Biodiversity Net Gain – Translating Policy into Practical Delivery

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Biodiversity Net Gain – translating policy into practical delivery

- Biodiversity Net Gain – What is it?
- Why should we bother?
- What are the Principles of Biodiversity Net Gain?
- Keeping it real – What does it mean in practice?

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Biodiversity Net Gain – What is it?

Leaving biodiversity in a better state at the end of the development than it was before, as a result of biodiversity enhancements that form an integral part of the development.

Making a meaningful and measurable contribution to improving biodiversity locally…

….therefore contributing to national and international targets and aspirations for biodiversity.

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Development Lifecycle

Feasibility and scoping	Identify the important biodiversity areas from existing data.
Ecological impact assessment	Embed Bio Net Gain in the ecological work.
Design	Design to avoid important habitats and enhance others where possible. Pass the data ready for construction
Construction	Implement the design; act on new enhancement opportunities; produce ‘as-built’ biodiversity calculation.
Maintenance and monitoring	Checking the habitat meets the requirements. Adaptive management.

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Why should we bother?

Facilitates consenting

Builds good relations with local planning authorities & stakeholders

Decrease business risk, including through the last option of biodiversity offsetting

Can significantly reduce development costs, at least in some cases

Provides early understanding and clarity on requirements

Provides an evidence based application of the mitigation hierarchy - demonstrating avoidance, minimisation and compensation

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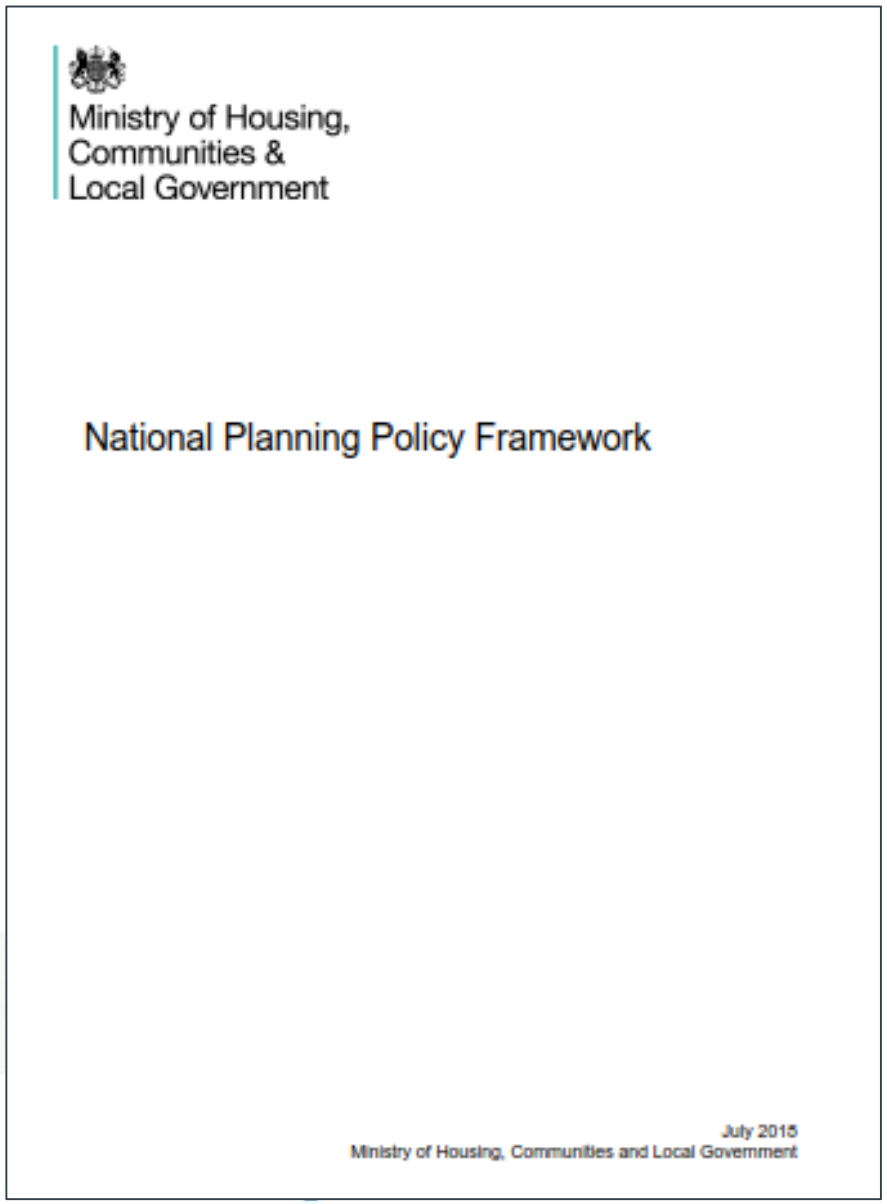

