. Unpublished Report by Footprint Ecology.

wetland habitat and associated species. A number of nationally designated water-dependent designated sites are potentially at risk as are several important locally designated sites. Impacts to sites downstream such as the internationally designated Ouse Washes SAC, Special Protection Area (SPA), and Ramsar site and Wicken Fen. We welcome that these sites are included within the 15km buffer for assessment of effects through the HRA. Opportunities for retrofitting and tightening water consumption targets must be prioritised. However, the Study also needs to identify opportunities for strategic projects to increase water storage, incorporating extensive wetland habitat creation and restoration of degraded peat soils, and implementation of multi-functional SUDS.

We support acknowledgement of the multi-functional benefits of green infrastructure for people's enjoyment and wellbeing, water storage, absorbing carbon emissions and improving biodiversity. The need to improve and connect green spaces is recognised alongside the need to balance rural biodiversity with other demands on the countryside such as agriculture.

The Plan's biodiversity policy should recognise the hierarchy of international, nationally and locally designated sites across Greater Cambridge. This should be accompanied by a map of the existing ecological network and enhancement opportunity areas. This should be used to guide site allocations / development away from more sensitive areas and to identify opportunities for developers to deliver net biodiversity gain enhancements, noting the Combined Authority's Doubling Nature Vision i.e. 100% gain.

Natural England's Cambridgeshire Accessible Natural Greenspace Analysis 2010 indicates a deficit in accessible greenspace across Greater Cambridge, particularly South Cambridgeshire. The new Local Plan offers a significant opportunity to address this through the preparation of a biodiversity and green infrastructure enhancement strategy, with the various elements (open space, biodiversity rich habitat, community orchards, allotments etc.) delivered by developers through appropriate policy requirements for major allocations. We support the Councils' indication that individual development will need to deliver biodiversity net gain (BNG) through measures such as design, landscaping, phasing and monitoring. We agree that BNG can be required for all developments; this is irrespective of whether a loss has occurred. Requirements for smaller developments to deliver through developer contributions for can be set out in a separate BNG / biodiversity policy. It would be helpful if such a document was given the status of an SPD to ensure it was given adequate weight in planning decisions. Given the scale of the environmental challenges and opportunities facing the natural environment a biodiversity SPD could outline how the aspiration of doubling with nature will be delivered on the ground, how BNG will be addressed and how biodiversity enhancement will be priorities and delivered. We will be pleased to discuss this further with the Councils.

We would also advise that the costings for delivering the required biodiversity and green infrastructure elements of the local plan is included in the Local Plan's Infrastructure Delivery Plan (or similar document) – so that the investment required in the natural environment is transparent and are factored into costings for delivering sustainable developments.

The plan should recognise that social and economic benefits can be delivered through environmental gains, in addition to enhancing biodiversity. Natural England has a significant evidence base for this, including the [Microeconomic Evidence for the Benefits of Investment in the Environment 2](#) (MEBIE2).

Annex A includes more detailed advice to help the Council embed biodiversity net gain into the relevant Local Plan policies.

Further advice on what we would expect to be included within Plan policies, including the biodiversity policy, is provided in Annex B.

Q16 – Q19 Wellbeing and social inclusion

We agree that addressing requirements for climate change and green spaces, in addition to other national planning policy requirements will help to promote wellbeing and social inclusion. This

should be a key consideration in the preparation of the Local Plan biodiversity and green infrastructure evidence base. Access to sustainable transport and access to nature, close to people's homes, can have a significant influence on mental and physical wellbeing.

As indicated above there is an accessible natural greenspace deficit across Greater Cambridge, and particularly South Cambridgeshire. This needs to be addressed through the new Local Plan to improve opportunities for people, to improve health and wellbeing, in addition to delivering wider environmental benefits including air quality and climate change. Creation of an enhanced and extended ecological network brimming with high quality open space, biodiversity rich habitat, community orchards, allotments etc. will make a significant contribution towards enhanced wellbeing.

Q20 How do you think we should achieve improvements in air quality?

With regard to air quality and health, the Plan should strive to develop a strategy and related policies that enable more sustainable travel and reduced reliance / use of private cars. Greater Cambridge requires a significantly enhanced sustainable transport network including enhanced and safer walking and cycling networks and better, cheaper and more frequent public transport. In addition to cleaner air and better health this will benefit wildlife and climate change.

Q23 How do you think we should ensure that new development is as well-designed as possible?

