

# Biodiversity Net Gain

It's coming soon – What you need to know...

Timothy David Crawshaw MRTPI FRSA

Immediate Past President RTPI

Chair of the Tees Valley Nature Partnership



# The Basics

- National policy sets out that planning should provide biodiversity net gains where possible. National Planning Policy Framework (NPPF) Paragraphs 170(d), 174(b) and 175(d) refer to this policy requirement and the Natural Environment Planning Practice Guidance (PPG) provides further explanation on how this should be done. Delivering net gain is also referred to in the National Infrastructure Commission's Design Principles, National Policy Statements and the National design guide.
- In November 2023 10% BNG will be a Planning Condition for new development



# The Basics

- Minimum 10% gain required calculated using Biodiversity Metric & approval of net gain plan
- Habitat secured for at least 30 years via obligations/ conservation covenant
- Habitat can be delivered on-site, off-site or via statutory biodiversity credits
- There will be a national register for net gain delivery sites
- The mitigation hierarchy still applies of avoidance, mitigation and compensation for biodiversity loss
- Will also apply to Nationally Significant Infrastructure Projects (NSIPs)
- Does not apply to marine development
- Does not change existing legal environmental and wildlife protection



# The Biodiversity Metric

- The Biodiversity Metric (2023) is now version 4.0
- The metric can be used to inform and improve planning, design, land management and decision-making. The metric uses habitats and 'biodiversity units' as a proxy to describe biodiversity. These biodiversity units are the 'currency' of the metric. There are three types of biodiversity units, which are calculated in three separate 'modules' of the metric (area units, hedgerow units and watercourse units).
- Losses and deterioration of irreplaceable or very high distinctiveness habitat cannot be accounted for through this metric.



# The Biodiversity Metric

## Calculating the value of habitats

BNG is measured using the Biodiversity Metric. This tool should be used by a competent person, normally an ecologist. It uses changes in the extent and quality of habitats as a proxy for nature and compares the habitat found on a site before and after development. Four key factors underpin this comparison: habitat size; condition; distinctiveness; and location.



### HABITAT SIZE

How large or small is the habitat?



### HABITAT CONDITION

How well is the habitat functioning, compared to one in full working order?



### HABITAT DISTINCTIVENESS

Is the habitat of particular ecological importance?



