Applying Biodiversity Metric 2.0

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Biodiversity Net Gain?

What is Biodiversity Net Gain?

Biodiversity net gain is an approach to development, and/or land management, that aims to leave nature in a <u>measurably</u> better state than beforehand.

The Importance of a Metric

Underpins biodiversity net gain.

The metric:

- Calculates baseline + forecast outcome
- Provides confidence
- Ensures consistency of approach
- Does not replace ecological advice

Needs to be:
- Simple yet sound

# Metric Update – Pre-Launch External Consultation

Natural England led work with external input…..

- User survey (200+)
- Stakeholder workshops (x4)
- External sounding board
- Net gain consultation launch – publication of summary approach
- Metric webinar
- Soft testing of 'pre-beta' versions (including in Greater Manchester, OxCam, by Wildlife Trusts, individual developers, Defra etc.)
- 3 x additional stakeholder sessions pre-launch (NGO/consultancies, LPAs & smaller developers)

Biodiversity Metric 2.0

- Uses habitats as a 'proxy' measure

- Translates into biodiversity units

- Calculations based upon:

    - Habitat size
    - Habitat condition
    - Habitat distinctiveness
    - Spatial location
    - Ecological connectivity
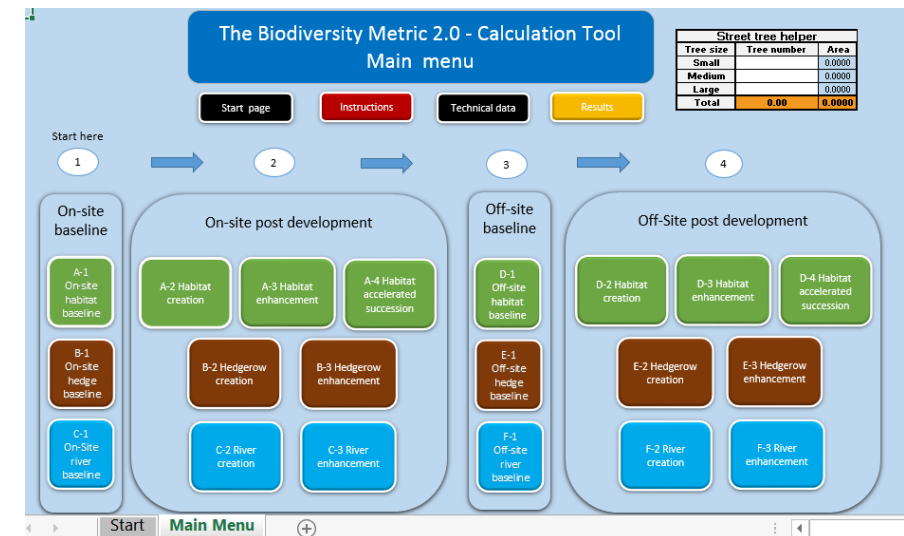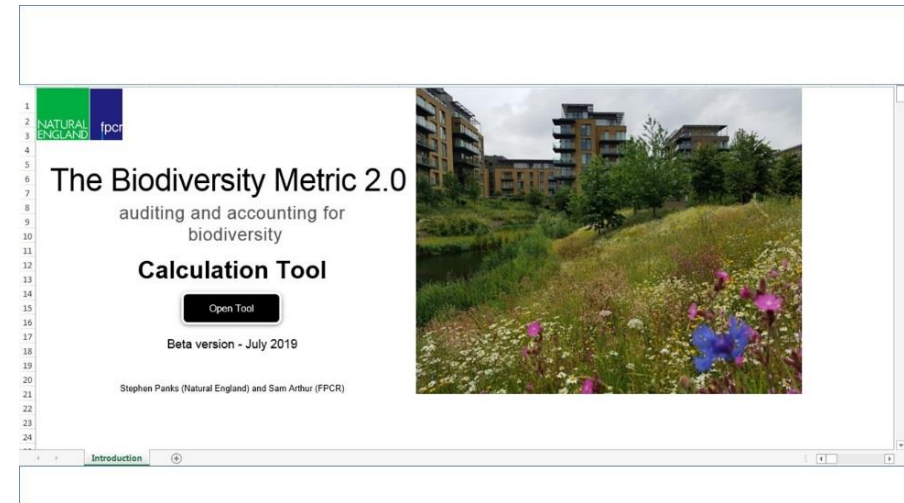
Beta Biodiversity Metric 2.0

July 2019: Natural England published:

