The revised national biodiversity metric and a proposed metric for small-scale developments

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What Is Net Gain?

Net gain is an approach to development, and/or land management, that leaves the natural environment in a measurably better state than beforehand

The Importance of a Metric

Fundamental to net gain

Net gain is an approach to development, and/or land management, that leaves the natural environment in a measurably better state than beforehand.

The metric:

- Calculates baseline + forecast outcome
- Provides confidence
- Ensures consistency of approach

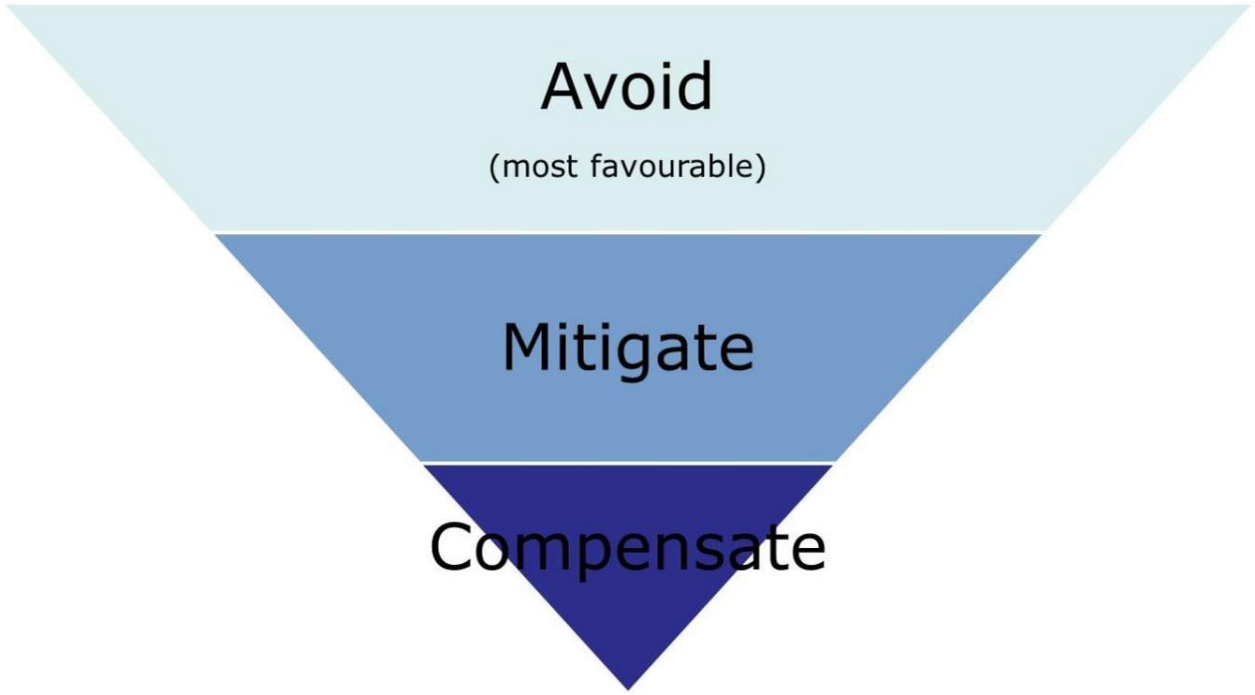
Needs to be:

- Simple yet sound

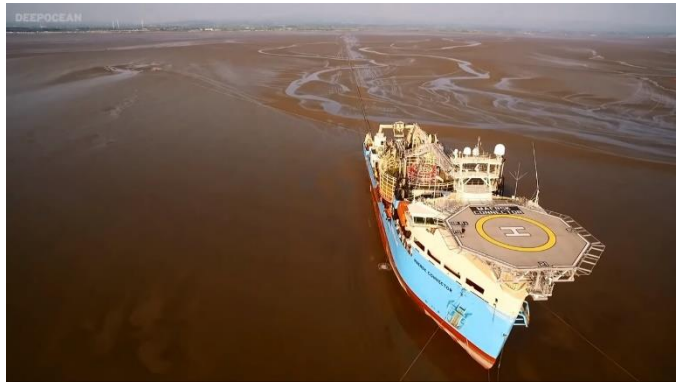
Metrics & the Mitigation Hierarchy

"Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere".

