## THE PRESENT CRISIS FOR NATURE IN THE UK

### The hard truth
We are facing a climate emergency and ecological crisis. Catastrophic species loss means the way we experience nature is different today compared with the experiences of our parents and grandparents. We rely on the natural environment to provide us with the resources we need to live, including food, water and oxygen. Nature sustains us and we are part of it. Our natural habitats take years or even centuries to establish. Once lost they are difficult to replace, but we have the skills and experience to reverse these declines. We must fight to conserve the wildlife that we have left and find every opportunity to enable nature to recover.

### Environmental issues
Habitat loss has unintended consequences. These include soil erosion, loss of pollination services, increased risk of flooding and pollution of water courses. Once environmental degradation begins it is difficult to reverse. At the same time, cities and urban expansion place pressure on natural resources. The Southeast of the UK for example has extremely high levels of water stress.

The Intergovernmental Panel on Climate Change emphasises the need for rapid and deep reductions in greenhouse gas emissions to limit global warming to 1.5°C above pre-industrial levels. This increase, will continue to cause long-term changes to the climate, resulting in sea-level rises and increasing the risks of drought, floods, and extreme heat. This will exacerbate the current environmental and biodiversity crises, and affect our way of life.

### Health and wellbeing
We are also seeing increasing social and health inequality. Our built environment can contribute to mitigate that and other non-communicable diseases. A place that prioritises pedestrian and cycle movement and active lifestyles with greenery can significantly impact health and wellbeing of residents. More green coverage in urban areas help regulate temperatures, thus reducing the risk of overheating; improve air quality which has a positive effect in fewer respiratory diseases.

Increased connection with nature is known to benefit our mental health too, correlating with reduced levels of depression and anxiety. The NHS Green Social Prescribing programme, where people are offered nature-based activities to improve mental and physical health as part of personalized care and the long-term plan to use green/blue spaces for wellbeing, is proven to be cost-effective compared to other mental health interventions. For every £1 invested by central government, the programme generated a social return on investment of up to £2.42.

### The need for housing
Addressing the lack of affordable housing is a Government priority. The governments Plan for Change sets out a mission to build 1.5 million homes from July 2024 and through the course of the current parliament. Shelter and others have referred to our current predicament as a housing crisis which particularly affects young people. There are many vulnerable people facing a lifetime of expensive rent. We need new homes that cater for a range of needs, such as 'Lifetime Homes', that enable us to adapt to different stages of life, and a mix of tenures that offer long term security and sense of community.

### What happens if we do nothing?
If we do not change the way in which we plan and deliver different types of infrastructure, we will see an acceleration of species loss, with knock-on consequences for our own health, wellbeing and social and environmental sustainability. If we continue to build in the same way, we will get the same results: increased congestion, pollution and continued deterioration in quality of life. The economic cost of this will be felt from increased social care requirements to the impacts of flooding and a fall in agricultural productivity.

### What happens if we do something?
We can decide the future we want to create. We can redesign how we live and work. We can put nature first and reconnect with our wildlife. We can create communities that support healthy lifestyles. We can take advantage of innovation to create new ways of connecting and sustaining communities. New models of development are emerging that recognise the value of nature and enabling communities to reconnect with wildlife and each other, we can capture the full social and environmental value of this approach.

### Ecological Loss

**16%** of all species in the UK are now at risk of disappearing
(State of Nature Report 2023)

**73%** the average size of wildlife populations has fallen by 73% between 1970 and 2020.
(2024 Living Planet Report, WWF)

**97%** of wildflower meadows have been lost
(English Heritage)

**63%** of all flying insects have been wiped out between 2021 and 2024
(The Bugs Matter Citizen Science Survey. 2024)

### Climate Emergency

**10** warmest years in the historical record have all occurred in the past decade
(NOAA National Centers for Environmental Information. 2024 Annual Report)

**1 in 4** properties in England will be in areas at risk of flooding from rivers and the sea or surface water by mid-century
(Environmental Agency's National assessment of flood and coastal erosion risk in England 2024)

**x50** The annual number of heat-related deaths in England and Wales is set to rise up to fiftyfold over the next 50 years because of climate change
(Projections of heat related mortality under combined climate and socioeconomic adaptation scenarios for England and Wales. Paper published in PLoS Climate)

**5b** By 2055, there will be a 5 billion litre a day shortfall for public water supplies alone in the UK
(Environment Agency's The National Framework for Water Resources 2023)

### Health Impact

**28%** of adults in England are obese.
Obesity levels in the UK have increased 14% since 1993.
(2022 Health Survey for England)