National Planning Policy Framework 2018

*The planning policies and decisions should contribute to and enhance the natural and local environment by: …**minimising impacts on biodiversity and providing net gains for biodiversity**, including by establishing coherent ecological networks that are more resilient to current and future pressures" (Section 15, paragraph 170);*

Biodiversity Net Gain

Good practice principles for development

ciria

CIEEM Chartered Institute of Ecology and Environmental Management

IEMA Transforming the world to sustainability

10 Guiding Principles

1. Apply the Mitigation Hierarchy
2. Avoid losing biodiversity that cannot be offset by gains elsewhere
3. Be inclusive and equitable
4. Address risks
5. Make a measurable Net Gain contribution
6. Achieve the best outcomes for biodiversity
7. Be additional
8. Create a Net Gain legacy
9. Optimise sustainability
10. Be transparent

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Make a measurable Net Gain contribution

- Measuring change is vital
- Area is not enough
- Most organisations and planning authorities are using the Defra metric (2012)
- We are expecting an update in Spring 2019

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How much more biodiversity is net gain?

Link to published biodiversity plans to avoid penalising projects that make important contributions:

- A project increases an extremely rare habitat by 5% to make a substantial contribution towards local biodiversity plans
- But another project increases a commonly occurring habitat by 20% that only makes a limited contribution

- **Not just outweighing losses with gains**
- **Check for LPA targets**
- **Proportionate**
- **How accurate is the metric?**

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How much more biodiversity is net gain?

The output with the lowest percentage score (rounded to the nearest whole percentage point) should be used to identify the reward level available for the development as follows:

- 75% and 94% - Minimising loss,
- 95% and 104% - No net loss for the habitats assessed,
- 105% and 109% - Net gain for the habitats assessed,
- 110% or above - Significant net gain.

GN36 BREEAM, CEEQUAL and HQM Ecology Calculation Methodology – Route 2

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Key Principles and Context

- The metric itself does not change the protection afforded to biodiversity
- The metric sits within a decision framework based on the mitigation hierarchy
- It has been kept deliberately simple to be of practical use and manage process burdens for users
- The core principles of Biodiversity Net Gain e.g.: additionality, not trading Down etc. should be applied

Key Principles and Context

- Whilst underpinned by ecological evidence the metric is only a proxy for biodiversity

- The metric recognises the importance of place and connectivity. It seeks to:
  - enhance biodiversity in the locality of impacts
  - contribute to England's ecological network by creating more, bigger, better and joined areas for biodiversity.

- It is a suitable proxy for widespread species but protected species will need separate consideration

How can it be used?

- **As an auditing tool** to quantify the biodiversity value of habitats.
- **To calculate the losses and gains in biodiversity**
  - From development
  - From positive conservation management
- **There are supplementary metrics for** hedgerows and lines of trees, and rivers and streams.

How does it work?

- The biodiversity 'value' is evaluated on the basis of its area and the relative 'quality' of its habitat.

- The assessment of quality comprises four components :
  - **Distinctiveness**
  - **Condition**
  - **Strategic significance**
  - **Connectivity**
- The metric operates by applying a score to each of these elements.

- Then a calculation using the scores and the area of the habitat gives a number of biodiversity unit that represents the biodiversity value of that habitat parcel.

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How does it work? continued

- The initial calculation - ‘baseline’ biodiversity units.

- The process repeated using a ‘post development’ scenario to account for the impact.

- Additional factors to account for the risk associated with creating, restoring or enhancing habitats are considered. The three risks are:
  - ☐ **Difficulty** of creating or restoring a habitat
  - ☐ **Temporal** risk
  - ☐ **Spatial** risk

- The biodiversity units ‘post development’ are deducted from the ‘baseline’ to give a value for the extent of change.