A design policy should promote Natural Cambridgeshire's Developing with Nature Toolkit to maximise opportunities within the design of the development to provide sufficient area of high quality multi-functional green infrastructure, including sustainable drainage (SuDS) to deliver net gain for biodiversity, landscape and accessible open space to meet people's recreational and health needs. Sufficient high quality multi-functional green infrastructure, connected to the wider GI network, should form the framework for the built development, Appropriately designed and managed green infrastructure can also provide significant climate change mitigation including urban cooling and a wide range of other environmental services including wildlife habits, SUDS, high quality landscape, food production. Developers should be encouraged to follow Natural England's Accessible Natural Greenspace Guidance detailed in ['Nature Nearby'](#).

Q32 Do you think we should plan for a higher number of homes than the minimum required by government to provide more flexibility to support the growing economy?

The adopted Local Plans allocate land for 33,500 homes to 2031. However, current calculations using the Government's standard method indicates a need for 1,800 homes per year, or 40,900 homes for the Plan period 2017 – 2040. This represents significant growth and associated development pressure across Greater Cambridge. In light of the Councils' ambitious targets for zero net carbon, more efficient water use and 'doubling nature' our major concern is whether the proposed level of growth, and the additional infrastructure needed to support it, will be truly sustainable i.e. capable of having no adverse environmental impact and contributing towards the 100% BNG target. Also to ensure legal compliance it will be necessary to ensure assessment of the maximum number of houses through the SA and HRA, rather than a minima figure.

As discussed above, the Local Plan will need to promote the delivery of a strategic green infrastructure network that is resilient to the scale of development proposed, capable of protecting designated sites and supporting habitat, and delivering the wider range of environmental services to meet the needs of development.

Q36 – Q38 Infrastructure and sustainable travel.

The Local Plan should ensure that infrastructure is capable of supporting new development and that it contributes towards net zero carbon and doubling nature targets.

As already mentioned a more sustainable transport network is required to reduce reliance on car travel in order to improve air quality, people's health, biodiversity and to slow down climate change. We are aware that Greater Cambridge Partnership (GCP) is developing a number of transport schemes to improve sustainable travel in the area and the Combined Authority is preparing a Local Transport Plan including plans for a Cambridge Autonomous Metro (CAM) to

build on the work of the GCP by linking destinations across Cambridge and beyond.

Several rail schemes are being developed which are likely to influence the location of new development including the East West Rail Link, with a new station at Cambourne, and a new station planned for Addenbrookes. We welcome that the Councils are lobbying the East West Rail Company for the project to achieve biodiversity and wider environmental net gain. Wider Ox-Cam Arch projects include the A428 Black Cat to Caxton Gibbet Improvement Scheme. Our advice is that any new development should avoid impacts to the natural environment and should take a partnership approach to delivering strategic enhancements.

Infrastructure such as waste water treatment facilities should be sited in the most sustainable locations, prioritising avoidance of impacts to the natural environment, and delivery of significant environmental enhancements including BNG.

Q42 Where to build?

The current strategy focuses new development within Cambridge and then on the edge of Cambridge, at new settlements close to Cambridge, and at better served villages. It is proposed to add to this current development strategy. A key new site will be North East Cambridge with development contributing to the additional targets for the new Local Plan. Another potential major development site is Cambridge Airport. The location of further significant development is likely to be influenced by projects such as the Combined Authority's CAM and the East West Rail project.

Natural England believes that priority should be given to targeting growth in the most sustainable locations i.e. where impacts to the natural environment, through development and associated infrastructure, can be avoided and where maximum enhancements can be achieved by that development. The availability of existing infrastructure and services will be a key consideration.

The Local Plan development strategy should be underpinned by up to date environmental evidence such as the mapping of ecological networks and enhancement opportunity areas currently being undertaken by the Councils for the green infrastructure and biodiversity evidence base. The assessment of existing and potential components of local ecological networks should inform the SA: application of the mitigation hierarchy will ensure development avoids adverse impact to the natural environment; development is instead focused on land of least environment value; and opportunity enhancement areas are linked for delivery through those developments.

