



Greater Norwich Local Plan Partnership

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BY EMAIL ONLY

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Dear Sir or Madam

Planning consultation: Greater Norwich Local Plan 2045 Scoping Consultation

Thank you for your consultation on the above dated 17 August 2026 which was received by Natural England on the same date.

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 welcome the opportunity to offer our advice at this early stage of the Local Plan process. We would be happy to discuss any of the ideas within this letter further.

Natural England notes that your Local Plan is progressing ahead of the relevant Spatial Development Strategy (SDS) and our current advice reflect this. We would also encourage your Authority to consider the implications of other plans or strategies which may be relevant to your area, including those covering national or regional priorities for development and infrastructure.

The Importance of Nature

Natural England's Strategy¹ recognises that nature plays a vital role as the foundation of economic growth, and its degradation, both globally and locally, can disrupt food, water, health² and supply chains. Therefore, any threats to the natural environment also threaten other systems vital to our communities. Climate change is a profound threat to nature and people.

As the government's adviser on the natural environment, climate change is central to Natural England's work. The natural environment is experiencing the impacts of climate change and needs to recover, adapt to change and build resilience. When delivering the homes, jobs and infrastructure that we need for economic growth, we must collectively ensure that we embed nature into the heart of development from the outset to safeguard those ecosystems that underpin our collective security and prosperity. Sustainable development can and should contribute to net zero through supporting nature recovery and climate change mitigation and adaptation, helping both nature and people adapt, through Nature-based Solutions (NbS).

We advise that, in line with the National Planning Policy Framework (NPPF) (August 2026), local plans should provide for new development, and improvement of the environment, in a way which promotes a sustainable pattern of growth and seeks to mitigate climate change and adapt to its effects (S1).

¹ [Natural England's Strategy: Recovering Nature for Growth, Health and Security - GOV.UK](#)

² [NEER030 A narrative review of reviews of nature exposure and human health and well-being in the UK - NEER030](#)

In addition, of the three local authorities which make up the Greater Norwich Local Plan area, Norwich City Council and Broadland District Council have each declared a climate emergency, and produced an accompanying programme or plan of actions to help address this. We advise that, along with the Norfolk Local Nature Recovery Strategy ([LNRS](#)), these are considered at every stage of the Plan making process to ensure biodiversity and nature is protected and enhanced by policies.

The Plan should also define health inequalities and highlight how equitable access to green and blue space can reduce health inequalities. [The World Health Organization \(WHO\)](#) definition of health inequalities (or inequities) can be used which defines them as unfair, systematic, and avoidable differences in health status, life expectancy, and access to care between population groups. You may find the following reports useful in helping with this: [Improving access to greenspace: 2020 review](#) (Chapter 3) and [Public Health England - Healthy Places - GOV.UK](#).

By supporting nature recovery and climate change mitigation and adaptation, other challenges, such as flooding, mental and physical well-being and maintaining a healthy economy, will also be addressed.

The Plan Vision

Natural England advises that the Plan's vision and development strategy should address impacts on, and opportunities for, the natural environment and set out the ambition to improve the environment with specific reference to issues of local importance. The Plan should take a strategic approach to secure positive outcomes both for growth and the protection and enhancement of the natural environment, and include this within the vision's measurable outcomes. This includes providing a net gain for biodiversity, delivering green infrastructure, and considering opportunities to enhance and improve connectivity for nature and for people.

The priorities for the vision should include how the plan will protect and enhance the natural geodiverse and historic environment and plan for climate change mitigation and adaptation, with specific reference to the local area. This should include:

- utilising the Norfolk Local Nature Recovery Strategy to direct the potential areas for enhancement and align the local priorities for nature
- considering opportunities to enhance and improve habitat connectivity and providing net environmental gains for the environment
- improve access to nature as part of delivering health and wellbeing, including implementing green and blue infrastructure standards.
- conserving and enhancing the natural beauty of Protected Landscapes adjacent to the Plan area.

The vision should reflect other plans and strategies as appropriate such as the Biodiversity Action Plan, Norfolk Local Nature Recovery Strategy (LNRS), the Greater Norwich Green Infrastructure Strategy (April 2025), Norfolk County Council Local Transport Plan, the Greater Norwich Local Cycling and Walking Infrastructure Plan, the Broads Management Plan, and water resource management plans.

Regarding the Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, in the 'Opportunities' column we recommend adding the Greater Norwich Green Infrastructure Strategy and the Norfolk LNRS. These strategies are opportunities to deliver, safeguard and increase biodiversity and green infrastructure, which underpin and support many of the strengths listed, and can be used to address some of the issues listed under 'Weaknesses'. See below for further details about the benefits of good green infrastructure further on in our response.

Natural England advises that the [nutrient pollution](#) of Norfolk's internationally important rivers and broads, which support nature, people and the local economies, is a significant threat, rather than nutrient neutrality itself. Nutrient neutrality is a strategic mitigation measure to address this pollution issue, which occurs throughout much of the Local Plan area.

Recreational disturbance, arising from both existing and planned growth, is a threat to many important designated wildlife sites, which are valued by residents and visitors alike, and which make a significant contribution to Norfolk's economy. We suggest that recreational disturbance is added to the list of threats.

Similarly, biodiversity loss, which threatens the Plan area's rich environmental assets, and its agricultural, food and tourism sectors should also be added.

Green Infrastructure

Well-designed green (and blue) infrastructure (GI) are essential and critical assets which can deliver multiple functions including:

- improving people's mental and physical health
- supporting local community and social engagement
- enhancing nature and biodiversity
- encouraging active travel
- cooling urban areas during heat waves
- attracting financial investment by increasing the attractiveness of local areas
- reducing water run-off during flash flooding
- storing carbon
- providing sustainable drainage
- contribute to place-making

Specific Local Plan Issues

The table below sets out Natural England's advice on specific Local Plan issues. More detailed advice on these, and other Local Plan issues, can be found in Annex A and Annex B.

Table 1: Natural England's advice on specific Local Plan issues

Comment reference	NE comment	Further advice found in Annex A
1	Natural England advises that the use of NbS is embedded throughout the Local Plan. Developers should be strongly encouraged to contribute to, and deliver, NbS to address a range of issues, including climate change and flood risk.	1d , 2a , 2f , 3
2	We advise that site allocations, and other policies, are carefully considered to avoid impacts on areas of the highest ecological value. Where impacts can't be avoided, and mitigation is required, we strongly encourage you to set out as much detail as possible in the site allocations. For example, the quantity and quality of greenspace required. This should also include reference to the LNRS to ensure alignment with this.	1a,1b,1c , 2b,2c,2d,2e
3	Natural England advises the use of Shared Standards for Water Efficiency in Local Plans . This involves more stringent water efficiency standards for new builds, and water saving measures for non-domestic buildings.	2f
4	Good access to high-quality greenspace, and active travel infrastructure, greatly improves the health and wellbeing of residents, as well as providing greater connectivity for species and habitats. Natural England advise you refer to the Greater Norwich Green Infrastructure Strategy 2025 and Greater Norwich Green Infrastructure Strategy - Strategic Delivery Plan to ensure that there is a strategic approach to guiding GI in the Plan area alongside growth. We advise that your Local Plan has a robust GI policy to ensure good provision across the Plan	1d,1e,1f