Exposure to air pollution causes
**30,000** deaths in the UK in 2025
(Royal College of Physicians, A breath of fresh air Responding to the health challenges of modern air pollution)

Long-commuting workers are:
**33%** more likely to suffer from depression.
**46%** more likely to sleep less than 7h per night.
**21%** more likely to be obese.
(2017 research from Britain's Healthiest Workplace)

Mental illness affects:
**1 in 5**
1 in 5 adults (20.2%) in England are living with a common mental health problem. In 2023, 1 in 5 (aged 8–26) reported living with a probable mental health problem
(The Big Mental Health Report 2023, Mind)

### Healthcare Costs

Obesity costs UK society an estimated
**£74.3** billion per year
(UK Gov: Obesity Healthcare Goals: 14 October 2025)

The health and social care costs of air pollution could reach
**£5.3** billion per year by 2035
(Public Health England Air Pollution Tool)

The health benefits from the recreation ecosystem service contributed
**£508** billion to the UK economy in 2023.
(Census 2021. UK natural capital accounts: 2025)

Losses to the economy due to mental ill health equate to
**£110** billion every year in the UK
(The Economic and Social Costs of Mental Ill Health. Review of methodology and update of calculations. Centre for Mental Health)

### Natural Benefits

Every **10%** increase in access to green and blue spaces was linked with a **7%** reduction in risk of anxiety and depression
(Report: Ambient greenness, access to local green spaces, and subsequent mental health: a 10-year longitudinal dynamic panel study of 2·3 million adults in Wales)

Children who grow up in greener surroundings are up to **55%** less likely to develop a mental disorder later in life
(Research by Aarhus University. 'Residential green space in childhood is associated with lower risk of psychiatric disorders from adolescence into adulthood.')

People who live within 500 metres of accessible green space are **24%** more likely to meet 30 minutes of exercise levels of physical activity.
(Houses of Parliament. Green Space and Health Report 2016)

After spending time in nature **79%** of children felt that the experience helped their school work
(Nature Nurtures Children. A summary of research for The Wildlife Trusts)

## OUR HISTORY OF DECLINE

Increasing pressures on the environment mean we continue to lose the precious wildlife that enriches our lives and is essential to our health and wellbeing.

### Roman era
Looking through historical records and mapping, it is evident that much of the UK's natural woodland was lost by the end of the Roman era.

### 15th century
Settlements and farmland expanded through medieval times to the 15th century, further depleting woodland coverage.

Agricultural land coverage has significantly altered the character of the UK's landscape.

### 20th century
The urban and suburban expansion of places and infrastructure designed for the car.

The way we have developed and managed our land has eroded and severed the natural environment, forcing nature to retreat into isolated pockets of landscape.

### 21st C Vision
A pioneering and aspirational vision to restore the natural environment and wildlife in one of the most nature depleted regions in the UK. Creating a nature recovery network that stitches nature-rich areas together with a natural green mosaic that improves connections for wildlife and health and wellbeing for people. A 21st century solution we desperately need.

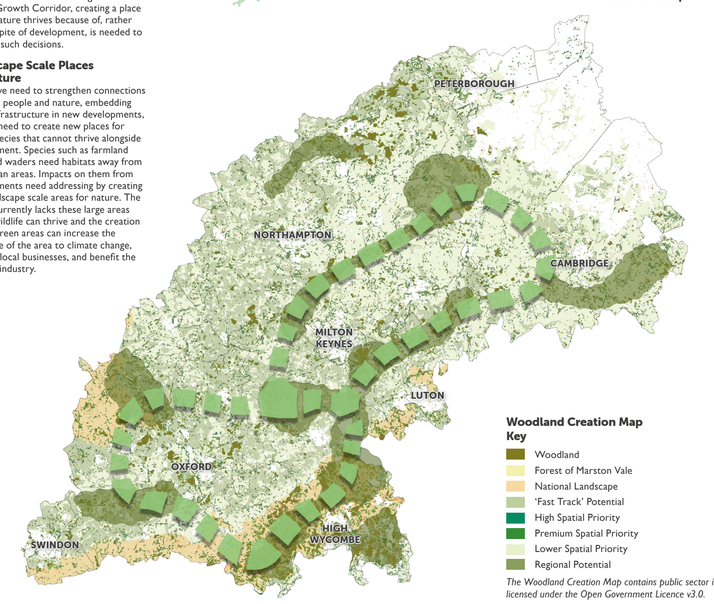
## WHAT DOES NATURE NEED?