- Beta Biodiversity Metric 2.0 (3 parts to this)
    - Area habitats - updated
    - Hedgerows - new
    - Rivers - new
- Free Calculator Tool (new)
- Summary + Detailed Guidance (new)
- Inter-tidal habitats + connectivity tool (coming)

http://publications.naturalengland.org.uk/publication/5850908674228224

July - January 31st 2019: online feedback

https://consult.defra.gov.uk/natural-england/the-biodiversity-metric-2-0/
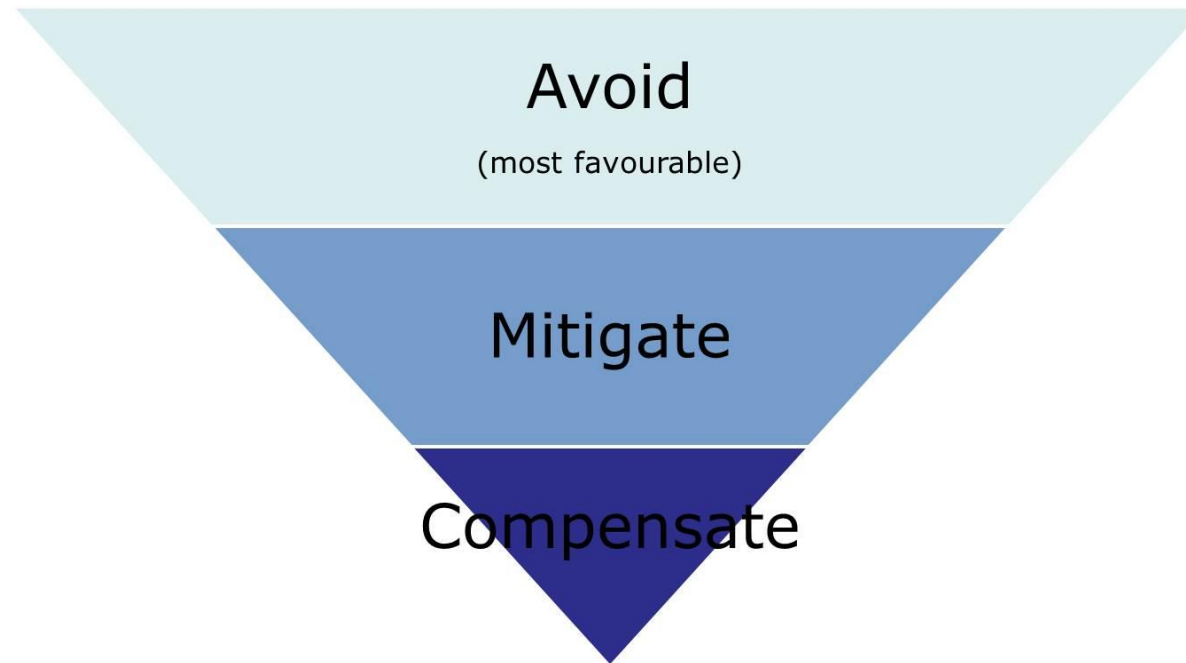
January – Summer 2020: Review + republish

Beta Metric 2.0 Can be Used From

Site Selection $\longrightarrow$ Detailed Design

Biodiversity Metric 2.0:Scale of Applications

Biodiversity Metric 2.0:
Example Application Types

Biodiversity Metric 2.0:
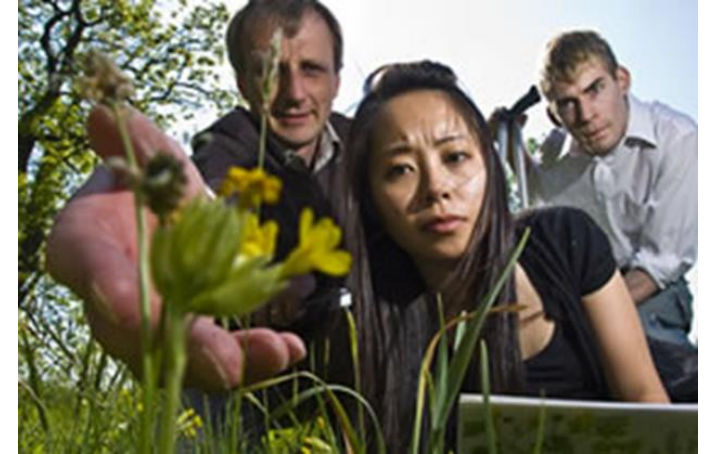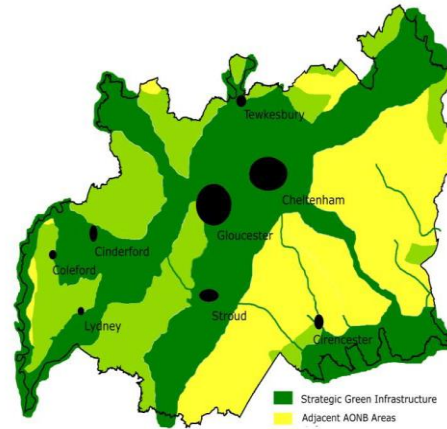# Net Gain Where?