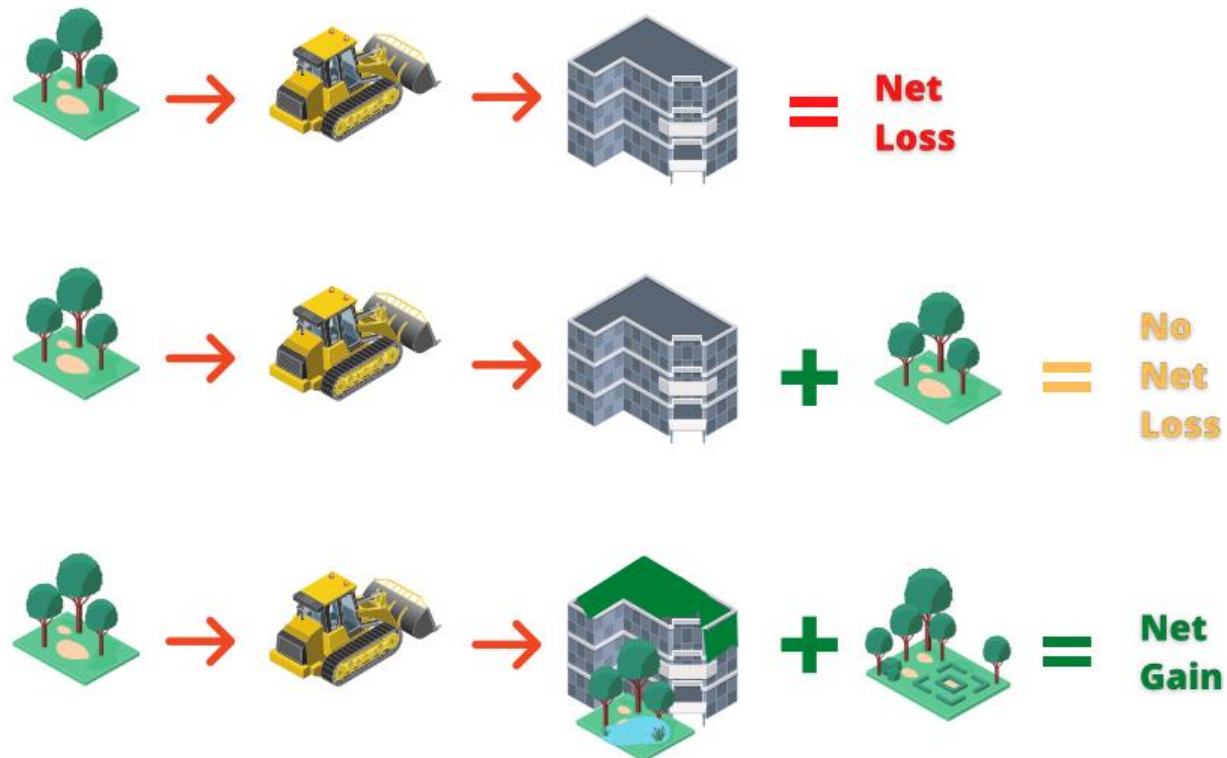
### STRATEGIC SIGNIFICANCE

Is the habitat a local priority or located in a priority area for habitat creation/enhancement?



# So What Does it Look Like

Development often results in impacts on, and losses of, nature. By reinforcing and complementing the mitigation hierarchy, mandatory BNG requires development to deliver more for nature; setting a requirement to increase biodiversity by a minimum of 10% compared to the baseline. This means that there will be more and better-quality places for wildlife to live and thrive and for people to enjoy.