	area. The Plan, as a whole, should work to deliver well designed GI aligned with the above GI strategy and to our Green Infrastructure Framework (GIF) , that delivers multiple additional benefits such as supporting nature to recover and thrive while also providing nature connections that benefit physical and mental health and wellbeing. It also provides wider benefits such as improving water management and helping to create places that are more resilient and adaptive to climate change.	
5	We note that your authority has an existing strategic solution for recreational disturbance, namely the Norfolk Green Infrastructure and Recreational Avoidance Mitigation Strategy (GIRAMS). Nutrient Neutrality is another strategic solution which requires nutrient budget calculators and a mitigation strategy where required. We advise that both of these strategic solutions are carried forward to the new Local Plan and are considered within the Habitats Regulations Assessment.	1a,2d
6	Natural England advises that your Local Plan includes policies detailing requirements for developments in relation to the Norfolk LNRS and Biodiversity Net Gain. The Plan should be ambitious in delivering its aims. LNRSs will provide valuable evidence for developing policies, and local planning authorities must take account of LNRSs in the Plan making process.	2b
7	Your Local Plan should include policies that ensure the protection of designated biodiversity and geological sites, designated landscapes and the area's soils.	2c,2d,2e,2g
8	You may find it helpful to carry out air quality monitoring to provide a baseline for the new Local Plan. This would include ammonia and nitrogen oxides for traffic impacts. We have produced standard advice to help local authorities when preparing Local Plans. As such, we no longer provide bespoke advice on air quality. The advice is provided in Annex B and should be taken as Natural England's formal representation on air quality matters and should inform the preparation of the Local Plan, including any Habitats Regulations Assessment and supporting evidence base.	Annex B

Evidence for the Local Plan

The table below sets out evidence that Natural England would expect to see underpinning policy decisions, with further advice provided in Annex A where relevant.

Table 2: Evidence required to underpin policy decisions in the Local Plan

Comment reference	NE comment	Further advice found in Annex A
A	In addition to using the Greater Norwich Green Infrastructure Strategy 2025 which allows for joined up delivery of GI across the Plan area, we advise the use of the Natural England GI mapping tool to provide spatial evidence for GI mapping. This evidence base can then inform site allocations and policy implementation. Embedding this tool in policy will enable spatial prioritisation, ensuring GI delivery addresses health inequalities and biodiversity needs.	1d
B	Natural England would expect to see evidence throughout the Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment to support site allocations and show	1a,2b,2c,2d,2e,

	how areas of high environmental value have been avoided. The Norfolk Local Nature Recovery Strategy can support this by identifying areas of particular importance for biodiversity.	
C	A water cycle study/ integrated water management plan should be carried out as early as possible in the Plan making process. This can act as a key evidence base to inform site allocations.	2f
D	We advise that key landscape features, attributes and sensitivities are identified through: • National Character Area Profiles • County Landscape Character Assessments • District Landscape Character Assessments • Neighbour Landscape Character Assessments You should also consult the National Landscape Management Plan for the Broads (Broads Plan 2022 - 2027).	2c

Other Advice

We welcome the opportunity to comment on the Local Plan at this early stage. We are interested in engaging further with the Local Plan process through workshops, meetings and other consultations.

If you have any queries relating to the advice in this letter, please contact me louise.oliver@naturalengland.org.uk.

Yours faithfully

Louise Oliver
Higher Officer - Sustainable Development
Norfolk and Suffolk

Annex A – Detailed Local Plan Advice

The advice in this annex is set out in the following structure

1. **Homes and Communities** Page 7
 - a. Allocations of Sites
 - b. Development of Brownfield Sites
 - c. New Settlement
 - d. Green Infrastructure (GI)
 - e. Connecting People with Nature
 - f. Other Infrastructure

2. **Environment and Climate** Page 10

This includes comment on:

 - a. Climate Change Mitigation
 - b. Local Nature Recovery Strategy
 - c. Landscape
 - d. Designated Sites
 - e. Soils
 - f. Water Quality and Resources and Flood Risk Management
 - g. Conserving and Enhancing Habitats and Species

3. **Economy** Page 17
 - a. Tourism
 - b. Agriculture
 - c. Cost of Climate Change

1. Homes and Communities

a. Allocations of Sites

In accordance with policy N1 of the NPPF, we advise that the Plan should allocate land with the least environmental or amenity value. Natural England expects sufficient evidence to be provided, through the supporting documents such as the Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA), to justify the site selection process and to ensure sites of least environmental value are selected. For example, land allocations should avoid designated sites and landscapes, and significant areas of best and most versatile agricultural land; and should consider the direct and indirect effects of development, including on land outside designated boundaries and within the setting of protected landscapes.

Agricultural Land Classification (ALC) Maps

To assist in understanding agricultural land quality within the Plan area, strategic scale Agricultural Land Classification (ALC) Maps are available, in particular, the newly published [Predictive Agricultural Land Classification Map](#) which is also available on [MAGIC](#). Natural England advises that you should ensure that sufficient site specific ALC survey data is available to inform decision making. For example, where no reliable or sufficiently detailed information is available, it would be reasonable to expect developers to commission a new ALC survey, for any sites they wish to put forward for consideration in the Local Plan.

Norfolk Local Nature Recovery Strategy (LNRS)

The Norfolk [LNRS](#) provides a key source of evidence for identifying potential areas of importance for biodiversity and the connectivity of ecological corridors to help shape where development might be most appropriate and deliver more for nature.

The plan should utilise appropriate evidence, including the LNRS, mapped environmental data (e.g. [MAGIC.gov.uk](#)), to identify guide sites for allocation to areas of least environmental value.

Norfolk Green Infrastructure and Recreational Disturbance Avoidance and Mitigation Strategy (GIRAMS)

Any allocations within your Local Plan should also take account of the Norfolk Green Infrastructure and Recreational Disturbance Avoidance and Mitigation Strategy (GIRAMS) zone of influence. Allocations within this zone should specify the measures required to mitigate for the impacts, alone and in combination, of recreational disturbance as a result of an increased population. For example, the quantity of on-site greenspace to be provided, safe provision for dog walkers, and connections to public rights of way that should be secured. You may also wish to explore, through the Plan preparation process, the possibility of more strategic provision of Suitable Alternative Natural Greenspace (SANG) to mitigate for the increase in housing to be delivered through the Local Plan. (Increased recreational disturbance to designated sites could also be included under Threats in your SWOT Analysis). Natural England welcomes the opportunity to be involved in designing such areas of greenspace. Please also see our advice on GI below.

b. Development on Brownfield Sites

The NPPF outlines that efficient use of land should be made by accommodating, as much as possible, development required in the area on previously developed land. Natural England recognises the opportunities that brownfield sites can provide for new development. However, some brownfield sites are important for wildlife and are of high environmental value, particularly invertebrate diversity. We advise that such brownfield sites of high environmental value have policy protection within the Local Plan. Further guidance can be found in the Planning Practice Guidance³.