Natural England suggests that cross-cutting issues should be identified at this early stage. For example, transport infrastructure, water and sewerage, air quality, flood protection and recreation and leisure requirements can have potential implications for the natural environment and policies to deliver these requirements will need to ensure its protection and enhancement. Key issues for Greater Cambridge's natural environment include pressure on water resources, flood management, recreational pressure & deficits in accessible GI, air quality and climate change. The effects of large scale housing development on the existing green infrastructure network, through recreational pressure and disturbance, is a significant issue. Avoiding impacts by locating development away from more sensitive designated sites and habitat is critical. However, the scale of proposed growth requires additional measures to mitigate residual impacts; buffering and extending these sensitive areas to enhance their resilience to access pressure and creation of new alternative areas of accessible greenspace capable of meeting people's needs and diverting pressure away from more sensitive areas.

Our advice is that the location of new development should be informed through preparation of a map of the existing ecological network including designated sites, priority habitats and other important green spaces to identify key areas for protection and delivery of strategic / landscape-scale enhancements. This should be used to develop a strategy to inform the appropriate location of site allocations and to identify opportunities for delivery of biodiversity and green infrastructure enhancement projects through the Plan's major development and biodiversity and green infrastructure policies. This could then be used to prepare a Green Infrastructure Strategy / SPD or an update to the Cambridgeshire Green Infrastructure Strategy.

Q45 What do you think about developing around the edge of Cambridge in the Green Belt?

Natural England supports the purpose of Cambridge's Green Belt in preserving the unique character of Cambridge, maintaining and enhancing the quality of its setting and maintaining community separation. The Plan should, as far as possible, seek to enhance the beneficial use of the Green Belt, such as looking for opportunities to provide access; to provide areas for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land.

In our view the Councils should plan positively to enhance the beneficial use of the Green Belt, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land.

Q50 What do you think should be in the Local Plan. Are there issues, ideas or themes that you don't feel we have yet explored?

We have provided advice in Annex B on some additional topics for consideration and further detail on some of those already included and discussed above.

Habitats Regulations Assessment Scoping Report

Natural England is satisfied with the proposed scope of the Habitats Regulations Assessment (HRA) as indicated in our letter to the Councils dated 11 October 2019 (ref. 295675). We believe this to be in general accordance with the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended).

We welcome consideration of long-distance impact pathways for European sites located beyond the identified 15km buffer, such as Wicken Fen Ramsar site, a component of Fenland SAC and the Ouse Washes Ramsar, SPA and SAC through hydrological and recreational pressure impacts for example. Consideration of recreational pressure impacts to Wicken Fen is particularly important in light of the findings of the Footprint Ecology visitor study recently commissioned by the National Trust. Our letter dated 11 October 2019 includes further advice regarding the assessment of recreational pressure impacts.

As previously indicated the HRA should provide sufficient evidence to demonstrate that there is no credible risk of air pollution beyond the 200m threshold that could potentially result in an adverse effect to either of these European sites.

The findings and recommendations of the Councils' Green Infrastructure & Biodiversity and Integrated Water Study evidence bases, being prepared for the Local Plan, should inform the HRA.

We welcome that the findings and recommendations of the HRA will inform the relevant aspects of the SA. Natural England would welcome early discussion on the HRA of the plan and can offer further advice as policy options are progressed.

Sustainability Appraisal

Natural England provided comments on the Councils' Sustainability Appraisal (SA) Scoping Report in our letter dated 11 October 2019.

We are satisfied that the SA of Issues and Options report prepared by LUC (December 2019) has been prepared in a proper, logical and comprehensive manner and seeks to integrate the requirements of the Strategic Environmental Assessment (SEA) Directive, into the SA process. The approach to SA, as set out in the Scoping Report, including sustainability objectives, assessment methodology, consideration of relevant plans, policies and programmes and the SA framework appears to generally accord with the requirements of the Planning and Compulsory Purchase Act 2004. The report proposes to address relevant SA themes and topics relating to the natural environment including biodiversity and geodiversity, agriculture, open space provision, transport, air quality, water resources and resilience to climate change and flood risk.

We welcome that the findings and recommendations of the HRA will inform the relevant aspects of the SA.

The SA considers the effects on key objectives of the following spatial distribution options for development:

- Option 1: Densification;
- Option 2: Edge of Cambridge – Outside the Green Belt including Cambridge Airport;
- Option 3: Edge of Cambridge – Green Belt;
- Option 4: Dispersal – new settlements.
- Option 5: Dispersal – villages.
- Option 6: Public transport corridors.

