



An introduction to the Statutory Biodiversity Metric

Planning Advisory Service & Natural England

24 January 2024



Introduction to Statutory Biodiversity Metric



- Microphones are muted and cameras are off
- Please join Slido to answer polls and ask questions
 - Go to slido.com and enter this code: #2033497
 - Or scan the QR code with your smartphone
- 'Like' or thumbs up questions rather than repeat
- We'll answer what we can / PAS BNG FAQs
- We will be using polls, so please answer these
- We're recording slides and the recording will be up on our website asap
- Technical issues email: pas@local.gov.uk







Agenda

1. Welcome, PAS intro	Martin Hutchings, PAS
2. Introduction to the Statutory Metric	Katie Gowers, Defra
3. How the Metric works	Sam Wilson, Natural England
4. Q & A	PAS, Natural England, Defra
5. Summing up and feedback	PAS





Planning Advisory Service (PAS) and BNG

- PAS is part of Local Government family, Team of 16
- Funded by DLUHC to support English planning authorities (LPAs)
- Wide programme, including in 2023/24: design, infrastructure levy, Local Plans, Environmental Outcome Reports & development management designation
- Environmental planning, covering nutrient neutrality, nature recovery and biodiversity net gain





Who we are and what we do

Getting planning right is important for councils. It allows them to manage development, ensuring that the best possible outcomes are delivered for places. It requires political and technical leadership and engaged communities. Helping councils is what we do.

What we do

The Department for Levelling Up, Housing and Communities provides a grant each year for the PAS so we can provide support to councils. We are funded to help get local plans up-to-date and to improve decision-making, as well as running event series on topical issues. We can also work with councillors and do thorough "peer challenge" reviews of planning departments. We believe in a 'sector led' improvement approach, where local authorities help each other to continuously improve.

Bulletin

Sign up for our Bulletin, which brings you news of our latest support, case studies events and muses.



PAS LPA Biodiversity Net Gain Support



- Peer-to-peer learning:
 - BNG practitioner network
 - Case studies, examples, sharing experience
- Online resources, including
 - FAQs and advice
 - Readiness checklist tool
 - BNG essentials module
- Workshops and events
- Feeding back to Government and Natural England and helping develop guidance
- Joining it all up

Networks Products

Support Events

Feedback

Joining it all up



The Statutory Biodiversity Metric

Katie Gowers, Defra BNG Metric Lead





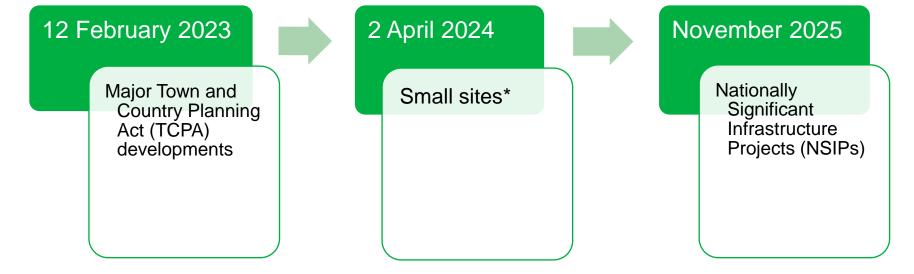


When will BNG apply to different developments?

Completed statutory biodiversity metric calculation tool submitted with gain plan

Exemptions

- 'de minimis': below 25
 metres squared, or 5m for
 linear habitats such as
 hedgerows
- householder applications
- biodiversity gain sites



*Small sites 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.



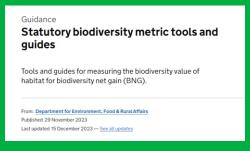
Roles and responsibilities for the metric



Owner of the statutory biodiversity metric



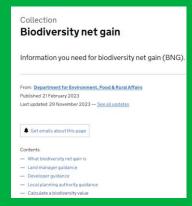
Laying the metric in Parliament



Hosting the metric package – calculation tools, user guide and condition assessments



Laying the related secondary legislation for the BNG framework



Producing gov.uk guidance



Updating the statutory metric every 3-5 years after statutory consultation



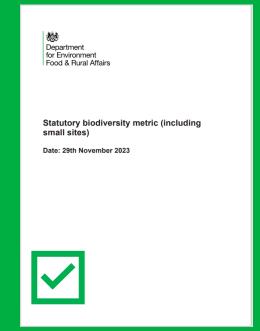




How did we make the metric statutory?