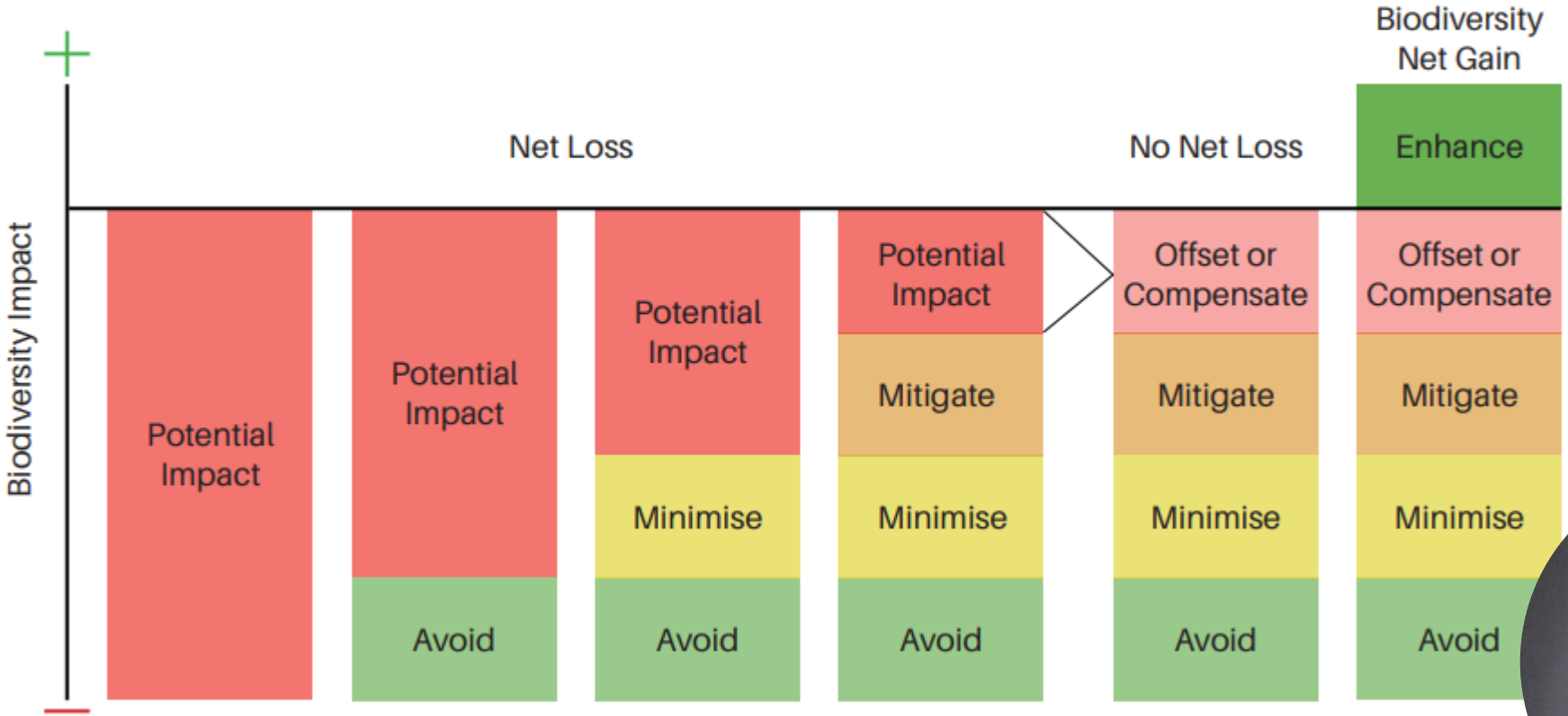
Source: Natural



# The Mitigation Hierarchy



# Going Deeper



# Offsetting

## ON-SITE (UNITS)



Delivered through habitat creation/enhancement via landscaping/green infrastructure

## OFF-SITE (UNITS)



Delivered off-site through habitat creation/enhancement, including via habitat banks, with public and private landowners

## STATUTORY CREDITS\*



Delivered through large-scale habitat projects delivering high value habitats which can also provide long-term nature-based solutions

\*Credits will be made available for purchase in the future. They are intended for use only where BNG cannot be delivered on-site or off-site via the market, as a last resort.