All options are assessed as having some degree of potential mixed negative and/or positive but uncertain effects on Objective 5 to conserve and enhance biodiversity, geodiversity and ecological networks. Option 2 is considered to present Biodiversity Opportunity Areas around the edge of the site, which could be used as a way to enhance the ecological networks present in the area, whilst also providing an opportunity to design in green infrastructure. Option 3 would put development in close proximity to a number of SSSIs and locally designated wildlife sites but may offer opportunities to design in green infrastructure, incorporating ecological networks, particularly at larger extensions. It is considered possible to avoid designated wildlife sites through Option 4 with opportunities to create a network of green infrastructure and biodiversity. Options 5 and 6 are predicted to have significant negative but uncertain effects with challenges to delivering integrated ecological networks.

Due to their urban nature options 1 and 2 are predicted to have a more positive effect on the protection of soils and agricultural land than the other options. Options 3, 4, 5 and 6 are considered likely to result in substantial development of greenfield land and loss of significant areas of BMV land.

At this stage of the SA process, and given the high level of the options, it is not possible to distinguish between the options with respect to water resources and waste water treatment capacity.

Natural England is unable to provide any detailed comments on the preliminary findings of the SA. We will be pleased to provide further comment as the detailed SA emerges, through preparation of the Local Plan and evidence documents including the Councils' Green Infrastructure & Biodiversity and Integrated Water Study evidence documents. The evidence should be used to guide the most sustainable locations for development, prioritising avoidance of impacts to the natural environment including recreational pressure, air quality and water. We would also expect this to identify opportunities for development to implement significant enhancements to the ecological network. The delivery of enhancements should be secured through the relevant allocation and biodiversity policies.

We hope our comments are helpful. For any queries relating to the specific advice in this letter only please contact Janet Nuttall on 020 802 65894. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours sincerely

Janet Nuttall
Sustainable Land Use Adviser

Annex A: Natural England additional guidance and advice on embedding biodiversity net gain into the Greater Cambridge Local Plan policies

Background

Biodiversity Net Gain (BNG) is an approach to development, and/or land management, which aims to leave the natural environment in a measurable better state than beforehand.

Defra recently consulted on proposals to make biodiversity net gain mandatory for Town & County Planning Act (TCPA) developments. The consultation closed in February 2019 and in the Spring Statement it was confirmed that mandatory net gain would be taken forward.

BNG is usually measured through use of a metric, most commonly one based upon Defra's 'biodiversity metric'. This calculates before and after habitat values in terms of 'biodiversity units'. The recent net gain consultation, also sought views on updates to the metric, which was originally piloted by Defra in 2012.

BNG does not replace existing environmental legislation or policy requirements. Importantly this includes the application of the mitigation hierarchy and BNG does not apply to development subject to the Habitats Regulations.

Furthermore BNG is not intended to be used to assess impacts and calculate compensation for habitat damage or loss affecting irreplaceable habitats or other designated sites, including SSSIs.

BNG outcomes can be achieved onsite, offsite or a combination of the two. The priority should be on securing **onsite gains** where possible. When delivering offsite, links should be made to relevant plans or strategies to ensure gains are targeted on areas of opportunity, for example the Cambridgeshire Green Infrastructure Strategy, the Cambridgeshire and Peterborough Biodiversity Group Habitat Opportunity Mapping areas, etc. It should be noted that BNG is not predicated on there being a biodiversity loss on a site.

National Planning Policy Framework (NPPF)

The revised NPPF (2019) set out the planning policy context for delivering BNG through the planning system, clearly stating that planning policies and decisions should provide net gains for biodiversity. The net gain policy should be considered in conjunction with other NPPF policies on the natural environment, including the mitigation hierarchy:

'providing net gains in biodiversity where possible', has been strengthened to *'minimising impacts on and providing net gains for biodiversity'* (para 170, NPPF 2019) and now refers to *'measurable net gains'* (174).

In addition, LPAs have a duty to have regard for biodiversity in the exercise of their functions² (under Section 40 NERC Act, 2006). An evidence based approach to biodiversity net gain can help LPAs demonstrate compliance with this duty.

Links to green infrastructure

Green infrastructure within and around new development e.g. SUDs, green spaces etc. can be designed and maintained to deliver new or enhanced habitat features for biodiversity (contributing towards the need for measurable BNG requirements) as well as providing a range of other health and wellbeing benefits for communities, contributing towards wider place-making.

BNG through Local Plans

Strategic policies should include requirements to conserve and enhance the natural environment (NPPF, para 20). LPAs can set a clear framework at this level for biodiversity net gain, which can flow down and be supplemented by lower tier plans, including neighbourhood plans.