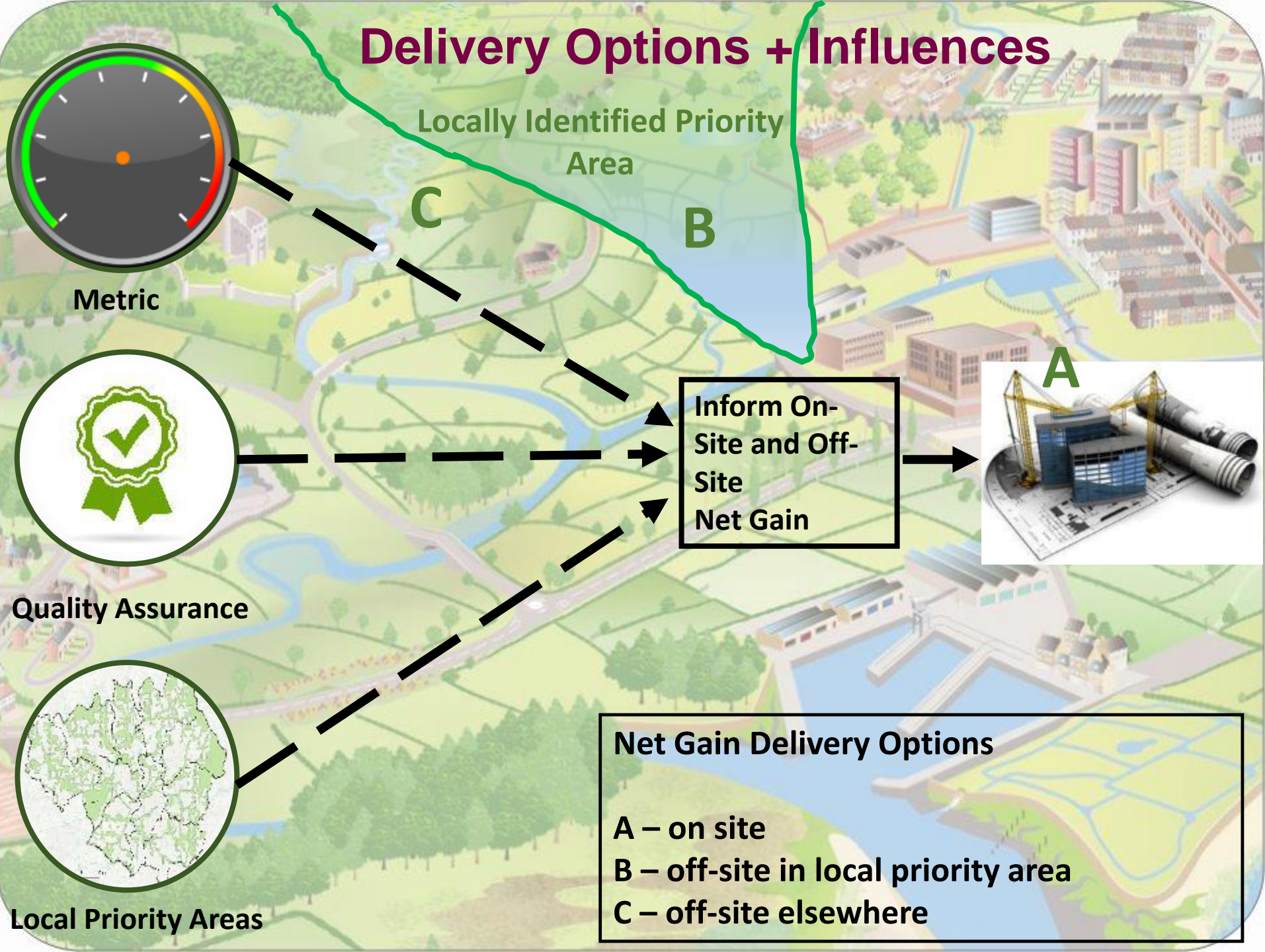**On-Site**   **Local/Strategic**

Metric Benefits to LPA

- Link to LPA local plan net gain requirement (if any)

- Offers a consistent approach to developers and LPA officers to assess against

- Facilitates easier more transparent communication between ecologists and LPA decision makers