# For Local Planning Authorities

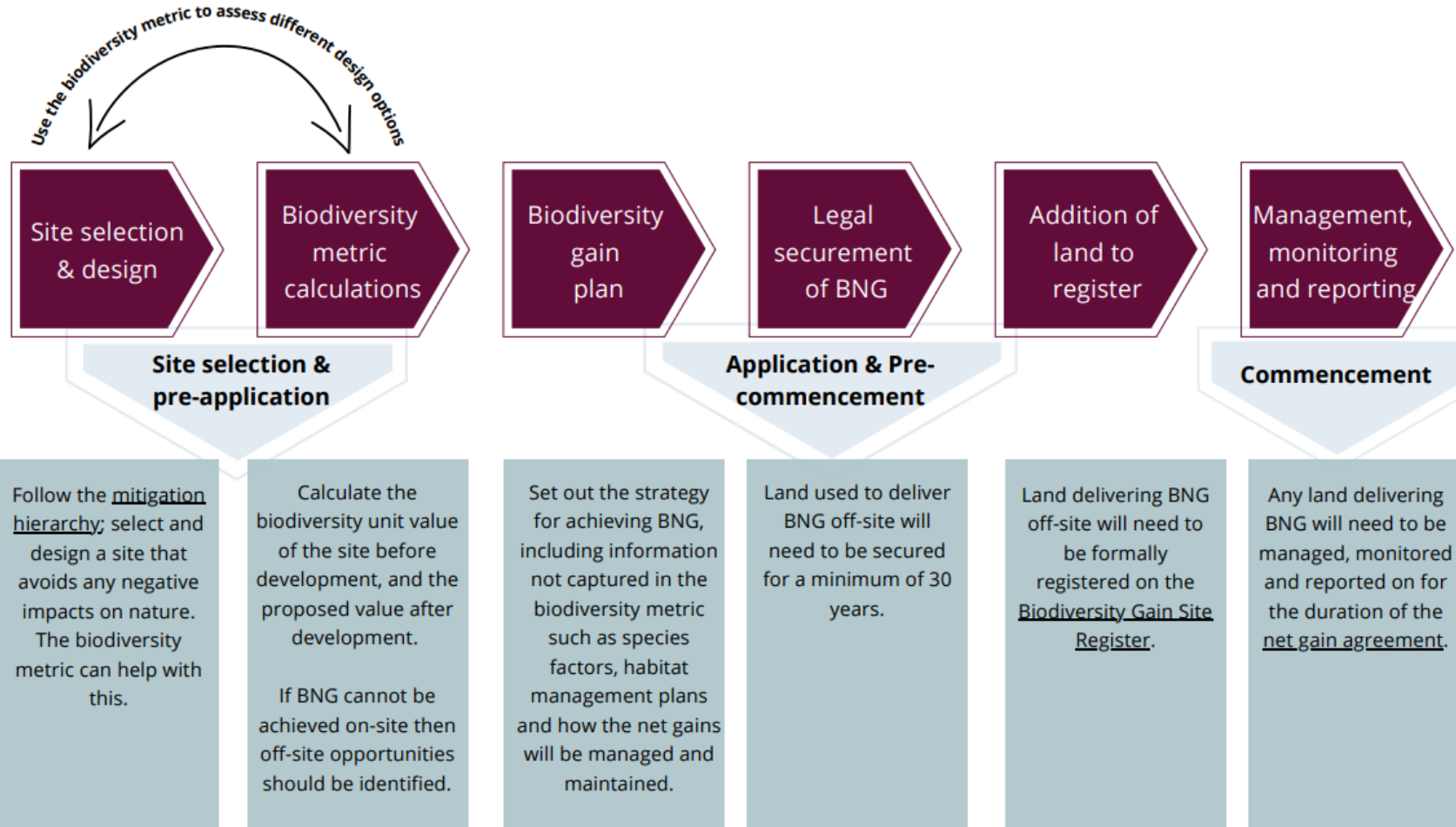
Planning Authorities (LPA) can:

- Develop approaches to embed BNG in local planning policy and decision-making and consider how BNG fits in with wider corporate priorities. Doing this now will help make sure LPAs are ready for mandatory requirements and that BNG delivers a wide range of benefits for people and nature in their local area;
- Identify features and areas for habitat creation and enhancement within strategic plans and/or Local Nature Recovery Strategies. This will help target BNG delivery where it is most needed and where it can achieve ‘best bang for buck’;
- Take a flexible approach to BNG delivery, including off-site options. Explore options for delivering net gain on both LPA owned and privately owned land, including via green and blue infrastructure features



# The Process

The biodiversity metric should be used early in the design process to quantify and evaluate the impacts of different design options, when there is more scope to influence design changes to achieve better ecological outcomes.