### OxCam National Forest
The new National Forest needs to plug into a joined-up system of places important for wildlife across the region and nationally. A wider vision can imagine interconnected National Forests across the nation, and in particular creating a strong connection to the Midlands National Forest. This is needed so the whole can be greater than the sum of the parts facilitating the creation of a national network of habitats that are more resilient to climate change and other pressures as a result of their connectivity. A strategic vision across the region can build on Local Nature Recovery Strategies, utilise opportunities from biodiversity net gain and use the National Forest to reconnect fragmented habitats. A strategic vision for the Growth Corridor, creating a place where nature thrives because of, rather than in spite of development, is needed to guide all such decisions.

### Landscape Scale Places for Nature
Whilst we need to strengthen connections between people and nature, embedding green infrastructure in new developments, we also need to create new places for those species that cannot thrive alongside development. Species such as farmland birds and waders need habitats away from new urban areas. Impacts on them from developments need addressing by creating new landscape scale areas for nature. The region currently lacks these large areas where wildlife can thrive and the creation of new green areas can increase the resilience of the area to climate change, support local businesses, and benefit the tourism industry.

### The Concept
Adopt the 4 stage process to nature recovery: protect and enhance the most valuable habitats, connect these through corridors, create buffers around the emerging network and encourage these nature reservoirs to extend into the surrounding farmland and communities.

1. Protect the wildest places
2. Connect them
3. Increase overall area for wildlife with a recovery zone
4. Find space for wildlife in the wider landscape




### Woodland Creation Map Key
- Woodland
- Forest of Marston Vale
- National Landscape
- 'Fast Track' Potential
- High Spatial Priority
- Premium Spatial Priority
- Lower Spatial Priority
- Regional Potential

*The Woodland Creation Map contains public sector information licensed under the Open Government Licence v3.0.*

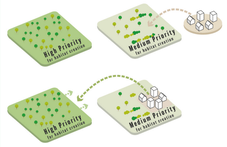
## PRINCIPLES FOR BUILDING NATURE'S WAY

### Planning For Nature
It is essential to understand environmental capacity before planning and setting targets for development; all development in the Growth Corridor should be set within a single strategic plan informed by a strategic environmental assessment, full public consultation and independent examination.

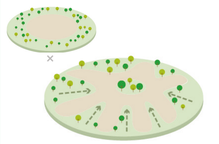
### Nature Centred Design
Development should be designed from the outset with nature in mind, targeted at places where it can have a positive environmental impact and contribute to a Nature Recovery Network. As many Councils are preparing Local Nature Recovery Strategies - these strategies should be the starting point for understanding and putting nature first, prioritising nature recovery.

### Build In The Right Places
New developments should where possible be prioritised in brownfield locations where enabling infrastructure already exists, reducing embodied carbon emissions. It should preserve the wildest places preventing nature loss and avoid impacting on floodzones. Never build on ancient or high-value habitat. Always ensure that nature's networks are maintained.

### Building with Nature
Developments should follow best practice guidance. Striving to achieve the Building with Nature standards framework as a green infrastructure benchmark integrating the core themes of wellbeing, water and wildlife. Also seeking to follow Natural Englands Green Infrastructure principles.




### Giving Back To Nature
New developments and settlements should give back to nature, linking into nature recovery networks, delivering more than the minimum requirement of 10% biodiversity net gain and contributing to creation of local habitat banks. We have taken from nature for generations, diminishing our baselines for what our natural environment should be - now we need to restore what we have damaged and rebuild nature.

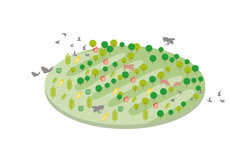


### Natural Space Provision
New places should interweave natural landscape with housing and movement networks in a way that draws nature in and gives everyone equal access to living landscapes. We recommend at least 30% of new development consists of natural green space.

A strong green framework will prioritise nature recovery networks, incorporating less disturbed spaces for wildlife and also spaces for people in a considered and balanced way, appropriate to the landscape setting.

### Restorative Water Management
It is vital that groundwater and aquifer restoration is prioritised in the region to ensure that water stress does not become more severe. This means increasing storage in the flood plain with natural habitats, and slowing rainfall with sustainable urban drainage and natural swales in new developments.

### Right To Access Nature
The landscape should be considered a cultural and wellbeing asset. Everyone should have access to nature and leisure activities such as nature trails, walking and cycling.



### Compact is Key
Getting the density right is about creating places that are compact, social and walkable. Well-designed compact places integrate natural intensity with efficient urbanism, creating strong communities and enhancing wellbeing.