A Simple Example

PRE-intervention biodiversity calculation

Size of habitat parcel	x	Distinctiveness	x	Condition	x	Strategic location	x	Connectivity	=	Biodiversity units
10 (ha)	x	2 (low)	x	2 (moderate)	x	1 (low)	x	1 (low)	=	40 units

POST-intervention biodiversity calculation (for newly created habitat)

Size of habitat parcel	x	Distinctiveness	x	Condition	x	Strategic location	x	Connectivity	x	Difficulty	x	Time to target condition	=	Biodiversity units
12 (ha)	x	4 (medium)	x	2 (moderate)	x	1.15 (high)	x	1.15 (high)	x	0.7 (medium)	x	0.5 (20 yrs)	=	44 units

The net effect of an intervention (or a series of interventions) on biodiversity is calculated as follows:

POST units	-	PRE units	=	Outcome
44 units	-	40 units	=	4 Units

Habitat parcel

Measure of biodiversity quality

Risk factor

Value in biodiversity units

Overview of the Revised Metric

- Condition assessed against generic set of criteria linked to habitat attributes in a recognised habitat classification.
- Larger range of habitats being covered e.g. Green Infrastructure
- Updated more detail around time to ‘target condition’, ‘difficulty’ and ‘distinctiveness’
- Future value still calculated using 3.5% discount rate.
- GIS Connectivity Tool & revised Strategic Significance multipliers

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Avoid losing biodiversity that cannot be offset by gains elsewhere – what do the Principles say?

"*Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or Let Gain*"

- Impacts on irreplaceable habitat should be EXCLUDED from any calculation of biodiversity losses and gains.
- Irreplaceable habitats are NOT TRADABLE, and impacts cannot be accounted for by using a metric.

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Avoid losing biodiversity that cannot be offset by gains elsewhere – what does this mean for….?

- Developers (and their consultants)
  - *Early survey work/information gathering to establish what irreplaceable habitats are in the vicinity of the development site*
  - *Inform early stages of the project lifecycle to avoid impacts*
  - *Separate bespoke measures to avoid, mitigate or if necessary 'compensate' with a biodiversity contribution that is proportionate to the loss*
- Local planning authorities
  - *Know what irreplaceable habitats might be in their administrative area*
  - *Understand what might constitute an irreplaceable habitat*
  - *Establish the factors that determine whether a habitat is irreplaceable in a given location*
- Contractors
  - *Know what irreplaceable habitats are in the vicinity of the development site*
  - *Understand how to protect them during construction*

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Avoid losing biodiversity that cannot be offset by gains elsewhere – how does this affect a net gain claim?

- A project wide net gain claim should not be made where the project affects irreplaceable habitat, unless impacts are fully avoided
- Where a project affects irreplaceable habitat, meaningful gains can still be made for all habitats that are not irreplaceable
- Record biodiversity net gains specifically for habitats that are not irreplaceable, but do not claim a project wide net gain.

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Avoid losing biodiversity that cannot be offset by gains elsewhere – Discussion points

- Can enhancement of irreplaceable habitat be counted within an account of biodiversity losses and gains?
- What would be the best way of expressing biodiversity net gain for other habitats, on a project that also affects irreplaceable habitat?
- How can we improve knowledge and understanding of irreplaceable habitats?
- How can bespoke measures for irreplaceable habitat 'compensation' be improved in the absence of using a metric?

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Optimise sustainability

— Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.

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Natural England's eco metric