Biodiversity value and the biodiversity metric

- 3 References to the biodiversity value of any habitat or habitat enhancement are to its value as calculated in accordance with the biodiversity metric.
- The biodiversity metric is a document for measuring, for the purposes of this Schedule, the biodiversity value or relative biodiversity value of habitat or habitat enhancement.
 - (2) The biodiversity metric is to be produced and published by the Secretary of State.
 - (3) The Secretary of State may from time to time revise and republish the biodiversity metric.
 - (4) Before publishing or republishing the biodiversity metric the Secretary of State must consult such persons as the Secretary of State considers appropriate.
 - (5) The Secretary of State may by regulations make transitional provision in relation to the revision and republication of the biodiversity metric.
 - (6) The Secretary of State must lay the biodiversity metric, and any revised biodiversity metric, before Parliament.



- Biodiversity metric calculation tool must be used to demonstrate proper application of the statutory metric formula
- Regard must be given to the user guides to inform proper use of the tool
- The condition assessments must be used to properly determine habitat condition







for Environment Food & Rural Affairs User guides*: rules vs. principles

- **1. 4 Rules** = if broken metric must be rejected at validation
 - Metric calculation tool has flags to show when rules have been broken
- 2. 'Must' = we have a legal basis to require this
- 3. Principles and 'should' = we don't have a legal basis but there is still a requirement to have regard to the user guides so the methodology should still be followed

Rule number	Rule detail		
Rule 1	The trading rules of this biodiversity metric must be followed.		
	diversity unit outputs, for each type of unit, must not be mmed, traded, or converted between types. The requirement iver at least a 10% net gain applies to each type of unit.		
	To accurately apply the biodiversity metric formula, you must u the biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites.		
	he tools remove the need for a user to manually calculate the hange in biodiversity value.		
	the tool will summarise the results of calculation and inform ser whether the biodiversity net gair ojective has been met.		
Rule 4	In exceptional ecological circumstances, deviation from this blodversity metric rethodology may also mitted by the relevancing authority. See more abov		
#	VS		
Principle num	or inciple d		
Principle nu			
Principle 1	The metric assument should be pleted by a compete person.		
Principle 2	The use this biodiversity metric does not override existing		
	biodiversity protects, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.		
Principle 3	requirements. This includes consenting or licensing		
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Principle 4 Principle 5 Principle 6	requirements. This includes consenting or licensing processes, for example woodlands. This blodiversity metric should be used in accordance with established good practice guidance and professional code: This blodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecologicadvice. Biodiversity units are a proxy for blodiversity and should be treated as relative values. This blodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance. Habitat interventions need to be realistic and deliverable		
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Statutory Biodiversity Metric

January 2024

What is Biodiversity Net Gain (BNG) and what is the Metric?



- When it comes into force, on 12th February 2024, BNG will be mandated in the planning process, making it a requirement for all appropriate major developments to deliver a minimum 10% net gain in biodiversity
- Calculation of net gain will be by way of the statutory biodiversity metric:
- 1. Calculation of the baseline biodiversity unit value of a piece of land prior to planning application
- 2. A second calculation of the post-intervention biodiversity unit value
- 3. Difference between the two calculations is biodiversity gain or loss

Day one of mandatory BNG = any applications submitted on or after this date

Evolution of the Statutory Biodiversity Metric



Over a decade of development:

- 2012 = Defra biodiversity metric published (no calculation tool)
- 2019 = Publication of Biodiversity Metric 2.0 (Natural England)
- 2021 = Publication of Biodiversity Metric 3.0 (Natural England)
- 2022 = Publication of Biodiversity Metric 3.1 (Natural England)
- April 2023 = Publication of Biodiversity Metric 4.0 (Natural England)

The Statutory Biodiversity Metric (draft) was published in November 2023

Natural England Role with Statutory Metric



- The Statutory Biodiversity Metric was published by the Secretary of State.
 It is NOT a Natural England metric but is based on the earlier Biodiversity Metric 4.0 released by NE
- NE will make recommendations every 3-5 years to the SoS about updates to the Statutory Biodiversity Metric, encompassing:
 - Technical aspects e.g. metric values, formulae changes etc
 - Usability and functionality
- NE metric team will provide ongoing advice + beta testing for Defra
- NE will work with EA and FC and seek external (eNGO, ecological consultants, LPA, academic etc) input to inform its advice to the SoS.
- Any metric change resulting in a change in unit values requires the SoS to consult before implementation

The Metric

Calculating the value of habitats using an Excel workbook



The Metric is fundamental to BNG

Consulted on by the Secretary of State (Sept 2022) and will be maintained and updated into the future on a 3-5 year review cycle

From day one of mandatory biodiversity net gain, all applications that need to submit a Metric must use the Statutory Biodiversity Metric.