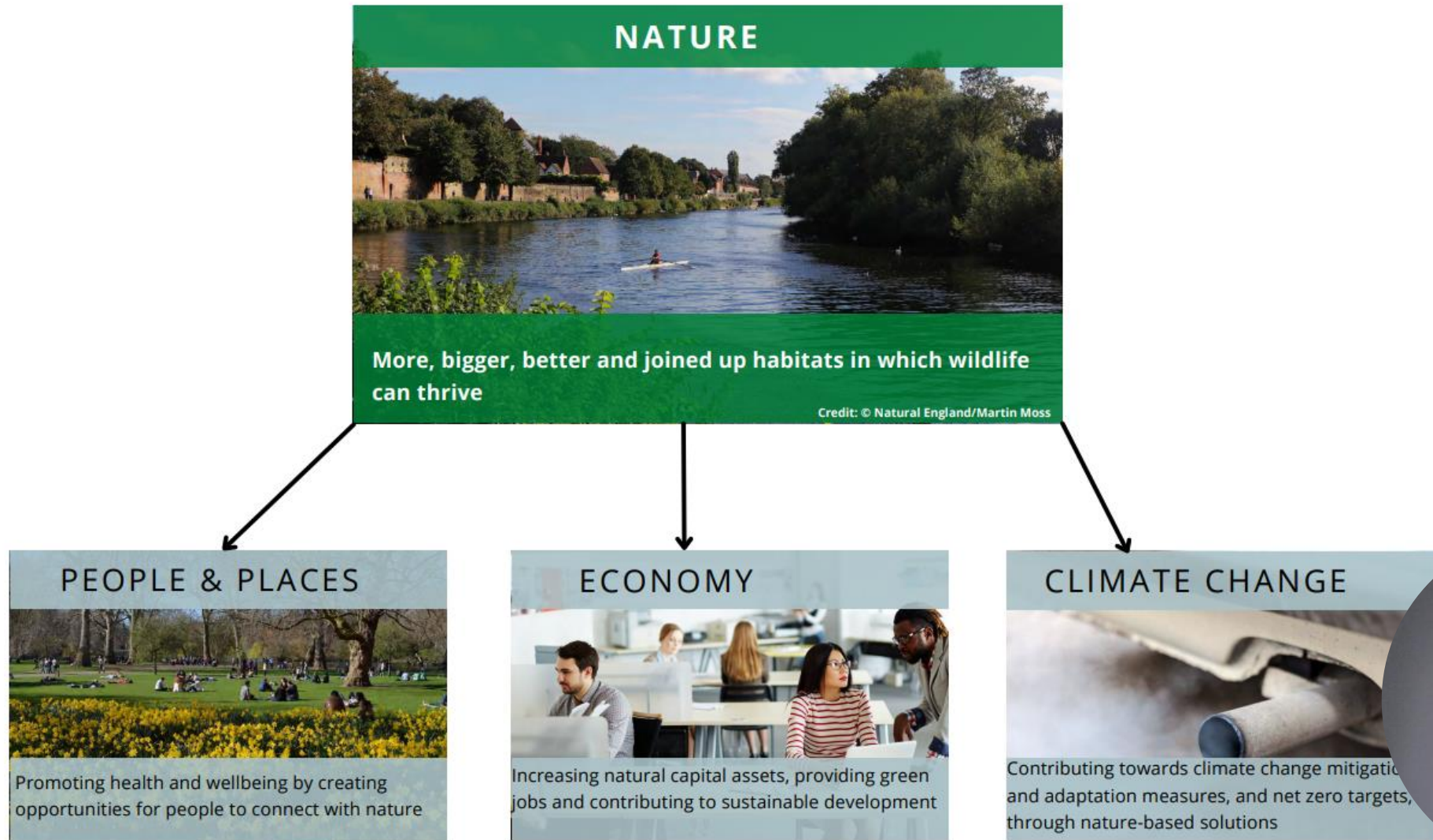


# Thinking about Local Nature Recovery Strategies

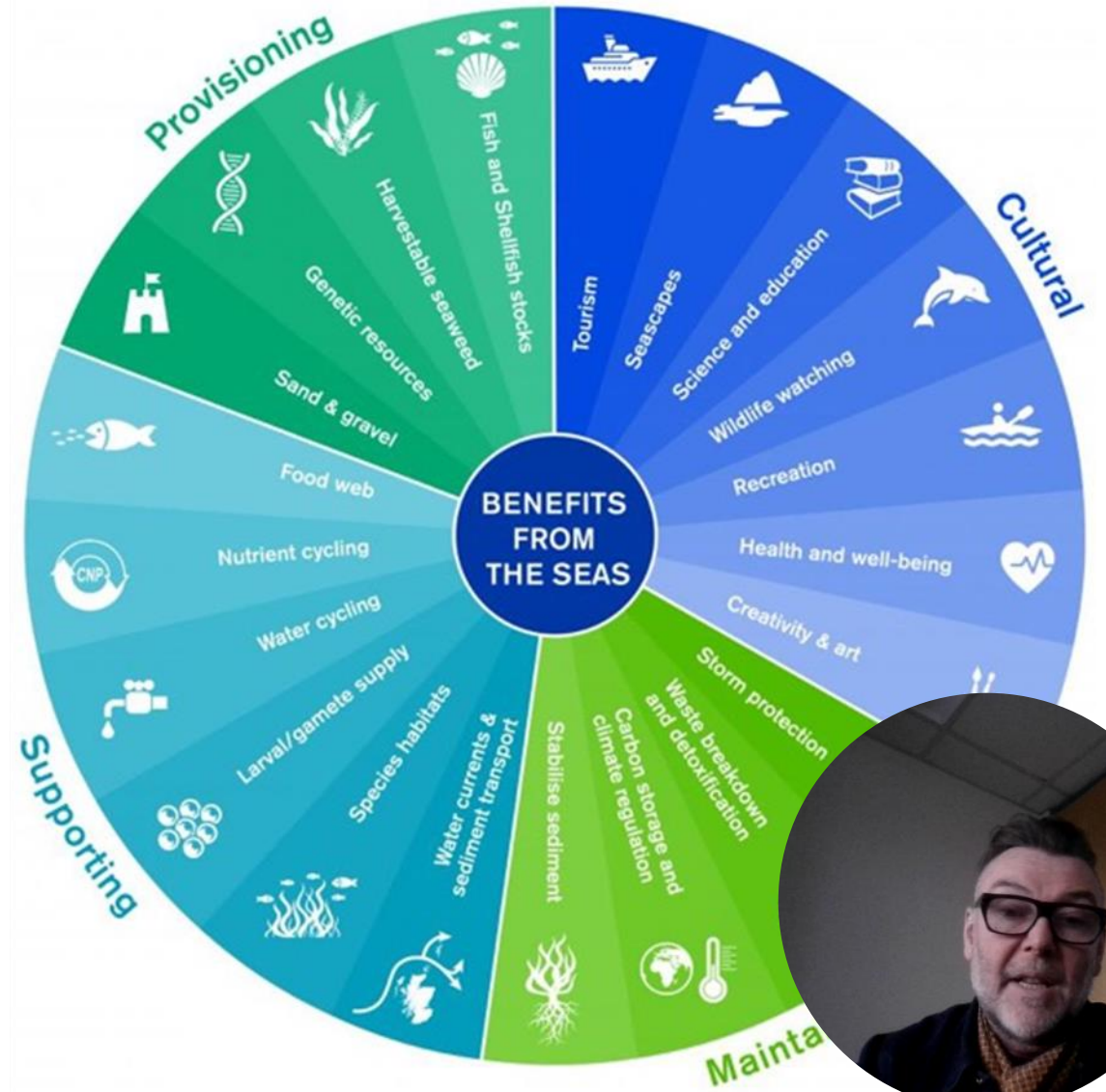
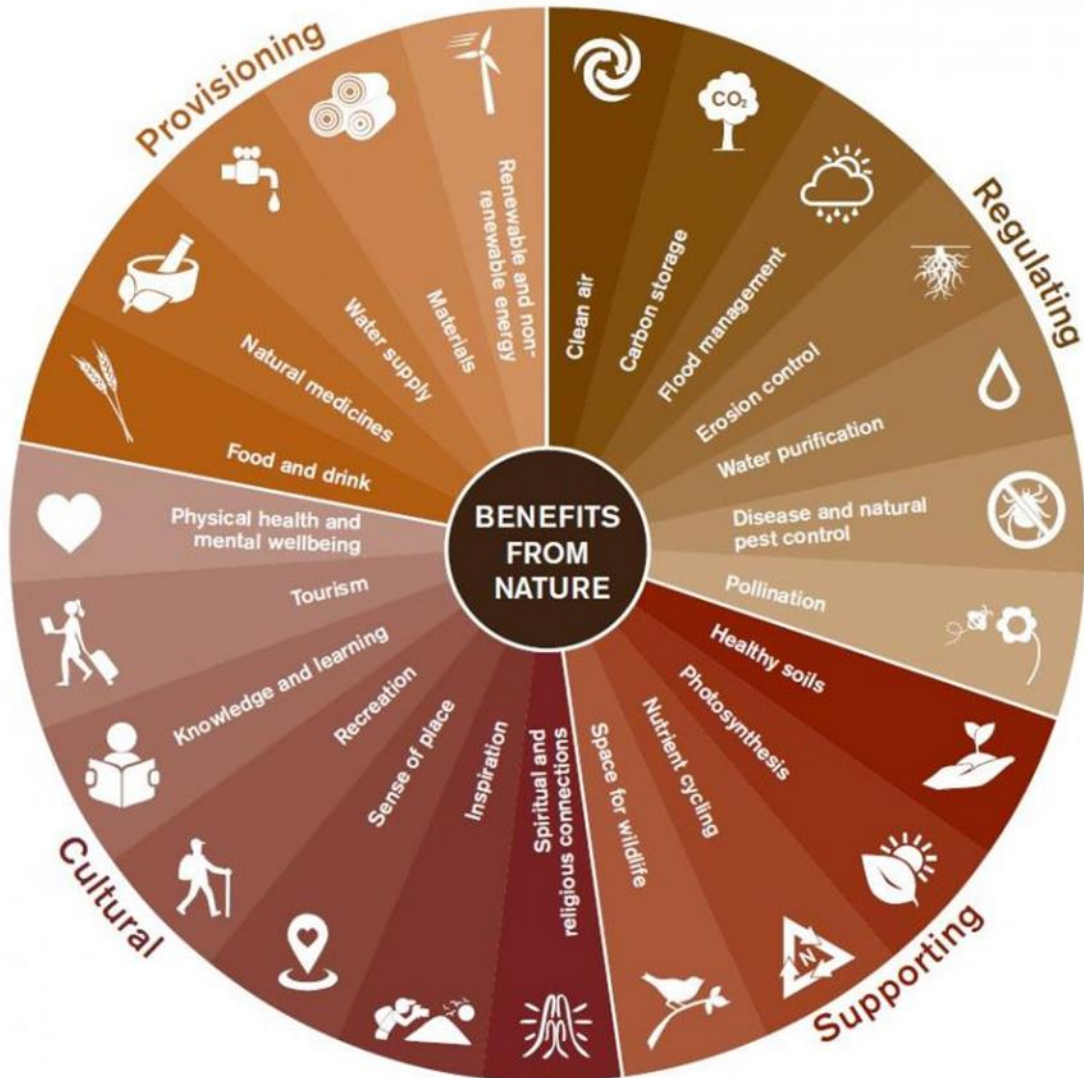
- Local Nature Recovery Strategies are a new, England-wide system of spatial strategies that will establish priorities and map proposals for specific actions to drive nature's recovery and provide wider environmental benefits
- The area covered by each Local Nature Recovery Strategy will be set by the Defra Secretary of State, who will also appoint a "responsible authority" for each to lead its preparation. The Defra Secretary of State will also be able to produce regulations on the process for preparing, publishing, reviewing and republication of a Local Nature Recovery Strategy and guidance on what each Strategy should contain.
- Landscape scale opportunities for offsetting will form a part