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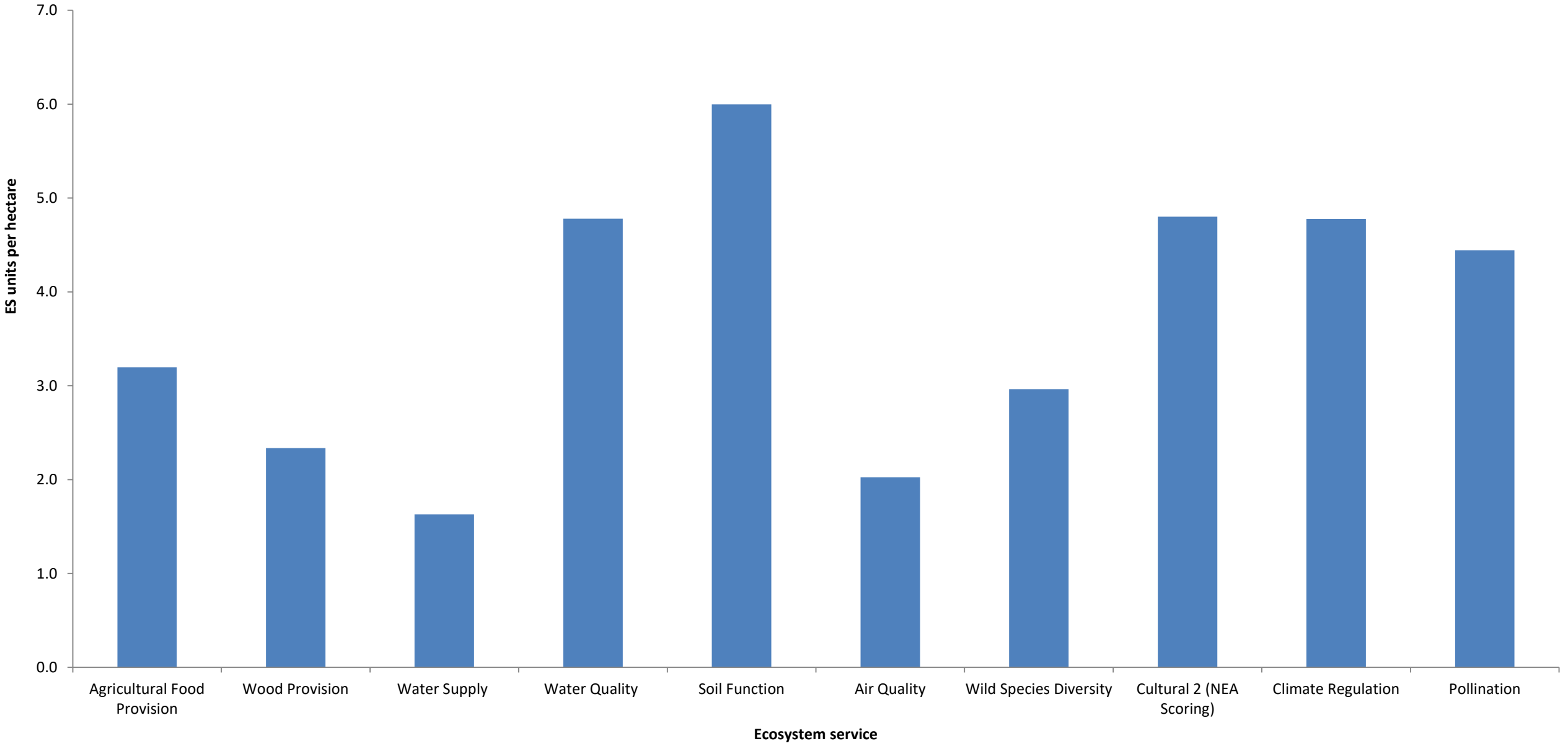