Non-strategic policies should be used to set out more detailed policies for specific areas, neighbourhoods or types of development. This can include allocating sites for development and

² 1 See <http://www.legislation.gov.uk/ukpga/2006/16/section/40>

the provision of infrastructure and community facilities at a local level. Non-strategic policies may provide further detail on biodiversity net gain, for example the delivery criteria for a development allocation or local priorities for habitat enhancement.

Helpful guidance is available through the CIRIA/IEMA/CIEEM publications³ including https://www.ciria.org/Resources/Biodiversity_Net_Gain.aspx

One of the first steps is to identify locations where development should be avoided (in line with the mitigation hierarchy) and locations where any off-site BNG delivery should be targeted e.g. to enhance ecological networks or to restore degraded habitats. The work being undertaken by Greater Cambridge to develop a biodiversity and green infrastructure evidence plan should help to identify these areas. Natural England has already advised on the availability of existing information through the following sources:

- Natural England's Impact Risk Zones (IRZs) available through [Magic](#);
- The Cambridgeshire Biodiversity Partnership's [Mapping Natural Capital and Opportunities for Habitat Creation in Cambridgeshire](#) (May 2019);
- Combined Authority Doubling Nature Investment Plan;
- Cambridgeshire and Peterborough Non-Statutory Strategic Spatial Framework;
- the objectives and projects in the Cambridgeshire Green Infrastructure Strategy (2011);
- Natural England's Cambridgeshire Analysis of Accessible Natural Greenspace 2010;
- Cambridgeshire Rights of Way Improvement Plan.

The Cambridgeshire and Peterborough Environmental Records Centre (CPERC) and existing environmental assessments for recent developments may provide useful additional data.

The existing evidence can be used to help develop policy objectives, for example by securing habitat creation to connect areas of fragmented habitat through development.

It can be useful to gather evidence and emerging approaches in a background paper to inform policy development. The Portsmouth [Background Paper](#)⁴ provides a useful example of bringing together the existing baseline and key priorities for the new Local Plan, highlighting gaps in evidence relevant to priorities for the plan. BNG is integral to the entire paper and key actions around environmental mapping and policy development is highlighted.

Another good example is [Lichfield Local Plan 2015](#) which includes a good BNG policy which requires development resulting in a loss to provide compensation that is at least 20% greater.

Engaging local stakeholders is also crucial in early plan making and we welcome the approach being taken to this by the Greater Cambridge Shared Partnership. Natural England may be able to assist with designated site knowledge, however it also important for the LPA to engage with the local community, Wildlife Trust, RSPB, local birdwatching groups etc. to understand what is important locally to the people who work, live and visit the area.

A partnership approach is considered the most effective way of delivering BNG. This includes an understanding of the view of local communities, residents, visitors and landowners, to help understand local aspirations and priorities.

Organisations working together via the Local Enterprise Partnership, the Combined Authority, the Local Nature Partnership or other biodiversity partnership can help to deliver BNG across larger spatial scales. We are aware that Greater Cambridgeshire Partnership is taking forward a partnership approach to the delivery of BNG in planning, which includes a leading role for the

³ CIRIA/IEMA/CIEEM Biodiversity Net Gain – Good practice principles for development (2016)
CIRIA/IEMA/CIEEM Biodiversity Net Gain: Good practice principles for development – a practical guide' 2019)
CIRIA/IEMA/CIEEM Biodiversity Net Gain: Good practice principles for development Gain – Case studies (2019)

⁴ Biodiversity and Portsmouth Background Paper. Portsmouth City Council, February 2019.

Local Nature Partnership. Mapping biodiversity and green infrastructure opportunity areas and analysing connectivity, ahead of selecting sites for development, will help identify where the biggest opportunities exist to maximise biodiversity gains when considering where to allocate areas of growth through the Local Plan.

Warwickshire County Council's approach to the Local Plan is underpinned by a robust evidence base using various data sets, including maps on grassland and woodland habitats. From here, they began to target where enhancement could be made and/or the connections between well-established existing habitats. The County Council formed a close working relationship with the Local Environmental Records Centre and neighbouring authorities to outline a programme of work to review and update data. More detail can be found [here](#).