³ <https://www.gov.uk/guidance/natural-environment#agricultural-land-soil-and-brownfield-land-of-environmental-value>

c. New Settlements

While we do not offer comment on whether, or not, new settlements would be appropriate, we recognise the potential opportunities that new settlements would offer. For example, they have the potential to be exemplars in restoring nature and embedding it into development, making the greatest positive impact for the environment, local communities and sustainable development. They do also present significant challenges through the scale of their impact. For example, air pollution as a result of increased traffic would be a significant concern. We refer you to our standard advice for air quality impacts for Local Plans, which is enclosed in Annex B, and also includes policy advice. Should your authority choose to go down this route, Natural England would be keen to be involved in any and all master planning stages.

d. Green Infrastructure (GI)

Green infrastructure (GI) refers to the living network of multi-functional nature-rich green and blue spaces in both urban and rural areas. It can include parks, green spaces, rivers and canals, sustainable drainage systems, wildlife habitats, trees and woodlands. The Local Plan should include policies and allocations that enable the creation of well-designed multi-functional GI that can deliver nature recovery and creates accessible green spaces, helping achieve the associated benefits for physical and mental health & wellbeing, water management, helping to create places that are resilient and adaptive to climate change.

Natural England has committed in our Strategy to embed nature into the heart of development, to help create nature-rich places for people to live and work in. We believe that all development should include well-designed GI that delivers multiple additional benefits such as supporting nature to recover and thrive while also providing nature connections that benefit physical and mental health and wellbeing. It also provides wider benefits such as improving water management and helping to create places that are more resilient and adaptive to climate change.

The [Greater Norwich Green Infrastructure Strategy 2025](#) should be used to support Local Plan policies, site allocations and local design codes. In addition, Natural England advises that all GI is designed and delivered in alignment with Natural England's [Green Infrastructure Framework](#) (GIF). The GIF provides clear guidance to aid local authorities and developers in embedding GI into local planning policy and new development, with a view of further integrating the Lawton Principle of bigger, better and more connected ecological networks. The GIF sets out five GI standards, these are:

- GI Strategy
- Accessible Greenspace
- Urban Nature Recovery
- Urban Greening Factor
- Urban Tree Canopy

Application of these standards, and in particular the Accessible Greenspace standard, can help in setting requirements to meet the [Environmental Improvement Plan](#) commitment that everyone should live within 15 minutes' walk of a green or blue space. demonstrating it meets criteria set out within [Access to green and blue space in England - GOV.UK](#). You can use the Green and Blue Infrastructure Asset Maps layer within the [Green Infrastructure Map](#) to help with this.

The GIF can help your authority in preparing a GI evidence base that can support Local Plan policies, site allocations and local design codes. We strongly advise your authority refers to the specific guidance for plan-makers provided in [Green Infrastructure Framework Process Guide for Local Planning Authorities](#). This provides a step-by-step best practice process for developing a GI strategy and integrating GI policies into Local Plans. Embedding the GI Standards in policy will ensure consistency with national best practice and help developers understand what constitutes high-quality GI provision.

The Plan should make provision for appropriate quantity and quality of green space to meet identified local needs as outlined in policy HC1 and HC2 of the NPPF. Natural England

highlights the importance of using spatial evidence to guide GI planning. We recommend the use of [Natural England's Green Infrastructure Mapping Tool](#) during Local Plan preparation to:

- Identify areas of deprivation and poorer health outcomes,
- Highlight locations where GI provision would deliver the greatest benefits for communities and biodiversity,
- Support strategic planning for multifunctional GI networks.

This evidence base can then inform site allocations and policy implementation, ensuring developers understand priority areas for GI delivery and can maximise benefits for nature and people. We also recommend that the GI mapping tool should be referred to within policy itself so that developers are aware of, and can use, the tool themselves if they wish. Embedding this tool in policy will enable spatial prioritisation, ensuring GI delivery addresses health inequalities and biodiversity needs.

We strongly support the provision of GI to be included as a specific policy in the Local Plan or alternatively integrated into relevant other policies, for example: critical infrastructure, housing and communities, biodiversity, green space, flood risk, and climate change, reflecting the multifunctional benefits of GI. In addition, we support the requirement for GI measures to be included in individual site allocations, where appropriate, including enhanced green infrastructure, including Suitable Alternative Natural Greenspace, and in accordance with [Greater Norwich Green Infrastructure Strategy 2025](#), and our GIF standards.

e. *Connecting People with Nature*

In addition to the nature, growth and security benefits, embedding nature as a key consideration from the outset in place making (including through new development) also benefits people's health and wellbeing by improving their access to and connection with nature. Various studies have shown how green and blue spaces can improve health and wellbeing and we recommend that you refer to [NEER030 A narrative review of reviews of nature exposure and human health and well-being in the UK - NEER030](#) when developing your Plan.

We advise that you should seek to increase population access to more, and a variety of safe, inclusive and accessible, green and blue spaces. For example, through parks, allotments and community gardens as well as greenspace designed into new development. Such provisions should be aligned with the Norfolk LNRS priorities and measures where possible to also maximise the benefits to nature. This approach can result in multiple benefits by providing high quality wildlife habitats, improving air quality, reducing flood risk, providing public spaces which are adaptive to climate change (mitigating the heat island effect), encouraging sustainable food systems, promoting physical activity and healthy weight/eating, improving mental health and providing opportunities for social connection, and therefore improving community cohesion and social capital (see p71 of the [Natural England Green Infrastructure Planning and Design Guide 2023](#)). This is also recognised within the NPPF (HC1 & HC2).

We also refer you to the [People and Nature Survey Evidence from Natural England](#) which gathers evidence and trend data about people's access, understanding and enjoyment of nature and how it contributes to wellbeing. There is also the [Healthy Outdoors: A guide for measuring health outcomes when evaluating outdoor interventions](#) and [The Nature Connection Handbook](#) to show how outdoor interventions can positively impact human health and wellbeing.

Natural England advises that the Plan should include policies to ensure protection and enhancement of public rights of way and National Trails. 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. Site specific policies in the Local Plan should seek to link new development to existing rights of way where possible and provide for new access opportunities where appropriate.

f. Other Infrastructure

Travel Routes

The Plan should also seek to increase the provision of GI which encourages good health through active travel, through for example, pedestrian and cycle routes, as set out in policy TR1 of the NPPF. In terms of the spatial approach to identifying potential improvements, we advise that you consider the improvement of existing, and creation of new, road, rail, cycling and pedestrian routes, alongside the opportunities to provide habitat connectivity corridors for nature (aligned with the Norfolk LNRS mapping where possible). This could include green crossings to minimise fragmentation of habitats (and communities) by transport infrastructure. Such an approach can provide multiple benefits to people and nature by improving health and wellbeing through encouraging physical activity and connection with nature, reducing noise and air pollution, reducing carbon emissions and enabling species and people to move between patches of habitat. We advise that your existing Greater Norwich and the County-wide Local Cycling and Walking Infrastructure Plans provide a good starting point for considering how nature connectivity could be aligned with your active travel aspirations. You could use the Linear Access Network layer within the Natural England [Green Infrastructure Map](#) and page 75 of the [Natural England Green Infrastructure Planning and Design Guide 2023](#) to help guide this.

Trees

Trees also make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change (N3 of NPPF). Within our Treescapes work (formerly Tree Action Plan Delivery (TAP-D)), Natural England seeks to enable nature-positive woodland creation and agroforestry whilst protecting high-value open habitats across England. Through this work we support land managers to establish the right trees in the right places, aligned with LNRS measures wherever possible, to enhance landscapes and help wildlife and people thrive. We would be keen to discuss how we might help you strategically deliver woodland and other woody habitats (wood pasture and parkland, traditional orchards, wet woodland, trees outside woodland etc.) through your Local Plan work as it develops.