Biodiversity Net Gain: Good practice principles for development – CIEEM/IEMA/CIRIA (2016)



Metric Applications



The Metric and the Environment Bill

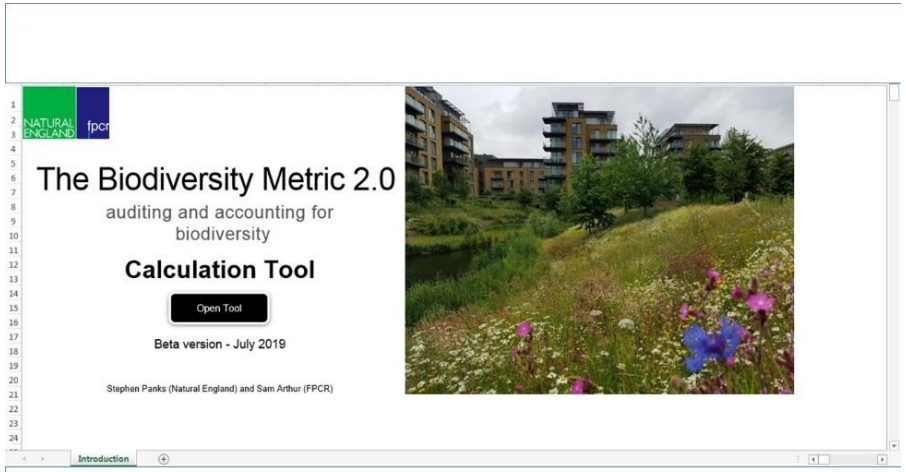
Mandatory Biodiversity Net Gain

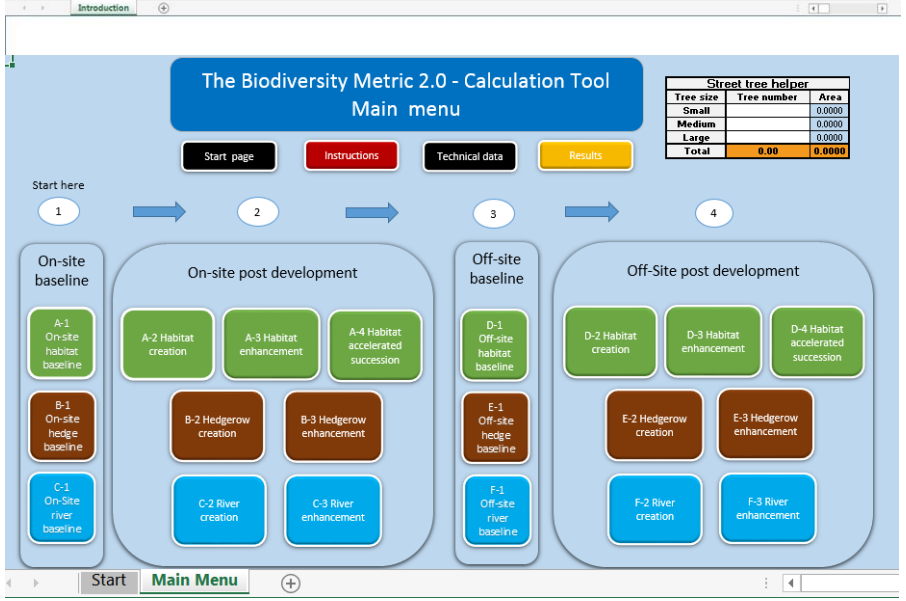
- Amends the Town & Country Planning Act (TCPA)
- Minimum 10% gain required calculated using Biodiversity Metric & approval of net gain plan
- Habitat secured at least 30 years

Legal requirement likely mid-2023 onwards

Biodiversity Metric 2.0

- Uses habitat features as a ‘proxy’ measure
- Translates into biodiversity units
- All intertidal and terrestrial habitat features
- Area and linear habitat types
- Calculations based upon:
  - Habitat size
  - Habitat condition
  - Habitat distinctiveness
  - Spatial location
  - ~~Ecological connectivity~~