There will be **NO** transition arrangements with regard to the Metric

The Metric

NATURAL ENGLAND

Defra's Statutory Biodiversity Metric was developed by Natural England with input from Environment Agency, Forestry Commission and others

- A tool for auditing and accounting for biodiversity losses and gains
- Uses habitat as a 'proxy' measure, translating it into biodiversity units
- All intertidal and terrestrial habitats plus linear habitat types
- Establishes a baseline and forecasts a proposed outcome

Best practice advice is that the metric should be used at site selection stage and then iteratively throughout 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.

Accessing the Metric, associated guidance, condition assessments and FAQ's



Guidance

Statutory biodiversity metric tools and guides

Tools and guides for measuring the biodiversity value of habitat for biodiversity net gain (BNG).

Hosted on GOV.UK (alongside User Guide)

Statutory biodiversity metric tools and guides - GOV.UK (www.gov.uk)

Hosted on Natural England Access to Evidence

Metric supporting tools (e.g. QGIS import tool) download



The Statutory Biodiversity Metric

User Guide (draft)

Date: November 2023

The Metric

Avoid



Mitigate

Compensate

- Within a decision framework based on mitigation hierarchy
- Provides confidence and consistency of approach
- Aids communication to non-technical audience
- Aids decision making. NOT a decision tool

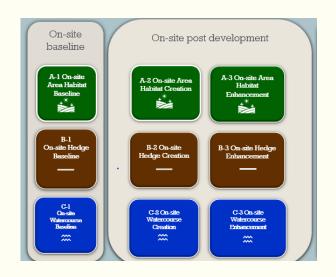
NB. Should be completed by a competent person.

Note, where there is a watercourse present, the river condition assessor must have completed river condition assessment training.

What is a biodiversity unit?

Biodiversity units are a proxy to describe biodiversity





- Area units
- Hedgerow units
- Watercourse units

BNG applies to each habitat type that is present at the baseline.

For example, a site with 100 area units, 20 hedgerow units and 40 watercourse units will need to provide as a minimum, post-intervention units of:

110 area units, 22 hedgerow units and 44 watercourse units

Baseline biodiversity unit



Habitat Area / Length

Main Metric: Hectares / km Small Sites Metric: m²/m

Condition

Measures a habitat against its ecological optimum

Baseline Biodiversity Unit

Distinctiveness

Based on type of habitat and its features

Strategic Significance

Local significance of a habitat based on its location and type

Requires user input

Automatically determined by habitat type

Post-intervention biodiversity unit

NATURAL ENGLAND

Previous Slide

Area/Length x Distinctiveness x Condition x Strategic Significance

Difficulty

Represents the uncertainty in the effectiveness of management techniques used to enhance or create habitat

Postintervention Biodiversity Unit

Time to Target Condition

Average time between starting intervention and habitat reaching its target condition

Spatial Risk

Only applied to off-site interventions

Requires user input

Automatically determined by habitat type

Mechanisms for delivery of BNG



On-site (units)

Off-site (units)

Potentially in full or combination



Habitat creation or enhancement; landscaping or green infrastructure



New habitat creation or enhancement on land holdings or via habitat banks

Statutory Credits

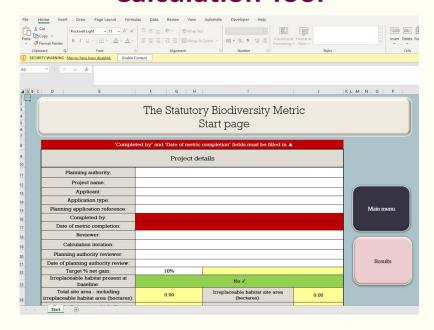
Only if units not available



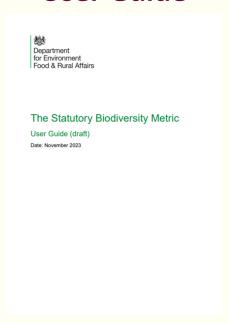
Landscape-scale strategic habitat creation delivering nature-based solutions

Biodiversity Metric Tools

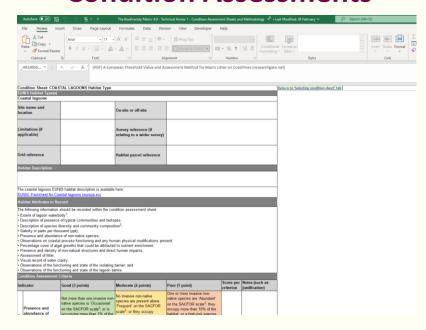
Calculation Tool



User Guide



Condition Assessments



Statutory Small Sites Metric (SSM)