2. Environment and Climate

a. Climate Change Mitigation and Adaptation

As highlighted above, Natural England recognises the interconnectedness of nature recovery and climate change mitigation and adaptation. Heatwaves and flooding are becoming more frequent and more severe in our changing climate, with impacts often disproportionately affecting deprived communities and vulnerable people such as the young and old. You should therefore consider how your Local Plan policies can require and/or encourage Nature-based Solutions (NbS) within new development to address these threats e.g. tree planting and other GI to cool built areas in the summer and provide shade, Sustainable Drainage Systems to reduce flood risk etc.

We advise that your Local Plan should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. In addition, factors which may exacerbate climate change (through more greenhouse gases) should be avoided (e.g. pollution, habitat fragmentation, loss of biodiversity) and the natural environment's resilience to change should be protected. Policies should support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure (NPPF policy CC1).

Nature-based Solutions (NbS), such as GI, and resilient ecological networks play an important role in aiding climate change adaptation. NbS are defined by the [International Union for Conservation of Nature](#)⁴ as “*Actions to protect, sustainably manage and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits*”. Examples of NbS for climate change adaptation include: biodiversity-rich approaches to green infrastructure, urban cooling, Natural Flood

⁴ Cohen-Shacham, E., Walters, G., Janzen, C., and Maginnis, S. (eds.) (2016). Nature-based Solutions to address global societal challenges. Gland, Switzerland: IUCN

Management, reducing drought risk, re-naturalising watercourses, and managed coastal realignment.

NbS can contribute to reducing net greenhouse gas emissions as part of the government's wider strategy for achieving net zero by 2050. Key principles for carbon storage and sequestration by habitats are:

- Protect and restore peatlands
- Create new native broadleaved woodlands
- Protect and restore natural coastal processes
- Protect existing semi-natural habitats
- Target incentives for NbS to places where they can have most benefit
- Integrate NbS for climate into landscapes which are primarily devoted to agriculture or production forestry
- Ensure mitigation and adaptation to climate change are planned together.

Please see [Natural England's Carbon Storage and Sequestration by Habitat](#) report for further details.

Natural England's Climate Change Adaptation Manual provides further details on adaptation NbS e.g. in the [green infrastructure section](#). It is important that any measures should not compromise any specific mitigation requirements under the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations), nor conflict with other objectives (compromise landscape character for example). Further guidance can be found in the [Natural Environment Planning Policy Guidance](#).

As part of your consideration of flood risk and NbS which can help mitigate these risks, we recommend that you consider the 'Nature-based Solutions (Water)' layer within the Norfolk LNRS which identifies habitat creation and restoration measures in specific locations which can guide such solutions.

b. Local Nature Recovery Strategy

The Norfolk [LNRS](#) maps nature recovery actions. It identifies opportunities and priorities for nature restoration in locations where they are most needed and where they provide the best environmental outcomes.

Local planning authorities are legally required to "take account" of the Local Nature Recovery Strategy when preparing Local Plans and we therefore advise that the Norfolk LNRS is embedded throughout plan preparation, site selection and policy development. Consideration should be given to how LNRS priorities, mapped and unmapped measures are reflected in the Plan, including the extent of safeguarding that may be appropriate and opportunities for development to contribute to nature recovery.

Through the *Areas that Could Become Important for Biodiversity* (ACB) data layer within the [Norfolk Local Habitat Map](#) the Norfolk LNRS has developed an ecological network built around the 'Lawton principles'⁵ of more, bigger, better and more joined up habitats to provide a framework for nature recovery across Norfolk. This can therefore help your authority meet the NPPF requirement in policy N1 to identify opportunities for creating and enhancing resilient ecological networks.

Additionally, we advise that you should consider how best to safeguard areas mapped and identified within the LNRS through your Local Plan, as advised within the [Natural Environment PPG](#) (paragraph 046). This will enable the proposed nature recovery network and measures in the LNRS to be delivered and not undermined. It should be noted that development sites proposed through Local Plans provide opportunities to help deliver the priorities identified in the LNRS. This could be done, for example, by creating and enhancing habitats in and around development sites in

⁵ <https://webarchive.nationalarchives.gov.uk/ukgwa/20130402151656/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf>

line with the LNRS measures and providing and/or maintaining connectivity through the sites into the wider nature recovery network.

Once you have a set of site allocations that you consider adequately safeguard the ecological network (existing and potential) within your Plan area, we advise that you screen each site allocation against the nature recovery measures within the Norfolk LNRS to identify the extent to which each could help deliver these measures in and around the red line boundaries. The Norfolk LNRS maps measures within allocated development sites where these overlap across the county. This presents an excellent opportunity for developers to use those measures to create nature-rich developments which align with Norfolk's habitats and species priorities, maximising the benefits for nature and people. Identifying these opportunities at the earliest possible stage in site planning can maximise the integration of built development and nature recovery throughout your Plan area.

Beyond the legal duty to 'have regard' to the LNRS which all public bodies (including Natural England) have, as fellow members of the Norfolk and Suffolk Nature Recovery Partnerships, we are keen to work with you to drive forward actions which deliver LNRS priorities and measures in your Plan area, through the Local Plan/development but also in your wider council functions.

c. Landscape

The NPPF expects Local Plans to safeguard and enhance the landscape by setting out the hierarchy of international, national and locally designated landscapes and areas of importance for their landscape value in the plan area. In identifying landscapes of importance in the plan area, Natural England recommend the use of robust methodologies that can be applied consistently across administrative boundaries and draw on appropriate and up to date landscape evidence and assessment methods.

Landscape Character Assessments (LCA) should be used to provide an evidence base to underpin policies of the Local Plan relating to the wider landscape, as well as Protected Landscapes and Heritage Coasts (see: [An Approach to Landscape Character Assessment](#)). LCAs set out what is distinctive and special about a place and describe variations in landscape character and condition, helping inform the understanding of the character of an area in place-making. They can help conserve and enhance the landscape whilst also guiding and managing change and should be aligned with Natural England's [National Character Areas](#). LCA and Landscape Sensitivity Assessments (see: [An approach to landscape sensitivity assessment – to inform spatial planning and land management](#)) can also be part of the evidence base necessary to identify land of 'least environmental value' that should be the focus for development allocations.

In setting Local Plan policy for landscape at a plan-wide, area or site-specific level, the NPPF states that, wherever possible, development should identify opportunities to conserve and enhance the landscape character and the natural beauty of the countryside. This should include consideration of existing landscape features of visual, historic or nature conservation value (such as established trees and hedgerows) including tranquillity and dark skies. This will help create well-designed places that integrate development into its landscape setting and contribute to multi-functional Green Infrastructure networks. The identification and protection of landscape features in the Local Plan should be informed by assessment as part of the evidence base or set as a requirement for development on allocated sites where necessary. Local Plan allocation policies could draw on the Strategic Environmental Assessment to identify mitigation and avoidance measures.

National decision-making policies set out how development proposals should limit artificial light impacts on 'intrinsically dark landscapes' and, where justified, Local Plans could identify such areas in their plans.