Biodiversity Metric 3.0 - Timetable

- **July 2019 – February 2020**: Metric 2.0 Consultation
  - 7,000+ downloads & 130 formal responses
- **March 2020 – October 2020**: Metric edits
  - c1.3m calculations run to test numbers + stress tested
- **August 2020** – Formal Consultation response published
- **January 2021**: Metric 3.0 Published
  - Metric calculation tool
  - Summary & detailed guidance + case studies
  - Revised condition assessment methodologies
- **January 2021**: Consultation on Small Sites Metric

User Feedback on Beta Metric 2.0

Key Habitat Feedback

- Woodland
- Grasslands
- Scrub
- Urban
- Rivers & Streams
- Wetlands
- Intertidal

Other Feedback

- Accelerated succession
- Condition assessment
- Ecological connectivity
- Habitat banking
- Data input

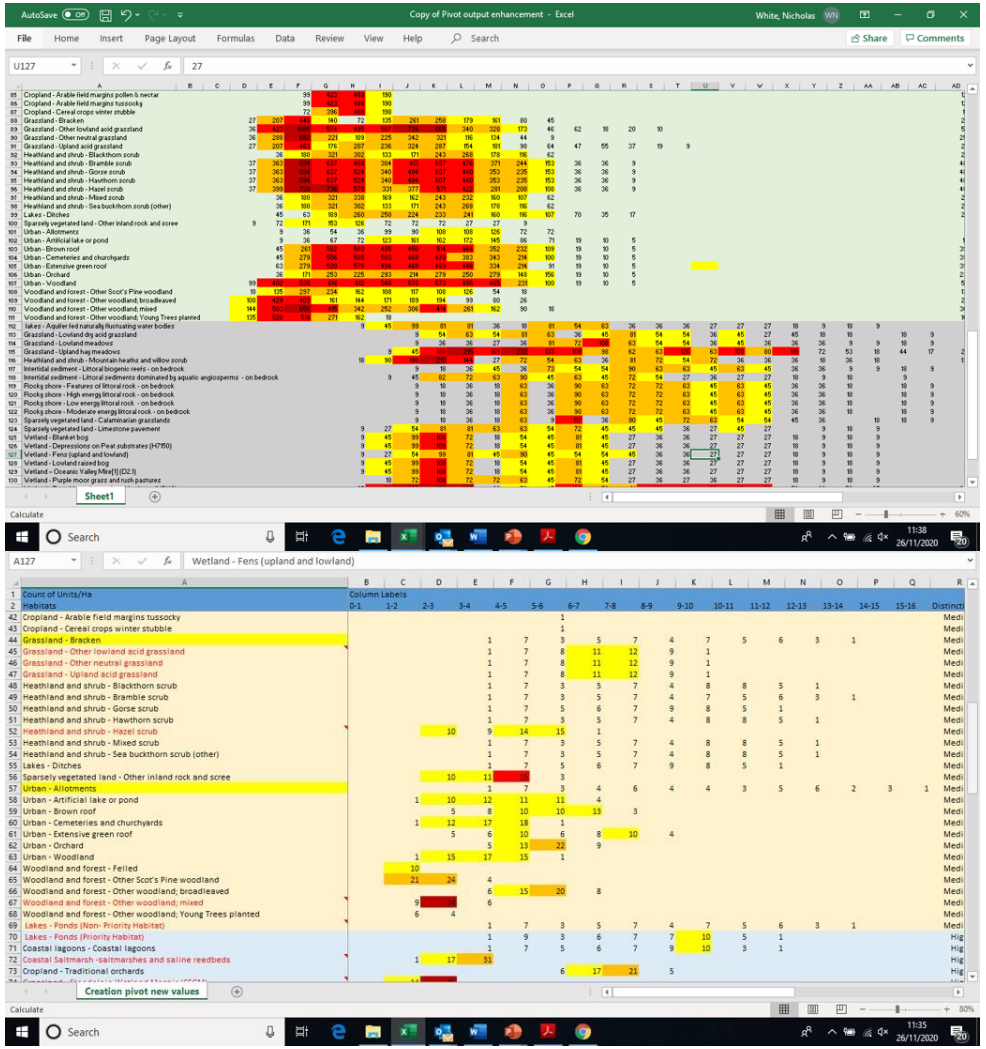
Metric 2.0 Testing

Testing covered

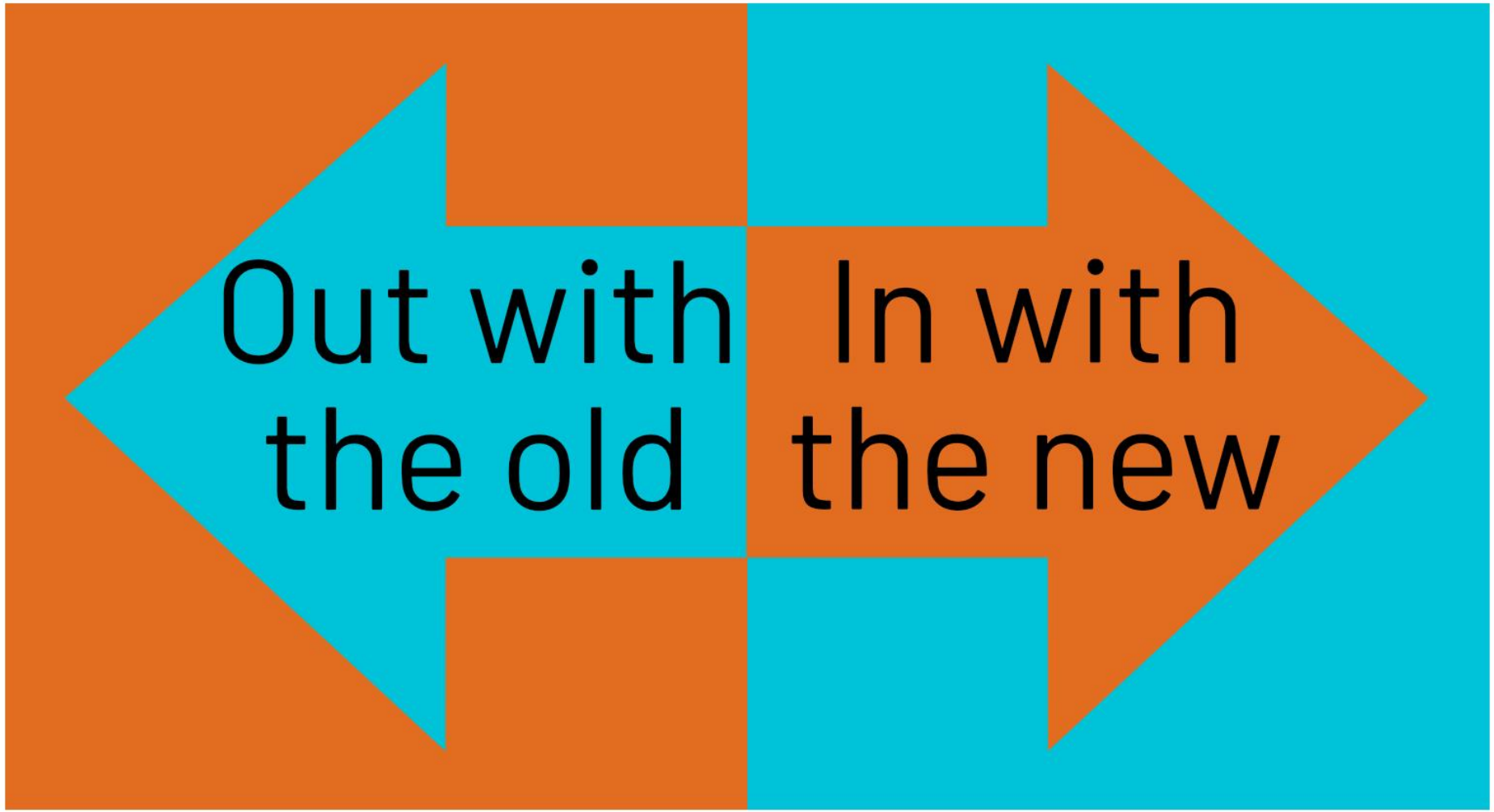
- Evidence for time to target condition
- Ecological accuracy
- Calculation errors
- Connectivity tool
- Condition assessment
- User experience

Stress and Scenario Testing Metric 2.0

- Metric tool adapted to run **81 different** combinations of **condition, connectivity** and **strategic significance** across all distinctiveness bands for each of the 133 habitats simultaneously.
- **10,000 calculations** each for baseline, enhancement and accelerated succession.
- The tool was **run 130 times** to capture data across 10 condition ranges and 21 habitat change scenarios.