At this early stage the Councils should consider:

- What biodiversity is at risk locally and whether the approach to BNG should be targeted on-site or off-site, and how this might work in practice to secure delivery;
- Consider and map the area's most important assets and their connectivity;
- Identify other relevant plans and strategies and cross reference these, for example the Cambridgeshire Green Infrastructure Strategy (Cambridgeshire Horizons, 2011) and Cambridgeshire Habitat Opportunity Mapping to identify opportunity areas, reducing the need for additional evidence mapping;
- Establish the best and least favourable areas for BNG underpinned by evidence;
- Undertake further evidence gathering where gaps occur or to provide further detail to inform options;
- Set out minimum requirements for BNG, bearing in mind the 'doubling nature' vision for Cambridgeshire is equivalent to 100% net gain;
- Consider the impact of the BNG approach on viability and the deliverability of emerging policies and allocations.

Natural England advocates the inclusion of a standalone BNG policy within Local Plans, and the inclusion of specific BNG requirements within site allocation policies. Ideally this should include a BNG % target, although local plan policy may simply outline the positive intention for BNG, noting that a mandatory requirement is likely to be at least 10%. The policy should also include a commitment to using a single, preferably the Defra 2.0 metric, to ensure consistency.

Policy requirements should be clear so that they can be accounted for down the line, ensuring costings are factored in and that BNG is deliverable indicating whether this will be secured through planning condition or S106 agreement. Further details can be set out in lower tier plans such as a Supplementary Planning Document (SPD).

Local Plans should include a commitment to monitor the BNG policy and approach including the quantified gains achieved by the policy and the recording of any losses.

A habitat banking approach could be taken for smaller developments.

The SA should include an objective around biodiversity and net gain that could be tested against all policies in the emerging draft plan

For larger sites allocations additional evidence including mapping of key areas and opportunities for BNG can be sought from the developer.

Longer term the Nature Recovery Network (NRN) will be a useful tool in the delivery of BNG. Net gain can contribute both towards the creation of new habitats and the enhancement of existing sites and habitats to develop a NRN, which is a key action in the Defra 25 Year Environment Plan.

Annex B: Natural England Further Advice on Local Plan Policies

Biodiversity and geodiversity

Designated sites

The Local Plan should set criteria based policies to recognise the hierarchy of designated biodiversity and geological sites and ensure their protection. Such policies should clearly distinguish between international, national and local sites⁵. Natural England advises that all relevant Sites of Special Scientific Interest (SSSIs), European sites (Special Areas of Conservation and Special Protect Areas) and Ramsar sites⁶ should be included on the proposals map for the area so they can be clearly identified in the context of proposed development allocations and policies for development. Designated sites should be protected and, where possible, enhanced.

The Local Plan should be screened under Regulation 105 of the Conservation of Habitats and Species Regulations 2017 (as amended) at an early stage so that outcomes of the assessment can inform key decision making on strategic options and development sites. It may be necessary to outline avoidance and/or mitigation measures at the plan level, which will usually need to be considered as part of an Appropriate Assessment, including a clear direction for project level HRA work to ensure no adverse effect on the integrity of internationally designated sites. It may also be necessary for plans to provide policies for strategic or cross boundary approaches, particularly in areas where designated sites cover more than one Local Planning Authority boundary.

The Plan should set out a strategic approach, planning positively for the creation, protection, enhancement and management of networks of biodiversity through all relevant development including housing, transport and community infrastructure. There should be consideration of geodiversity conservation in terms of any geological sites and features in the wider environment. The biodiversity policy and wider Plan preparation should apply the mitigation hierarchy and promote delivery of biodiversity net gain, in accordance with paragraphs 170 and 174 of the NPPF.

The existing ecological network including designated sites, priority habitats and other important green spaces should be mapped along with key areas for protection and delivery of strategic / landscape-scale enhancements. This will help in the development of a strategy to inform the appropriate location of site allocations and to identify opportunities for delivery of biodiversity and green infrastructure enhancement projects through the Plan's major development and biodiversity and green infrastructure policies.

Ideally the policy should include a requirement for proposals to be accompanied by a biodiversity survey, including an audit of gains and losses, based on the Defra 2.0 metric or very similar methodology. Developer's should also be required to consider Natural England's IRZs to ensure that potential direct and indirect impacts to designated sites, including recreational pressure, are appropriately assessed and that any adverse impacts can be satisfactorily mitigated.

The policy should seek to safeguard the value of previously developed land where it is of significant importance for biodiversity and/or geodiversity.

Priority habitats, ecological networks and priority and/or legally protected species populations

Priority habitats and species are those listed under Section 41 of the Natural Environment and Rural Communities Act, 2006 and UK Biodiversity Action Plan (UK BAP). Further information is available here: [Habitats and species of principal importance in England](#). Local Biodiversity Action Plans (LBAPs) identify the local action needed to deliver UK targets for habitats and species. They also identify targets for other habitats and species of local importance and can provide a useful blueprint for biodiversity enhancement in any particular area.