Where the plan-area includes or adjoins a Protected Landscape, the Local Planning Authority has an [active duty to 'seek to further'](#) the statutory purposes of Protected Landscapes in Local Plan preparation (as set out in Section 245 of the Levelling-up and Regeneration Act 2023). The duty also applies to development management and extends to development and allocations outside designated areas where natural beauty, special qualities or setting may be affected. Accordingly, the spatial strategy, site allocations and development policies should demonstrate how the Greater

Norwich Local Plan Partnership has sought to further the statutory purposes of the Protected Landscape.

The NPPF is clear that substantial weight is placed on the importance of conserving and enhancing the natural beauty of Protected Landscapes, and major development should be refused in these areas other than in exceptional circumstances. The Local Plan should define what type of development would represent 'major development' in a Protected Landscape, including considerations of the nature, scale and setting of the proposal and if this would have a significant adverse impact on the statutory purpose for which the area is designated. Site allocations should otherwise be limited in scale and extent within Protected Landscapes.

Policy should guide any development within or affecting a Protected Landscape to meet the highest standards of design and environmental quality and seek opportunities to enhance the landscape and improve access to nature, where possible. Consideration should be given to the impact of development in the setting of Protected Landscapes as well as impacts within their boundaries, particularly where development has the potential to harm the natural beauty, special qualities and key characteristics of the Protected Landscape. Natural beauty may include landscape and scenic quality as well as culture heritage features, as set out in [Areas of outstanding natural beauty \(AONBs\): designation and management](#).

The Broads, which is a member of the National Park family, and a Protected Landscape, adjoins the Greater Norwich Local Plan area to the east, including a section which lies less than 2 km from Norwich city centre. We advise that you take into account the Management Plan for the Broads and seek the views of the Broads Authority. Development proposals brought forward through the Plan should avoid significant impacts on Protected Landscapes, and their settings. We recommend that the vision, objectives and policies in Local Plans reflect the need to conserve and enhance the natural beauty of the Broads adjacent to the Plan area, and as set in the NPPF, be informed by its Management Plan.

d. Designated Sites/Habitats Regulations Assessment

The Local Plan must map any areas of particular importance for biodiversity, so they can be clearly identified in the context of proposed development allocations and policies for development. This covers sites of:

- international importance (Special Areas of Conservation, Possible Special Areas of Conservation, Special Protection Areas, Potential Special Protection Areas and listed or proposed Ramsar Sites), and as defined as Habitats Sites in the NPPF glossary that includes Marine Sites, and compensatory habitats which relate to these sites.
- national importance (Sites of Special Scientific Interest, Marine Conservation Zones)
- local importance (Local Nature Reserves or local wildlife site, local geological sites or equivalent).

National Decision-Making Policies set the relative levels of protection for these types of sites. However, the Local Plan could include locally specific policy on these sites where justified. This could include policies relating to specific designated sites taking into account mitigation of potential impacts of development and/or where a strategic solution may be required.

Individual site allocation policies should also reflect these designations where relevant in the criteria covering delivery of development. This could include the expectation of delivering towards strategic solutions for impacts on international sites and measures to mitigate, enhance or create new habitat areas.

Although work may not have commenced on the Habitats Regulations Assessment (HRA), and specifically, screening the Local Plan under Regulation 105 of the Conservation of Habitats and Species Regulations 2017 (as amended) it is important to consider as early possible its likely effects on the integrity of internationally designated sites. This can help ensure this is considered in the choice of site allocations to avoid effects as well as any measures needed to mitigate potential

effects at a plan level. It may also be necessary to consider the need for cross-boundary cooperation with neighbouring plan areas, where impacts on sites may be cross-boundary.

In particular, the plan level HRA should consider the impact of increased recreation as a result of development proposed through the Local Plan and if this can be adequately mitigated through the Norfolk GIRAMS. The evidence base underpinning the current GIRAMS should be reviewed to establish if the identified mitigation measures and developer contribution is sufficient to mitigate the additional housing growth proposed in combination with other plans and projects.

Consideration of nutrient impacts as a result of new overnight development in the River Wensum Special Area of Conservation (SAC) and The Broads SAC Nutrient Neutrality catchments, and how these will be mitigated, will also be required.

Other key topics and pathways to consider may include water quality, air quality and functionally linked land. The in-combination assessment should factor in large scale development proposals and infrastructure projects.

Natural England welcomes early discussion on the HRA of the Plan and can offer further advice as policy options are progressed.

In preparing the Local Plan consideration should be given to how it can help the local authority meet the [Biodiversity Duty](#), as set out in the Environment Act 2021. As part of this duty, all public authorities are expected to consider how Local Nature Recovery Strategies (LNRS), Species Conservation Strategies and Protected Site strategies might impact or influence the Plan.

Details of designated habitats site will be included in the local [LNRS](#), where they are referred to as 'areas of particular importance for biodiversity'. Data layers for international and national sites can also be on magic.gov.uk and details of designations at <https://designatedsites.naturalengland.org.uk/>.

The Local Plan should be underpinned by up-to-date environmental evidence. This should include an assessment of existing and potential components of local ecological networks. This assessment should inform the SEA, ensure that land of least environment value is chosen for development, and that the mitigation hierarchy is followed and inform opportunities for enhancement as well as development requirements for particular sites.

As well as considering the sites of international, national and local importance for nature when preparing your new Local Plan, you should also consider how these can be used as the framework of core sites around which to create a wider nature recovery network throughout the Plan area. Such a network should improve habitat quality, expand habitat size, create more new habitat and connect these through the landscape for the benefit of multiple species and people. As the county-wide strategy that has been developed collaboratively with partners to agree local priorities for nature recovery and propose measures in those locations where they would have most benefit, the Norfolk LNRS should be a key evidence document within the natural environment section of the Plan to guide this. Your authority has played a key role in the development of the Norfolk LNRS as a Supporting Authority in the process. In addition to helping guide habitat restoration as stated in the consultation document, the LNRS should also help you identify where new habitats can be created in your Plan area. Within any monitoring of natural environment policy effectiveness, we advise that it would be useful to record the number of hectares of habitat created and/or restored, in line with Norfolk LNRS measures, through development in the Plan area.

The Plan should consider any impacts to Habitats Sites as early as possible in the development of the Plan and continue throughout the plan-making process. This is an iterative process that should be revisited as further information, details of the plan and policies are established. Natural England would welcome early discussion on the HRA of the plan and can offer further advice as policy options are progressed.

e. Soils

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, prosperity and food security. Decisions about development and the location of any site allocations should take full account of the impact on soils, their intrinsic character, the sustainability of the many ecosystem services they deliver and the habitats they support, their role as carbon stores (especially peat soils) as well as their agricultural value.

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, utilising areas of poorer quality land as preference when identifying sites for development.

The plan should also recognise that healthy soils are not only important for agriculture, but soils with high environmental value (e.g. wetland carbon stores such as peatland and low nutrient soils) are also important to ecological connectivity. The Local Plan should consider how to protect the soil resource through policies in the plan to help protect the most valuable soils and ensure that where development comes forward soil is managed on site in a sustainable way. This should be supported by suitable evidence, such as soil surveys, area or site-specific policies could set policy to require further survey and to protect and manage the soil resource on development sites.