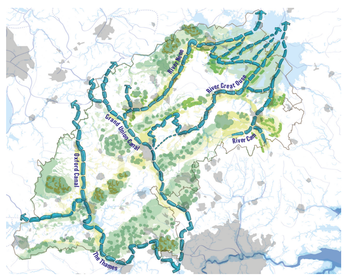
### Nature Friendly Farming
The Growth Corridor contains large areas of nationally important farmland. Promote and support nature friendly agricultural practices that are better for wildlife, our health and our long-term economy. Enable people to make informed choices about local, seasonal, sustainably grown food.



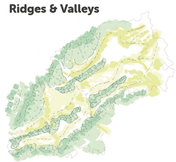

### Active + Aligned Travel
Encourage people to move sustainably by providing interconnected and easy to use travel services. Slow movement networks that link up to decarbonised public transport will help people to shift their habits and make better everyday decisions about how they move.

## A LANDSCAPE-LED APPROACH

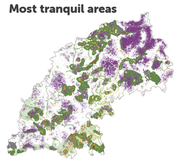
### Water & Flooding



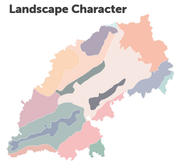

### Ridges & Valleys



### Most tranquil areas



### Landscape Character



Taking a landscape-led approach means understanding and prioritising nature's needs first.

The region's geography is defined by ridges and valleys, structuring the area along corridors that run from the southwest to northeast.

Interspersed with remnant forests, meadows, grasslands and fens, the region comprises various national landscape character areas that have largely been influenced by human activity and retain little of their original character.

Key waterways include the Thames, River Nene, River Great Ouse and River Cam. Flood mapping reveals the importance of the waterways and fenlands to the northeast of the region, which drain towards the Wash nature reserve on the east coast. Development in these areas could exacerbate flooding issues upstream, and negatively impact the water stress the region is already beginning to experience.

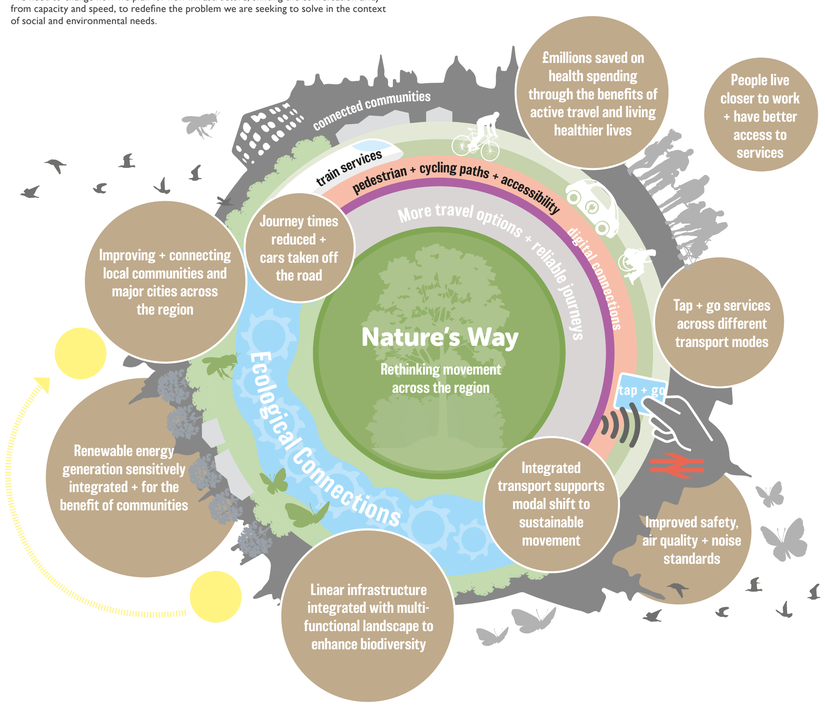
Tranquillity data reveals the most tranquil areas across the region, where one can appreciate dark skies at night and quiet retreat in the day.

Our mapped vision has been overlaid with the various geographical constraints and characters, to create a network that will holistically protect, connect and provide room for nature to recover.

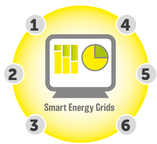
## RETHINK MOVEMENT ACROSS THE REGION

### Rethinking movement across the region
Our vision includes rethinking the way in which we plan and design movement within the corridor so it is more joined up and takes advantage of the natural landscape. This means prioritising active travel and planning development that is easily accessible to local services and public transport hubs.

We need to change how we plan for new infrastructure, shifting the conversation away from capacity and speed, to redefine the problem we are seeking to solve in the context of social and environmental needs.