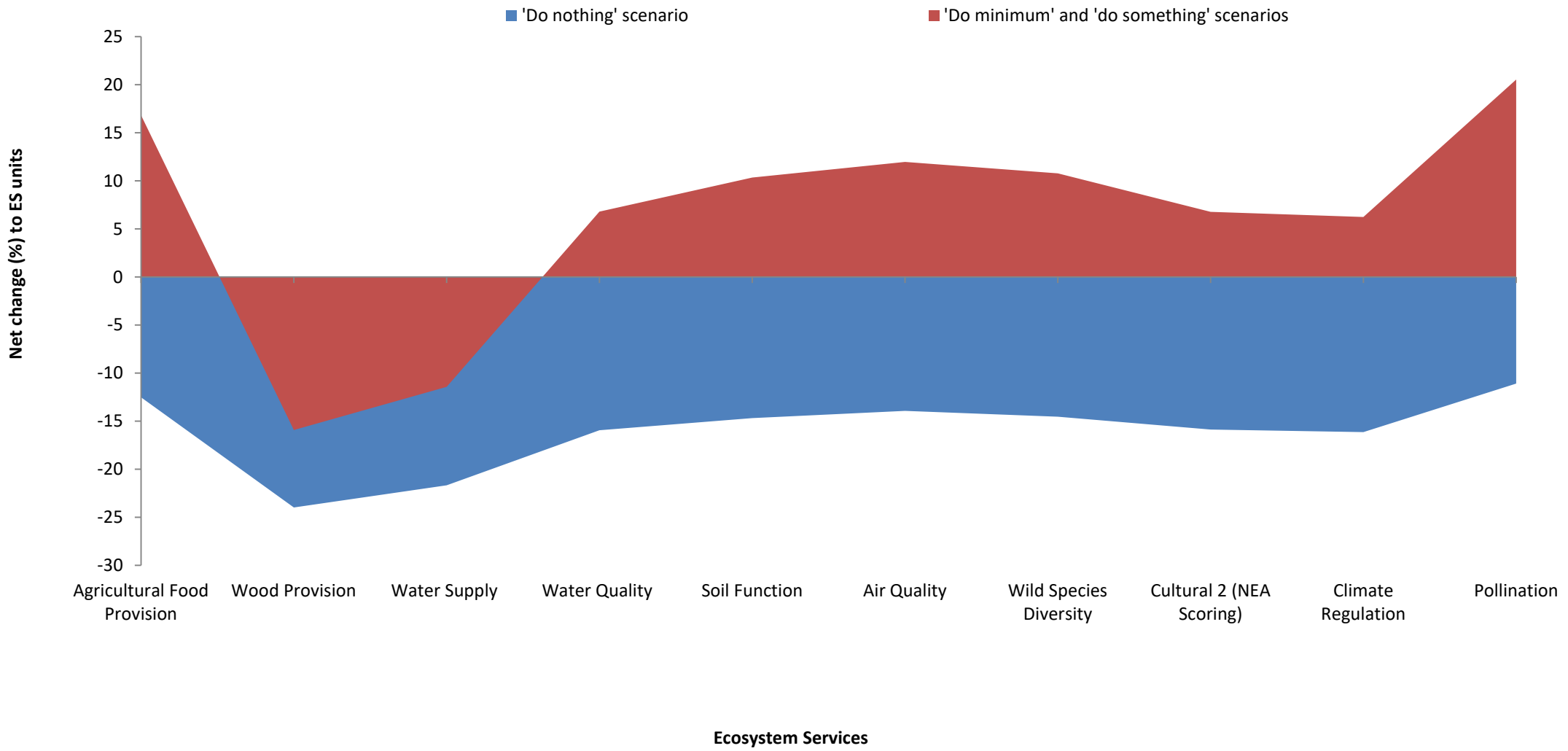
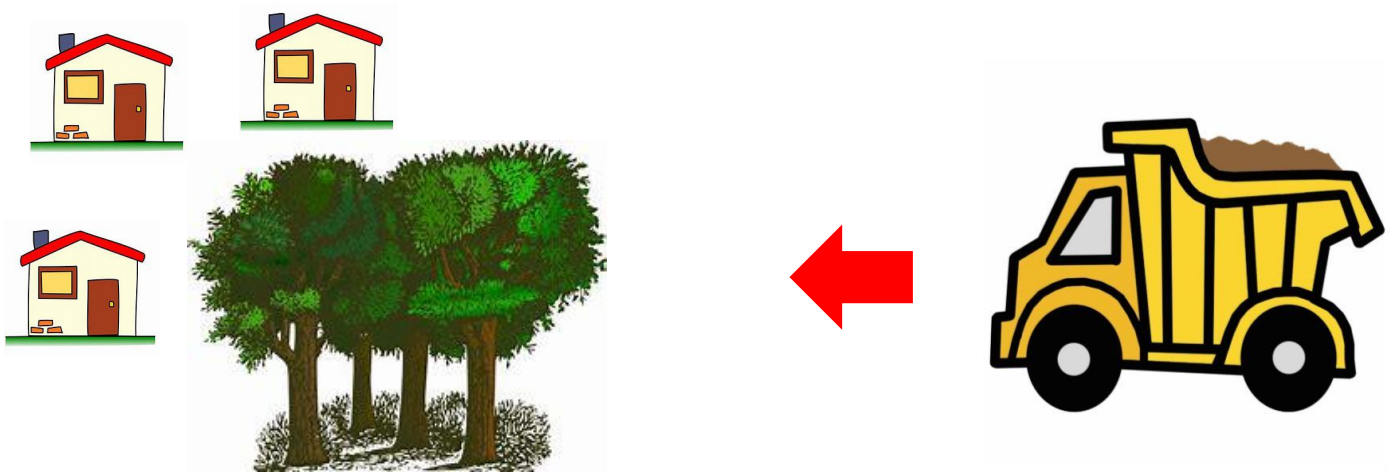
Natural England's eco metric