Evidence sources for agricultural land include the [Predictive Agricultural Land Classification \(ALC\) Map for England](#), and available on MAGIC maps. The extent of peat soils can be found on the England Peat Map, both of these maps are strategic and indicative and can support plan-making as a guide for allocations, although further survey will be necessary to understand the actual soil classification and presence of peat on a site. The LNRS may also include details of important soil habitats.

f. Water Quality and Resources and Flood Risk Management

Natural England expects the Plan to consider the strategic impacts on water quality and resources as outlined in policies CC1 and W1 of the NPPF. We would also expect the plan to address flood risk management in line with the policies F1 and F2 of the NPPF.

The Local Plan should be based on an up-to-date evidence base on the water environment, aligning with other plans or strategies such as any relevant River Basin Management Plans, Water Capacity Studies and Water Resource Management Plans, which should inform the development proposed in the Local Plan. These Plans 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 have regard to these plans in exercising their functions. Plans are available on gov.uk [River basin management plans: updated 2022](#) guidance.

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

Water Quality

Local plans should consider the impacts applicable development proposed in the Plan could have on Nutrient Neutrality (NN) catchments, which can be found here: [NN Catchments](#). Evidence packs are available for all of the NN catchments affected: [NN Evidence Packs](#). Natural England has also developed NN calculators for each catchment which can be found here: [NN Calculators](#). They are updated regularly and could be used to help identify what mitigation measures may be required to address pollution from development when allocating housing sites.

We note that much of your administrative boundary falls within the catchments of either the River Wensum Special Area of Conservation (SAC), and consequently the catchment of The Broads SAC and Broadland Ramsar, or directly within catchment of The Broads SAC and Broadland Ramsar, and is therefore impacted by our Nutrient Neutrality advice.

The local plan should also take into account any [Environmental Delivery Plans](#) (EDPs) which Natural England has identified as a priority for addressing impacts on protected sites from development.

Water Availability

Local plans should ensure that proposed development considers any water infrastructure requirements and should be informed by Water Resource Management Plans and Drainage and Wastewater Management Plans. Any proposed Water Cycle Studies or Integrated Water Management Plans should be carried out as early as possible in the plan making process. All of these will need to be part of the evidence base to inform site allocations, particularly in relation to sewage treatment works' capacity and water supply areas.

East Anglia is a water scarce region, meaning that there is insufficient water to supply growth as well as to help nature to recover and adapt to climate change. We advise that you use the [Shared Standards for Water Efficiency in Local Plans](#) when preparing policies for your Local Plan. This is a joint initiative with Natural England, the Environment Agency and water companies in the East Anglia region. They aim to take a nature positive, water efficient approach that enables growth where it is constrained by lack of water. To support LPAs to deliver sustainable growth, the Shared Standards parties have produced a shared evidence base that has made recommendations on tight water efficiency standards and needs for water assessment in Local Plans. For support with this, you should contact the Environment Agency and Anglian Water. You may also find [Enabling Water Smart Communities \(EWSC\)](#) to be helpful.

The shared standards provide recommendations that LPAs include Local Plan policies that:

- Require new homes to be built to more stringent standards for water efficiency than the optional Building Regulations standard of 110 litres per person per day (l/p/d); recommending between 85 and 95 l/p/d
- Encourage extended or redeveloped non-household buildings to get full credits in the BREEAM water calculator. Non-domestic buildings should include water-saving measures and water reuse in their designs

Natural England also advises that you engage with water companies regarding any site allocations to ensure both water supply and treatment will be available at the point of occupation. Development should be sequenced to align with any upgraded capacity required.

We welcome proposals to undertake a [Water cycle study](#) for the Plan area, and advise that it should be carried out as early as possible in the plan making process. It will act as a key evidence base to inform site allocations, particularly in relation to sewage treatment works' capacity and water supply areas. This will also be important information for the HRA.

The Local Plan should contain policies which protect habitats from water related impacts, including nutrient mitigation, and where appropriate seek enhancement and mitigation. Priority for enhancements should be focussed on Habitats 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 GI policies and the provision of Sustainable Urban Drainage systems (SUDs) to achieve this. The provision of SUDs should be supported by securing their long-term maintenance.

g. Conserving and Enhancing Habitats and Species

The Plan should set out a strategic approach, seeking to safeguard, enhance and restore the natural environment. There should be consideration of geodiversity conservation in terms of any geological sites and features in the wider environment.

A strategic approach for networks of biodiversity should support a similar approach for green infrastructure (outlined above). Planning policies and decisions should contribute and enhance the natural and local environment.

Plan-makers should also seek to identify opportunities to conserve, enhance and recover habitats and priority or threatened species. 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 and Priority Habitats available on magic.gov.uk.](#)

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.

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

3. Economy

Natural England's strategy recognises that Nature plays a vital role as the foundation of economic growth. The [Dasgupta Review](#) highlights the strong relationship between nature and the economy, and the [United Kingdom Food Security Report 2021 - GOV.UK](#) also highlights this importance when it says the "biggest medium to long term risk to the UK's domestic [food] production comes from...environmental pressures like...biodiversity [loss]".

Natural England strongly advises that by securing nature recovery through your Local Plan you can also support a healthy sustainable economy. Below is further information on specific contributions nature is making to the economy in our region.

a. Tourism

The economic contribution of visitors and tourism in Norfolk annually is approximately £3.6 billion, and supports almost 73,000 jobs⁶. £500 million of that alone is from day trips to the countryside, including the Broads, or coast. The scoping consultation contains evidence that the tourist industry is worth £769 million to Norwich City, and £227 million to South Norfolk. These highlight how the unique habitats and species (together with built heritage) across the county are vital in supporting income from tourism. We advise that you consider how your Plan can encourage Regenerative Tourism which goes beyond sustainability by actively restoring and enhancing landscapes, biodiversity, and cultural heritage while providing meaningful visitor experiences. Incorporating this principle would align economic development with environmental stewardship and community wellbeing, ensuring that tourism contributes positively to the landscape rather than placing additional pressures on it.

As is acknowledged in the consultation document, the natural environment within, and adjoining, the Greater Norwich Plan area, which is rich in nature and of high landscape quality, is a key attraction for tourists to the area. Investing in the restoration and enhancement of the natural environment therefore supports growth of the local tourism industry.

b. Agriculture

Norfolk benefits from extensive areas of fertile, high-grade agricultural land, with a large portion classified under Grades 1, 2, and 3. Agricultural and agri-food businesses form roughly 9% of the local economy - more than double the national average⁷. By safeguarding Best and Most Versatile soils through your Local Plan, you are helping to support a sustainable local economy. Natural England's further advice on considering soils within your Local Plan can be found in [Section 2e](#) above.

c. The cost of climate change

⁶ [Norfolk-Business-Board-Visitor-Economy-Brochure_Web.pdf](#)

⁷ [Agri-Food in Eastern England - An Investment Opportunity 2022.pdf](#)

The impacts of climate change are estimated to cause damages worth up to 3.3% of UK GDP by 2050, under current policies⁸. This is through a range of mechanisms including flooding, impact to agriculture and impacts to human health. Natural England believes that protecting and enhancing nature is vital in mitigating the impacts of climate change and improving resilience. In particular, NbS can contribute to reducing net greenhouse gas emissions as part of the government's wider strategy for achieving net zero by 2050. Please see [section 2a](#) above for further advice on climate change mitigation and adaptation.