⁵ International sites include: Special Protection Areas (SPAs); Special Areas of Conservation (SACs) and Ramsar sites⁵. National sites include Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) Local sites include wildlife Sites or geological sites (a variety of terms are in use for local sites).

⁶ The following wildlife sites should also be given the same protection as European sites: potential SPAs, possible SACs, listed or proposed Ramsar sites and sites identified, or required, as compensatory measures for adverse effects on European sites

Protected species are those species protected under domestic or European law. Further information can be found here [Standing advice for protected species](#). Sites containing watercourses, old buildings, significant hedgerows and substantial trees are possible habitats for protected species.

Ecological networks are coherent systems of natural habitats organised across whole landscapes so as to maintain ecological functions. A key principle is to maintain connectivity - to enable free movement and dispersal of wildlife e.g. badger routes, river corridors for the migration of fish and staging posts for migratory birds. Local ecological networks will form a key part of the wider Nature Recovery Network proposed in the 25 Year Environment Plan. Where development is proposed, opportunities should be explored to contribute to the enhancement of ecological networks.

Planning positively for ecological networks will also contribute towards a strategic approach for the creation, protection, enhancement and management of green infrastructure, as identified in paragraph 171 of the NPPF.

Where a plan area contains irreplaceable habitats, such as ancient woodland, ancient and veteran trees, there should be appropriate policies to ensure their protection. Natural England and the Forestry Commission have produced [standing advice](#) on ancient woodland, ancient and veteran trees.

The policy should include a commitment to work with developers and Natural England to identify a strategic approach to great crested newt mitigation, where this is required, on major sites and other areas of key significance for this species.

Green Infrastructure

Green infrastructure refers to the living network of green spaces, water and other environmental features in both urban and rural areas. It is often used in an urban context to provide multiple benefits including space for recreation, access to nature, flood storage and urban cooling to support climate change mitigation, food production, wildlife habitats and health and well-being improvements provided by trees, rights of way, parks, gardens, road verges, allotments, cemeteries, woodlands, rivers and wetlands.

Green infrastructure is also relevant in a rural context, where it might additionally refer to the use of farmland, woodland, wetlands or other natural features to provide services such as flood protection, carbon storage or water purification.

A strategic approach for green infrastructure is required to ensure its protection and enhancement, as outlined in para 171 of the NPPF. Green Infrastructure should be incorporated into the plan as a strategic policy area, supported by appropriate detailed policies and proposals to ensure effective provision and delivery. Evidence of a strategic approach can be underpinned by Green Infrastructure Strategy. We encourage the provision of green infrastructure to be included as a specific policy in the Local Plan or alternatively integrated into relevant other policies, for example biodiversity, green space, flood risk, climate change, reflecting the multifunctional benefits of green infrastructure.

We advise the Council to prepare a map of the existing ecological network and opportunities for enhancement. An accompanying strategy should identify opportunities for delivery of biodiversity and green infrastructure enhancement projects through the Plan's major development and biodiversity and green infrastructure policies. The policy should make provision for appropriate quantity and quality of green space to meet identified local needs as outlined in paragraph 96 of the NPPF. Natural England's Cambridgeshire Accessible Greenspace Analysis (2010) may be of use when considering current level of provision whilst our [Accessible Natural Greenspace Standard \(ANGSt\)](#) offers useful guidance to developers.

Provision of sufficient quantity of high quality alternative natural greenspace is an important tool in mitigating the effects on recreational pressure associated with new housing development on more sensitive SSSIs. Our advice is that the level of provision should be proportionate to the scale of

development, for example 8ha /1000 population is advocated through the Suitable Alternative Natural Green Space (SANGS) [guidance](#).

The policy should promote Natural Cambridgeshire's Developing with Nature Toolkit to maximise opportunities within the design of the development to provide sufficient area of high quality multi-functional green infrastructure, including sustainable drainage (SuDS) to deliver net gain for biodiversity, landscape and accessible open space to meet people's recreational and health needs. Appropriately designed and managed green infrastructure can also provide significant climate change mitigation including urban cooling. Developers should be encouraged to follow Natural England's Accessible Natural Greenspace Guidance detailed in '[Nature Nearby](#)'.