From Biodiversity Metric 2.0 to 3.0



Metric 3.0 – Key Changes

Removal of…

- Ecological connectivity
- Accelerated succession
- Small number of habitat types

Addition of….

- GIS data import facility
- Reward for creating habitat in advance
- Penalty for deferred habitat creation
- Small number of habitat types

Some Example Habitat Changes

Woodland

- Creation adjusted to what achievable within 30 years
- Adjusted time to target condition
- Accelerated succession removed
- Urban woodland category removed

Urban

- ‘Suburban mosaic’ replaced with guidance on 70/30 developed land/garden split
- Allotments changed to low distinctiveness

Lakes

- Reallocated ditches to Rivers & Streams
- Non-priority lakes-ponds changed to medium distinctiveness
- Urban – artificial lake/pond changed to Lakes/ponds – ornamental

Rivers & Streams

- Added culverts
- Change riparian encroachment to %, include in baseline + split in watercourse & riparian
- River type changes
- Creation river types reduced

Condition Assessment

Updated to

- Standardised proforma
- Habitat description link provided
- Key assessment criteria
- Pass, fail scores
- Highlights undesirable features
- Aligns woodland with England woodland condition survey
- Field tested with stakeholders

The Biodiversity Metric 3.0 Publication

Release early 2021

- Metric calculation tool
- User + technical guidance
- GIS import tool
- Condition assessment materials
- Case studies

Small Sites Biodiversity Metric

Government Proposed

"*Government will address concerns about process burdens for small sites by following a similar approach to BREEAM in allowing a simplified assessment for sites ... This simplified assessment will not include a condition assessment, so users will only need to state what habitats are present and the area that these habitats occupy to define their baseline for net gain*."

Net Gain: Summary of responses and government response (Defra), July 2019

Small Sites Metric – Scope and Usage

Intended for:

*"**Minor development** being defined (i) for residential: where the number of dwellings to be provided is between one and nine inclusive on a site having an area of less than one hectare, or where the number of dwellings to be provided is not known, a site area of less than 0.5 hectares; (ii) For non-residential: where the floor space to be created is less than 1,000 square metres OR where the site area is less than one hectare."*

Scale of potential usage

In the year ending June 2018, district level planning authorities

- *granted 48,800 decisions on residential developments, of which 6,400 were for major developments and **42,400 were for minors,** down by two and three per cent respectively on the year ending June 2017*

Planning Statistical Release 20 September 2018, MHCLG

Small Sites Metric - Development

Developed with input from:

- Professional Ecologists
- LPAs
- Developers
- Contractors
- Landscape Professionals
- NGOs
- Defra Group

Small Sites Metric – Key Principles

- It should be **fit for purpose** for the scale of developments
- Biodiversity **units generated should be equivalent** in value the 'main' metric
- Include both **area and linear units** and should be applicable to both **terrestrial and inter-tidal** development scenarios.
- Based on the **same metric formula and trading rules** as those that underpin the main metric.
- **Not appropriate for** use where high or very high distinctiveness habitats are found within or 'close to' the development red line boundary.
- A developer should use a form of **light-touch assessment appropriate to the development** to ascertain whether the habitats on-site meet the thresholds e.g. existing published habitat data, a simple walkover or an ecology survey.
- A **risk-based approach** should be adopted towards the condition multipliers which should auto-default to moderate or high
- The Small Sites metric should **only be used to calculate on-site** biodiversity units.

Small Sites Metric - Main Points

- Supports mitigation hierarchy
- Fulfils a Government proposal, likely alternative would have been to exempt small sites from BNG
- Usage is optional, can still use main metric
- Can be used only where low or moderate distinctiveness habitats only are present
- Does not require a full habitat survey
- Metric to be used by any suitably qualified person
- Cannot be used to calculate off-site units
- Units generated are equivalent to main metric

Small Sites Metric – Estimated Timeline

- **September 2020** – work commenced on small sites metric
- **Early 2021** – launch of beta consultation version + guidance. Questions on
  - The key principles
  - Format of final release
  - Translating into landscape typologies
  - Use of images/illustrations to aid identification
- **Late Spring 2021** – consultation period closes
- **Summer/autumn 2021** – final small sites metric released

Thanks

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