⁸ [Climate-costs-UK-policy-brief.pdf](#)

Annex B - Standard Advice for Air Quality Impacts for Local Plans

Local Plans are likely to generate increased emissions of nitrogen oxides (NO_x) and ammonia, and additional nitrogen deposition as a result of increased traffic generation associated with new development. As impacts from individual development management proposals would be difficult to quantify without an overarching assessment of the cumulative impacts from Local Plan development, it is necessary for this to be considered strategically at plan level. Natural England would expect the environmental assessment of the plan including the Sustainability Appraisal (SA) and the Habitats Regulations Assessment (HRA) to consider any detrimental impacts on the natural environment from these emissions. It should also suggest appropriate avoidance or mitigation measures where applicable. Technical guidance about the ecological impacts from road transport can also be found in the [Natural England research report 'The ecological effects of air pollution from road transport: an updated review' \(NECR199\)](#).

Protected sites are 'sites of special scientific interest' (SSSIs) and 'habitats sites' (also called 'European sites'). For the purposes of this advice, Habitats Sites are Special Areas of Conservation (SACs), possible SACs, Special Protection Areas (SPAs), Potential SPAs, Ramsar sites, and sites identified, or required, as compensatory measures for adverse effects on Habitats Sites. Although their regulatory frameworks differ, the general principles and approach for air pollution assessment outlined for Habitats Sites are also relevant for SSSIs. Where the following advice applies to both, we use the term protected sites. Where the advice or approach differs, the individual terms are used.

Habitats Sites and SSSIs at risk from local impacts are those within 200m of a road with increased traffic, which feature habitats that are vulnerable to nitrogen deposition and/or acidification. Natural England provides the following standard advice on air pollution. This advice relates to the protection of protected sites under the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) and the Wildlife and Countryside Act 1981 and should also be taken as Natural England's formal representation under the Town & Country Planning (Local Planning) Regulations 2012. This standard advice is applicable to all stages of the Local Plan process. This includes advice on information that is required to assess air quality and how to interpret the results of air quality modelling for your LPA to conclude whether air quality impacts would have an adverse effect on the integrity of a Habitat site or a SSSI. Detailed guidance on how to undertake a Habitats Regulations Assessment for air pollution impacts generated from traffic can be found here [Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations \(NEA001\)](#).

You should also consider any relevant caselaw that could affect how you carry out any air quality assessments.

Air pollutants

This advice covers the following air pollutants:

- ammonia (NH₃)
- nitrogen oxides (NO, NO₂ or NO_x)
- nitrogen deposition
- acid deposition
- sulphur dioxide (SO₂)

Standing advice on air pollution and development is also available here:

<https://www.gov.uk/guidance/air-pollution-and-development-advice-for-local-authorities>

Whilst the standing advice does not cover Local Plans, it does include additional technical advice which may prove useful. However, in summary, the following Table 1 provides the steps that we advise should be taken by local planning authorities.

Table 1: Sequential approach to air quality assessments

Stage	Step		Supplemental evidence/ basis for judgment
Initial screening for credible risk of an effect	1	Check Distance criteria - could significant emissions reach a protected site? Yes = move to Step 2 No = no further HRA required	The Air Pollution Information System (APIS) includes an introduction to air pollution. APIS provides site specific information on the interest features of individual protected sites and the sensitivity to air quality impacts of those features. For road traffic impacts, roads on the affected road network that lie within 200m of a designated site should be considered. Use Magic Map to check the location of designated sites. Search for the location then select the 'Designations' option.
	2	Check if the qualifying habitats or supporting habitat of qualifying species are sensitive to air quality impacts. Yes = move to Step 3 No = no further HRA required APIS Site relevant Critical Loads and Levels (based on literature and professional judgement) http://www.apis.ac.uk/src/ Some habitats may not have a critical load because there is not enough data. In these cases, you should find the critical load for a similar habitat type or feature.	The qualifying features of Habitats Sites can be identified in the relevant Site Conservation Objectives and Supplementary advice packages, which include a definitive list of legally qualifying features. These objectives are available here. Alternatively, a list of qualifying features can also be found by searching for the Habitats Site and SSSIs on Designated Sites View , alongside Conservation Objectives and Supplementary Advice for Habitats Sites. The above links will also show whether any of the qualifying features for Habitats Sites have a Restore or Maintain Conservation Objective in relation to air quality thresholds (critical levels or loads). If the site is a SPA or an SAC/SSSI designated for an animal species (as opposed to a habitat), determine whether the predicted pollution effects on the supporting habitat will have a negative effect on the notified species.
Detailed AQ modelling	3	Undertake detailed modelling using a recognised dispersal model – i.e. Atmospheric	Air Quality modelling for Local Plans should include relevant scenarios that are clearly identified. We advise an allowance is also made for windfall

Stage	Step		Supplemental evidence/ basis for judgment
		Dispersion Modelling System (ADMS) - Roads Unless robust site-specific evidence is provided, we advise the lower range of the critical load should be used in modelling. If there are site specific reasons why it is more appropriate to use the higher end of the range, then this should be clearly evidenced.	development. One such example of scenarios is a baseline plus future forecasts as follows: Baseline, future baseline (at end of plan period taking into account background trends for each pollutant), do nothing (without plan), do something (with plan). The Institute of Air Quality Management (IAQM) has produced the following document to assist its members in the assessment of the air quality impacts of development on designated nature conservation sites: air-quality-impacts-on-nature-sites-2020.pdf
Applying screening thresholds	4 a	Apply Screening Threshold Alone If below threshold alone, move to step 4b. If above = move straight to step 5	Ascertain the Process Contribution (PC) from the plan or project (emissions and predicted deposition). Apply Screening threshold (1% of critical level or load) alone using the <u>annual averages</u>. If the process contribution is less than 1% of the relevant long-term benchmark (Environmental Assessment Level, Critical Level or Critical Load), the emission is not likely to have a significant effect <u>alone</u> irrespective of the background levels.
	4 b	Apply Screening Threshold In-combination. If below threshold in-combination = no LSE/significant risk of damage etc and no further assessment required. If above = move straight to step 5	Use information from competent authorities (Planning Portal or Environmental Permitting register) to determine if there are plans or projects in the pipeline (not included in the current baseline) that should be considered in-combination for emission from roads/ increase in traffic. For example, add emissions & deposition from other Local Plans together and apply 1% to that sum. If the process contribution is less than 1% of the relevant long-term benchmark (Environmental Assessment Level, Critical Level or Critical Load), the emission is not likely to have a significant effect <u>in-combination</u> irrespective of background levels.
Detailed Assessment	5	This step is to consider the ecological impacts of AQ	The following information is likely to be helpful for the LPA:

Stage	Step	Supplemental evidence/ basis for judgment
of ecological impacts	on the interest features of the designated site and is not based only on numerical figures. If it is not certain whether sensitive features are located within the areas to be impacted, a site visit may be helpful to determine this. For SSSIs, this step should provide all the information necessary, including any required mitigation, for the LPA to determine if there would be an adverse effect on a SSSI. Should an adverse effect not be ruled out, this will need consideration within the Local Plan Sustainability Appraisal and consideration of the tests of the NPPF (para 193b). If Habitats Sites are impacted by the proposals, move to Step 6.	Is the sensitive feature(s) located within the pollution footprint? Should it be there for the site to meet its Conservation Objectives or is there some other, natural reason (e.g. hydrology), why the sensitive feature(s) would not be expected to occur there? Check APIS Trends Tab for reasonable expectation on whether background pollution may be decreasing or not. Assess likely scale and duration of impacts on habitats from emissions. Check whether any strategic initiatives in the area (such as shared nitrogen action plans) would be compromised by the proposals.
Appropriate Assessment (AA) for habitats sites	6 LPA to undertake their AA to conclude whether or not there will be an adverse effect on integrity (AEOI) of habitats sites. Any mitigation proposed by the applicant should also be assessed at this point. Should the AA conclude that the Local Plan would have an AEOI that cannot be excluded with mitigation measures, consider derogation route of the HRA process. Should compensation measures be required under derogation, please contact Natural England for specific advice. Note: If an AA has been undertaken of the	Where mitigation is required to enable a conclusion of no adverse effect on integrity to be reached the AA must be able to show that mitigation measures can be relied upon to avoid adverse effects over the full lifetime of the plan. To be viable, such measures should be effective, reliable, timely, guaranteed and of sufficient duration. The assessment of such measures should be supported by evidence. When deciding on whether the proposals set out in the plan will have an adverse effect on Integrity on a Habitats Site, the Conservation Objectives and any supplementary advice should be taken into account. Including whether the site is already exceeding the environmental thresholds for ammonia, nitrogen oxides and nitrogen deposition and has a restore conservation objective.

Stage	Step	Supplemental evidence/ basis for judgment
	proposals <u>alone</u> and concluded that there will not be an adverse effect on integrity, if there are residual impacts that are not fully mitigated, these will need to be considered in combination with other plans or projects	

Additional advice

For many protected sites, the current background pollution may already be exceeding the relevant critical load/level from a different source type to the project being assessed (e.g. the main source of background exceedance is due to agriculture, but the proposal is a road scheme). Proposals must consider their own impacts against the relevant environmental thresholds. There are many reasons why background levels are high, but the conservation objective is to 'maintain or restore' air pollutants to within these benchmarks. The objective would be undermined by proposals that add further emissions, including if it compromises any strategic initiatives to reduce air pollution levels.

Where an air quality report concludes that only a very small area of the site will be impacted, the assessment of effects on integrity or damage to the site, should take into account the interest features of the site, their distribution and how they will be impacted by proposals rather than on specific percentages of site. Dependent on features being present in the area to be impacted, this could have a disproportionate impact on the site if an area of a rare habitat type were lost rather than a judgement just on the percentages of habitat.

Improvements in vehicle technology and a move to further electrification of the vehicle fleet will, over time, result in lower background levels of nitrogen deposition and Nitrogen Oxide pollution near to roads. As most sites are currently over the relevant thresholds and have a "restore" objective, this should be noted as a "retardation" of the restore objective and expressed in months and years. Retardation of less than one year is acceptable as air quality is considered against an annual average. Please note that ammonia impacts cannot be assessed in this manner as there is no certainty of a declining trend.

Common Standards Monitoring^[1] is used to define the ecological condition of a protected site. It is undertaken on a broader level and does not currently consider air quality impacts. The relevant benchmark for assessing impacts is the critical thresholds. Therefore, the existing status of a designated site should not be the sole reason for judgement on potential impact.

Defra Emissions Factor Toolkit

The Defra Emission Factor Toolkit (EFT) allows for gradual introduction of electric vehicles into the fleet (cars and LGVs) up to 2050. These are the emission factors we advise that Local Plans should be using (which we advise should also consider ammonia emissions as well as NOx – using one of three sets of emission factors available). However, the User Guide to the EFT highlights that calculation tools only support assessment years 2018 up to 2030, reflecting that predictions and assumptions beyond then become less certain. Where EFT calculated emissions are to be used after 2030 to inform air quality assessments, the EFT indicates that appropriate caveats around the limitations of the analysis must be included to accompany the assessment.

We therefore advise that emission factors no later than 2030 are used for HRAs– which would mean percentages of EVs are at predicted 2030 levels. A key concern is that, although EVs themselves have no tailpipe emissions, and the percentage of them will increase, the remaining combustion engine vehicles on the road may become more polluting as they age as selective catalytic reduction technology may create 'ammonia slip' over time. Ammonia slip is the unreacted ammonia (NH₃) that escapes from a selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR)

system used to reduce NO_x in exhaust gases.

Motorways within the affected road network

There is potentially an added complexity to the need for in-combination assessments when considering traffic on motorways, as including these roads can mean that the assessment takes account of traffic growth related to strategic factors or long range (external) trips that are independent of the specific plan or project and neighbouring plans or projects. These roads are strategically important and tend to have high volumes of traffic as well as being well represented in traffic models. The air quality assessment should therefore include traffic flows on these roads, but the external trips can be excluded from the initial screening assessment. A justification and explanation of which journeys are included and excluded in the traffic model should be provided. The conclusions reached on the air pollution impacts of the HRA must be incorporated into the wider HRA conclusions for other impact pathways identified for the local plan.

How to Use this Advice in Decision Making

Provided you have followed the above advice and have been able to conclude there would be no adverse effects on any protected sites we would be able to agree with the conclusions of your HRA in relation to air quality impacts and that the Local Plan is sound in this regard.

Local plan policy advice:

Natural England expects 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 protected sites. If the Local Plan would result in other air quality impacts apart from traffic, then this will also need to be addressed.

Local authorities should consider including a local plan policy based on the suggestion below to address air pollution impacts on Habitat Sites and SSSIs. The local plan policy could include the following:

1. *Proposals should not significantly delay the date for compliance with environmental thresholds for air pollutants for Habitats Sites or SSSIs that are currently in exceedance of environmental benchmarks (critical levels and loads).*
2. *Proposals emitting air pollutants which impact Habitats Sites must rule out adverse effects on the integrity of such sites. Where this is not possible the derogations route of the Habitats Regulations should be followed.*
3. *To avoid and minimise air pollution impacts any development requiring Habitats Regulations Assessment, Environmental Impact Assessment (EIA) or impacts to SSSIs unrelated to EIA development should consider:*
 - *the measures included which will minimise air pollution impacts on SSSIs and Habitats Sites and SSSIs during the design process of the development; and*
 - *how air quality improvements have informed the design choices made about the location of the development, its layout, and distribution of buildings, on-site activities, amenity spaces and infrastructure.*

A local plan could go on to set out what would be required for different development types in more detail. This may be important where there is strong evidence that particular sources of air pollution are preventing nature recovery. For example, where agricultural development is known to be one of the main sources of air pollution, a policy could specify a buffer around a protected site within which new or intensified agricultural proposals would not be permitted, apart from in exceptional circumstances.^[2]

^[1] [Common Standards Monitoring | JNCC - Adviser to Government on Nature Conservation](#)

^[2] Joint Nature Conservation Committee's (JNCC) Nitrogen Futures Project, available at: <https://jncc.gov.uk/our-work/nitrogen-futures/>