# Securing Multiple Stacked Benefits



# Ecosystems Services



# Nature Based Solutions

- Tree planting, afforestation, woodland pasture
- Carbon capture gardens
- Changes in farming practices and fallow land
- Natural flood management including re-wetting drained lowland areas
- Rain gardens, bioswales and SuDS
- Links to mitigation for Nutrient Neutrality



# A New Aesthetic?



# Blended Financing

- Opportunities to deliver multiple benefits through:
  - BNG Credits
  - Internal carbon offsetting
  - Environmental Land Management Schemes
  - Nutrient Credits



# Natural & Sustainable Environments

## Quality of Evidence:

- ▲ Improved
- ▼ Reduced
- ▬ High Quality
- ▬ Medium Quality
- ▬ Low Quality
- ▬ NR (Not reported):

Methodological quality of the original research is unclear and should be treated with caution.

**Greyed Out Text**

Association between a health impact & health outcome not obtained as part of the umbrella review.

## Best Available Evidence:

- \* In some instances, more than one piece of review-level evidence reporting on the same health impacts and/or outcomes was identified as part of this umbrella review. In such instances this table highlights findings of the review(s) which reported evidence of the best methodological quality.

## Population Groups:

- 👤 General Population
- 👴 Older Adults
- 👦 Children & Adolescents

## Disclaimer:

This diagram has been produced as part of a wider evidence resource, commissioned by Public Health England and developed by the University of the West of England. Please see the document Spatial planning for health: an evidence resource for planning and designing healthier places for further information.

## Planning Principles



Reduce exposure to environmental hazards



Access to and engagement with the natural environment



Adaptation to climate change

## Modifiable Features

- Improved air quality
- Exposure to air pollution
- Excessive noise
- Reduce impact of flooding

## Impact

- ▲ Physical activity among older adults
- ▼ Exposure to particulate matter and other gaseous pollutants
- ▼ Exposure to excessive noise

## Health Outcomes

- ▼ Risk of CVD, type 2 diabetes, stroke, mental health problems, musculoskeletal conditions and some cancers; Improved mental wellbeing
- ▼ Risk of COPD, healthy birth weight, reduction in myocardial infarction, reduction in risk of out-of-hospital cardiac arrest
- ▲ Cognitive function, improved birth outcomes, reduction in infant mortality and improved respiratory function amongst children.
- ▼ Lung cancer
- ▲ Mental health outcomes amongst older adults and children
- ▲ Mental health outcomes amongst older adults
- ▼ Ischemic heart disease
- ▼ Risk of Carbon Monoxide poisoning \*
- ▲ Mental health and wellbeing \*

## Provision of access and engagement opportunities with the natural environment

- ▲ Physical activity \*
- ▲ Active travel
- ▲ Mobility among older adults
- ▲ Physical activity
- ▲ Social participation among older adults
- ▲ Physical activity among children
- ▲ Motivation to engage in physical activity

- ▼ Risk of CVD, type 2 diabetes, mental health problems, musculoskeletal conditions and some cancers; Improved mental wellbeing
- ▼ Risk of CVD, cancer, obesity and type 2 diabetes. Keeping the musculoskeletal system healthy. Promoting mental wellbeing
- ▲ Physical health outcomes amongst older adults
- ▼ CVD mortality risk
- ▲ Mental wellbeing
- ▲ Cardiovascular health, maintaining a healthy weight, improved bone health, improved self-confidence, develop new social skills
- ▲ Influences personal decisions which may lead to increased physical activity
- ▼ Obesity among adolescents
- ▲ Mental health outcomes
- ▲ Mental health outcomes

## Aesthetic park improvements

- ▲ First-time park users \*
- ▲ Physical activity among children and older adults
- ▲ Physical activity

- ▲ Cardiovascular health, maintaining a healthy weight, improved bone health, improved self-confidence, develop new social skills
- ▼ Risk of CVD, cancer, obesity and type 2 diabetes. Keeping the musculoskeletal system healthy. Promoting mental wellbeing
- ▲ Mental health outcomes

## Prioritisation of neighbourhood tree planting

- ▼ Urban Heat Island effect

- ▲ Health outcomes \*

## Tackle climate change

- ▼ Heat and cold extremes

- ▼ Excess winter death and illness



# Key Takeaways

- BNG is an opportunity to secure multiple stacked benefits for nature, people and the economy
- There are tools available to measure the BNG requirements for a given development
- The Local Nature Recovery Strategy is an opportunity to identify potential offsetting sites
- Blended funding and finance can help to deliver more and better quality habitats
- Nature is good for us and public access should be secured where possible