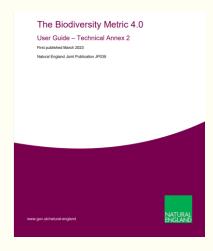
NATURAL ENGLAND

- Alternative tool for use in specific circumstances, where no priority habitats, protected sites or European protected species are present
- Competency requirements are lower
- Many values fixed
- Only certain habitats and interventions are available for use
- Small sites become statutory from 2nd April 2024 – must use a version of statutory metric (including SSM)

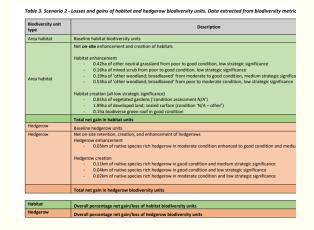


Other Biodiversity Metric Tools

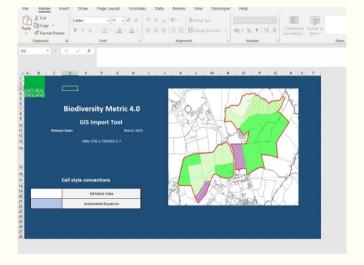
Technical Information



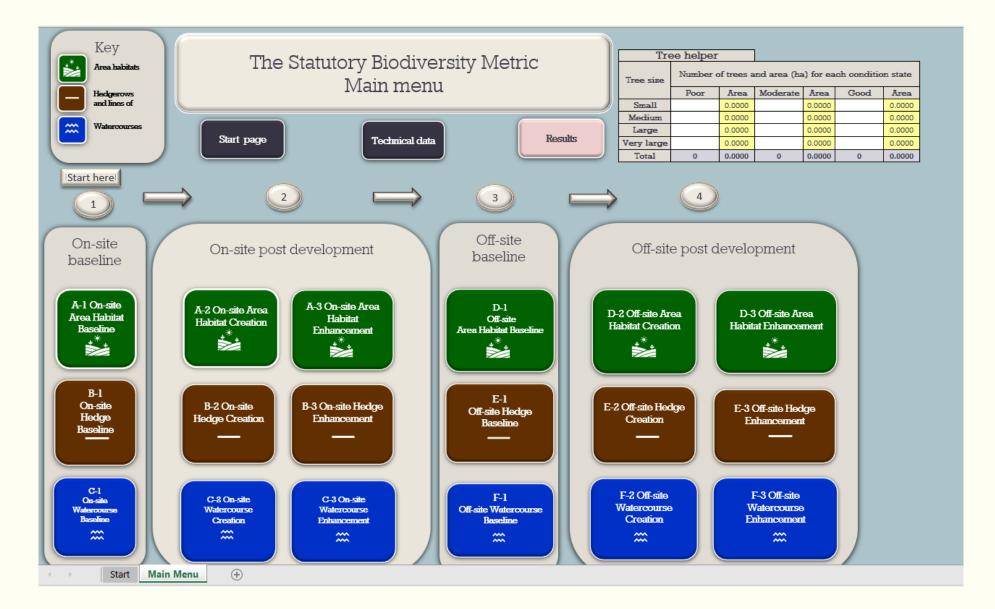
Case Studies



GIS Import Tool and Guidance



Metric - main menu





Example Changes from 4.0

Unit Value

Calculation Tool

User Guide



Corrections to errors to enhancement times

Corrections to enhancement options for hedgerows

Corrections for enhancement of watercourse by remeandering

Corrections for area calculations involving intertidal hard structures

Off-site reference required

SRM bug fixed

General fixes to improve useability

Enhancement tabs no longer autofill proposed habitat

Enhanced IH automatically highlighted

Irreplaceable habitats tab

Unit shortfall tabs – summary and calculations

New error messages and check flags

Formatting and accessibility changes

Tree helper

Methodology re restoration of intertidal habitats

Descriptions for strategic significance categories

Methodology for recording individual trees

Information on phased construction

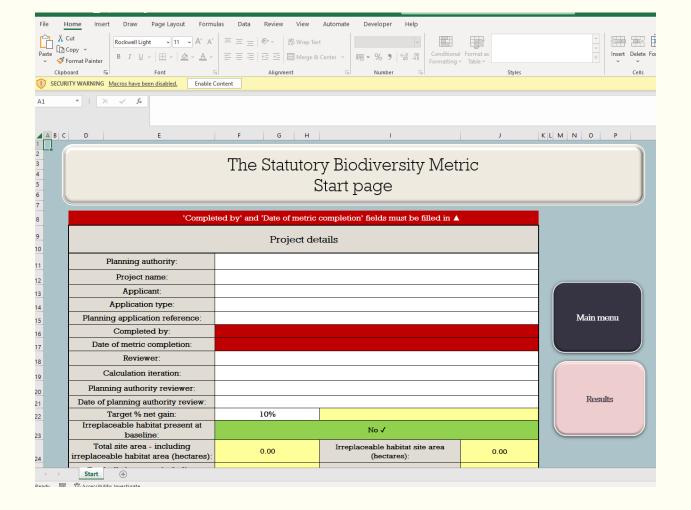
Applying spatial risk for intertidal habitats