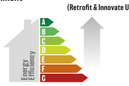



## ZERO CARBON LIVING




### INTRODUCTION
The UK government has set a target to reduce carbon emissions to zero by 2050. Infrastructure investment in the Growth Corridor must pave the way by achieving the goal of Zero Carbon well ahead of the national timeframe. An integrated, robust and consistent strategy will avoid the need and associated cost of remediating insufficient provision. The transition can be facilitated by smart, low carbon and integrated approaches to energy.

#### 1. Building Retrofit
Mega fact: 30-80% - emission reduction potential through low-carbon retrofit or refurbishment
(Retrofit & Innovate UK, 2014)

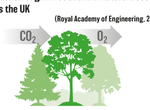



At least 80% of the homes that people will be living in by 2050 have already been built (Thinkhouse library of UK housing reports). Retrofitting buildings with improved insulation is essential to achieve the goals.

#### 2. Decarbonised Transport
Mega fact: 30% in 2024 - contribution from transport to UK total carbon emissions
(DESNZ March. 2025 provisional figures)

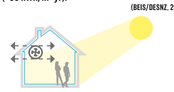
The movement hierarchy needs to prioritise people through active travel and local service provisions. Communities can be supported by interconnected public and shared transport services designed to integrate with renewable energy sources.

#### 3. Carbon Removal
Mega fact: 35 MtCO2e per year - removal potential through investment in natural assets across the UK
(Royal Academy of Engineering, 2018)




In addition to emission reduction, removal of carbon from the atmosphere is essential to achieve net zero carbon emissions by 2030. Natural assets such as woodlands, habitats and well-managed soils capture carbon effectively.

#### 4. New Passive Homes
Mega fact: 75-90% less heating energy than UK Building Regs average (~50 kWh/m²·yr).
(BEIS/DESNZ, 2025)



The Passivhaus Standard is an approach to designing out heating and cooling demand. Coupled with solar energy, this can deliver Zero Carbon homes.

#### 5. Renewable Energy
Mega fact: over 50% renewable energy contribution to UK energy mix in 2024
(DESNZ, 2025)

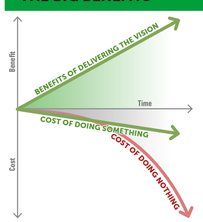
The falling cost of renewables and innovations in energy storage is enabling a shift towards decentralised energy generation. Local generation can also provide community benefits.

#### 6. Sustainable Agriculture
Mega fact: 80% emissions reduction potential by 2030 with major land use changes and efficiency improvements
(CTI, 2019)

Agricultural and farming practices are shifting so that they can preserve and restore critical habitats, improve soil health and reduce emissions.

## HOW CAN WE DO THIS?

## THE BIG BENEFITS




**COST-BENEFIT RATIO 1:70** (DNS, 2019)

**Benefits of doing this:**
- Reduced flood risk
- Improved health and wellbeing
- Decreased cost of health and social care
- Increased land value
- Increased natural capital and ecosystem services

**Costs of doing nothing:**
- Increased flood risk
- Declined health and wellbeing
- Increased cost of health and social care
- Decreased land value
- Devalued natural capital and decreased ecosystem services

### The economic benefits of investing in nature
Infrastructure investment decisions typically compare costs with expected benefits. While cost estimating is well established, valuing societal outcomes has been harder because many are not easily quantified. Recent progress in social and environmental valuation now enables several benefits to be measured, though some remain challenging to capture. Protecting and enhancing natural assets generates long term value for people and the economy, including better mental and physical health and reduced pressure on health and social care. Ecosystem services such as carbon sequestration, climate regulation, improved air quality and reduced flood risk can also be assessed. Natural capital accounting evidence shows that these benefits far outweigh management and maintenance costs. Urban greenspace delivers benefits estimated at 10–27 times its cost[1], while national nature reserves and public woodlands generate 2–2.5 times their value [2]. Multifunctional habitats also provide ongoing annual value of £558–£910 per hectare[3].

The government's Kickstarting Economic Growth mission aims to stimulate growth and expand national infrastructure to support homebuilding targets. The 100 miles wilder vision can help unlock development potential, support affordable housing, and improve living standards across collaborating regions.

[1] Parks and Green Spaces in Birmingham (2019), Public Green Space in Greater London (2017), London Borough of Barnet Corporate Natural Capital Account (2017) [2] England Public Forest Estate (2023), National Nature Reserves Managed by Natural England (2018) [3] National Nature Reserves Managed by Natural England (2018), Environment Agency (2022), Cam and Ely-Ouse Catchment (2017)