Landscape

Natural England expects the Plan to include strategic policies to protect and enhance valued landscapes, as well criteria based policies to guide development.

Access and Rights of Way

Natural England advises that the Plan should include policies to ensure protection and enhancement of public rights of way and National Trails, as outlined in paragraph 98 of the NPPF. Recognition should be given to the value of rights of way and access to the natural environment in relation to health and wellbeing and links to the wider green infrastructure network. The plan should seek to link existing rights of way where possible, and provides for new access opportunities and avoid building on open space of public value as outlined in paragraph 97 of the NPPF.

Soils and agricultural land

The Local Plan should give appropriate weight to the roles performed by the area's soils. These should be valued as a finite multi-functional resource which underpins our wellbeing and prosperity. Decisions about development should take full account of the impact on soils, their intrinsic character and the sustainability of the many ecosystem services they deliver.

The plan should safeguard the long term capability of best and most versatile agricultural land (Grades 1, 2 and 3a in the Agricultural Land Classification) as a resource for the future in line with National Planning Policy Framework paragraph 170.

Air pollution

We would expect the plan to address the impacts of air quality on the natural environment. In particular, it should address the traffic impacts associated with new development, particularly where this impacts on European sites and SSSIs. The environmental assessment of the plan (SA and HRA) should also consider any detrimental impacts on the natural environment, and suggest appropriate avoidance or mitigation measures where applicable.

Natural England advises that one of the main issues which should be considered in the plan and the SA/HRA are proposals which are likely to generate additional nitrogen emissions as a result of increased traffic generation, which can be damaging to the natural environment.

The effects on local roads in the vicinity of any proposed development on nearby designated nature conservation sites (including increased traffic, construction of new roads, and upgrading of existing roads), and the impacts on vulnerable sites from air quality effects on the wider road network in the area (a greater distance away from the development) can be assessed using traffic projections and the 200m distance criterion followed by local Air Quality modelling where required. We consider that the designated sites at risk from *local impacts* are those within 200m of a road with increased traffic⁷, which feature habitats that are vulnerable to nitrogen deposition/acidification. [APIS](#) provides a searchable database and information on pollutants and their impacts on habitats and species.

⁷ The ecological effects of diffuse air pollution (2004) English Nature Research Report 580
Design Manual for Roads and Bridges Volume 11, Section 3 Part 1 (2007), Highways Agency

Tranquillity

The Local Plan should identify relevant areas of tranquillity and provide appropriate policy protection to such areas as identified in paragraph 100 and 180 of the NPPF. The CPRE have mapped areas of tranquillity which are available [here](#) and are a helpful source of evidence for the Local Plan and SA.

Flood and Water Management

Natural England expects the Local Plan to consider the strategic impacts on water quality and resources as outlined in paragraph 170 of the NPPF. We would also expect the plan to address flood risk management in line with the paragraphs 155-165 of the NPPF.

The Local Plan should be based on an up to date evidence base on the water environment and as such the relevant River Basin Management Plans should inform the development proposed in the Local Plan. These Plans (available [here](#)) implement the EU Water Framework Directive and outline the main issues for the water environment and the actions needed to tackle them. Local Planning Authorities must in exercising their functions, have regard to these plans.

The Local Plan should contain policies which protect habitats from water related impacts and where appropriate seek enhancement. Priority for enhancements should be focussed on European sites, SSSIs and local sites which contribute to a wider ecological network.

Plans should positively contribute to reducing flood risk by working with natural processes and where possible use Green Infrastructure policies and the provision of SUDs to achieve this.

A specific requirement for relevant development to be accompanied by a detailed hydrogeological assessment should be included.

Site allocations / assessment

Our advice is that site assessment methodology should be based upon a robust and credible consideration of deliverability, the suitability of the land to accommodate the proposed development, as well as the potential contribution towards sustainable development against potential suitable alternatives. Preference should be given to allocating sites on brownfield / previously developed land to protect BMV land, noting that these can support important biodiversity.

When assessing Site Allocations we recommend the use Natural England's [Impact Risk Zones](#), which are available for LPAs to download or through www.magic.gov.uk, to identify where development may have an impact on designated sites. Impacts and mitigation requirements should be identified through the SA. The delivery of mitigation measures will need to be secured through relevant Plan policies. Water resource / quality impacts and the effects of increased recreational pressure on SSSIs are likely to be key issues which need to be addressed for some of the settlements identified. The combined effects of proposed development will need to be considered where relevant.