Methodology on assessing floodplain wetland mosaic

Information on preparing a metric for submission

Information on irreplaceable habitats

Metric Checks and Flags





Traffic Light Flag System

Red: Major issue reject

Amber: Potential issue / Warning

- Check Data

Green: No metric rule breaks

www.gov.uk/natural-england

Statutory Metric Rules...



Rule 1: Trading rules must be followed

Rule 2: Outputs of a Metric are unique cannot be compared

Rule 3: The correct tool must be used

Rule 4: Only to be used in <u>exceptional circumstances</u> with clear <u>ecological benefit</u> and where there is agreement with the LPA

Statutory Metric Principles...



Principle 1: Completed by a competent person

Principle 2: The metric does not override existing protections

Principle 3: Existing professional best practice still applies

Principle 4: The Metric is not a complex ecological model

Principle 5: The Metric offers a proxy for biodiversity

Principle 6: The Metric is designed to inform decisions

Principle 7: Interventions must be appropriate and realistic

Principle 8: Compensation should be local and strategic

Principle 9: There is no minimum habitat size ratio



Reviewing Metrics

Metric Checklist for use at planning application validation Updated draft – January 2024 NB. This

- 1. Is a Metric required? All major developments from 12th February 2024:
- a. erection of ten or more dwellings or housing development on a site of 0.5 hectare or more
- b. erection of a building or buildings where the floor space to be created is 1,000m2 or more
- c. development on a site of 1 hectare or more
- d. minerals and waste development
- 2. If the development is exempt from BNG a metric is not required to be submitted
 - self-build, biodiversity gain site, de minimis threshold
- 3. Has the Statutory Biodiversity Metric Calculation Tool been submitted in Excel format (not pdf or

other form)? No other versions of the Metric or any other metrics are allowable

- 4. Are sufficient details on start page? date of assessment, assessor.
- 5. Are there any red boxes in the Metric. If not, passes validation.
- 6. If a red box is present, it only passes validation if it is one of the following:
 - a. An outline planning application
 - b. Applicant is requesting permission to purchase statutory biodiversity credits
 - c. Rule 4 of the metric has been instigated

PAS note: the information in 5. and 6. is incorrect as a post-development Biodiversity Metric is not a requirement at planning application stage. We will provide more information on this in our BNG in DM toolkit available very soon!

checklist is

subject to

change

FINAL RESULTS

Total net unit change

(Including all on-site & off-site habitat retention, creation & enhancement)

Habitat units	-90.61
Hedgerow units	0.00
Watercourse units	0.00

Total net % change

(Including all on-site & off-site habitat retention, creation & enhancement)

Habitat units	-40.82%
Hedgerow units	0.00%
Watercourse units	0.00%

Trading rules satisfied?

No - Check Trading Summaries A

Area created must match area lost for both onsite and offsite ▲				
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	221.97	244.17	112.80
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional hedgerow units required to meet target ✓
No additional watercourse units required to meet target ✓

Total net gain achieved is less than target set ▲

Input errors/rule breaks present in metric ▲

FINAL RESULTS Habitat units 0.19 Total net unit change Hedgerow units 0.00 (Including all on-site & off-site habitat retention, creation & enhancement) Watercourse units 0.00 Habitat units 23.67% Total net % change Hedgerow units 0.00% (Including all on-site & off-site habitat retention, creation & enhancement) Watercourse units 0.00% Trading rules satisfied? Yes √

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.80	0.87	0.00
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

Unit requirement met or surpassed ✓
Unit requirement met or surpassed ✓

Unit requirement met or surpassed ✓



Questions



Questions and answers



- Please submit your questions through Slido:
 - Go to slido.com and enter this code: #2033497
 - Scan the QR code
- We will answer as many as we can today
- We will add answers to FAQs on the PAS website











Summing up & next steps



What do you think – please use polls

Next steps:

- Adding relevant questions to FAQs
- Ongoing support on biodiversity net gain and nature recovery through PAS projects

For more information:

- https://www.local.gov.uk/pas/topics/environment
- Sign up to the PAS bulletin: <u>https://www.local.gov.uk/pas/our-work/keep-touch</u>
- Join our BNG practitioner network