Net change after landscaping



Consider people



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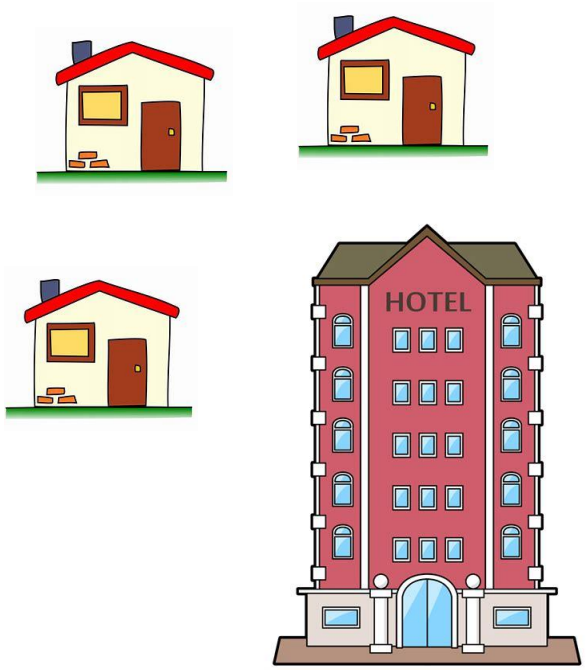


✓ **Biodiversity Net Gain is achieved**

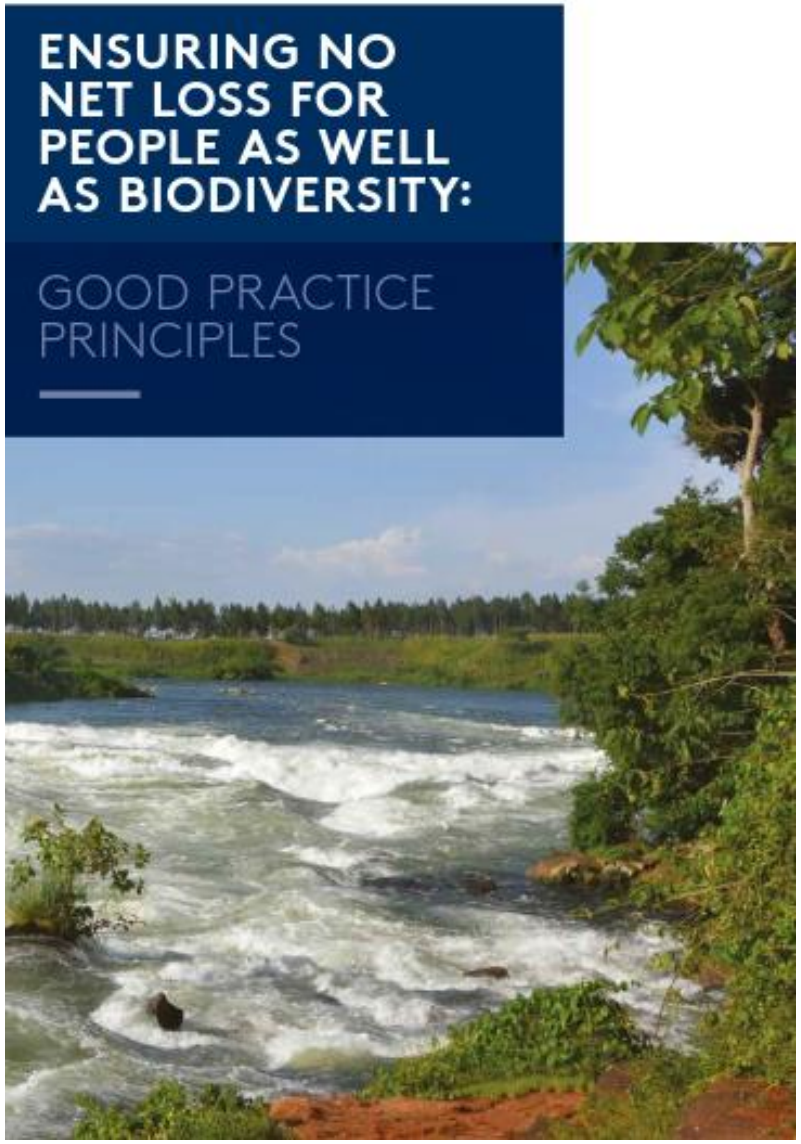
➢ **People at development site lose biodiversity**

✓ **People benefit from the offset**

➢ **But these are different people**

➢ **& less people benefit**

New social principles for Biodiversity Net Gain



People's wellbeing is at least as good as a result of the development's biodiversity net gain

- Measure wellbeing
- Throughout the project lifecycle
- Out-of-kind so long as the affected people consider their wellbeing is just as good

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The Guidance will be coming out shortly!

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