- Can be linked to other relevant LPA strategies i.e. GI, biodiversity, access and recreation, health and well-being etc. as a means of directing investment and prioritising locations for ecological delivery

Delivery Options + Influences

Metric

Quality Assurance

Local Priority Areas

Locally Identified Priority Area

C

B

A

Inform On-Site and Off-Site Net Gain

Net Gain Delivery Options

A – on site
B – off-site in local priority area
C – off-site elsewhere

Component Parts of Biodiversity Metric 2.0

Metric Calculation (area habitats)

Baseline calculation

Distinctiveness X Area (ha) X Condition X Strategic X Connectivity = <u>Biodiversity Units</u>
Significance

Post-Intervention Calculation

As above + Difficulty X Time to Target Condition X Spatial Risk = <u>Biodiversity Units</u>

Hedgerow (Linear) Calculation

- As above but as a linear (km) rather than area (ha) calculation

Rivers & Riparian Zone (Linear) Calculation

- As above

- River condition assessed using MultiMoRPh citizen-science based condition assessment methodology

Biodiversity Net Gain – River Metric

- Delivery by Environment Agency, supported by Natural England

- **'Distinctiveness'** 3 Categories (Priority Habitat and River Naturalness Assessment)

- '**Condition'** Scale 1-5 based on output of River Metric Survey (adapted from citizen science MoRPh).

- **Riparian habitat** included with condition assessment and considered within calculation of losses/gains

- A vehicle for River Restoration
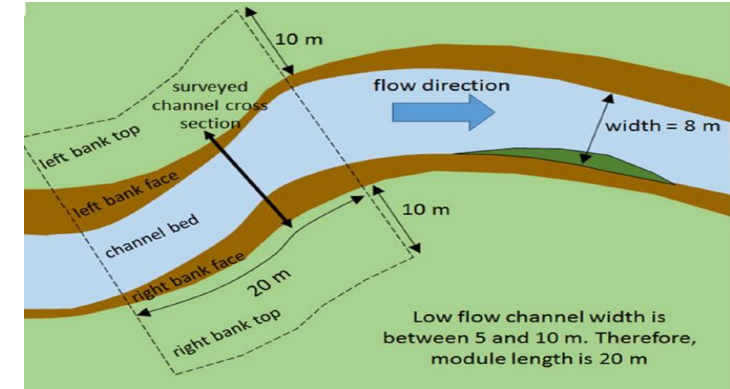
Metric Usage - Principles and Context

- Does not change existing biodiversity protection

- Based on the mitigation hierarchy

- Kept deliberately simple

- Embeds core principles of Biodiversity Net Gain

- Recognises the importance of place and connectivity
  ➢ enhance biodiversity in the locality of impacts
  ➢ more, bigger, better and joined areas for biodiversity.

Biodiversity Net Gain
Good practice principles for development

The components of ecological networks

Restoration area
Landscape corridor
Stepping stone corridor
Core area
Linear corridor
Buffer zone
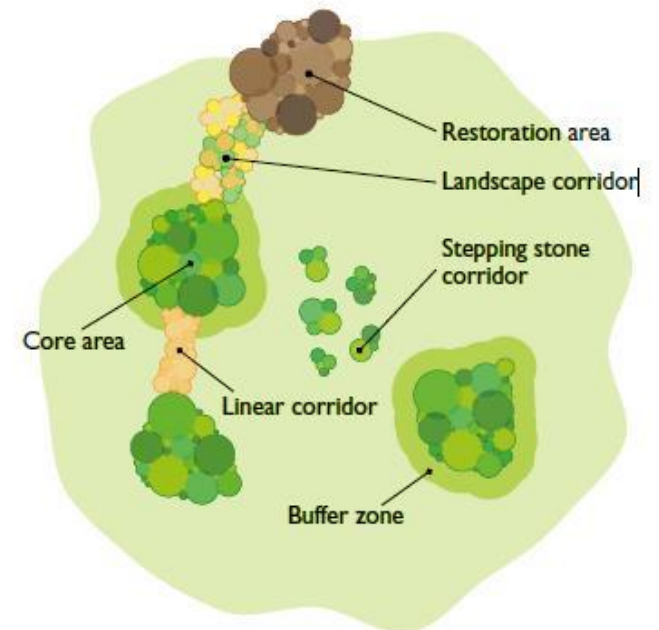
Tips for Metric Calculations

- Have hedges and rivers been accounted for separately?

- Have different habitat types been assessed separately?

- Ensure mitigation for protected sites not included as BNG

- Check is that really possible?

  - Can the proposed habitat be delivered in the proposed location?
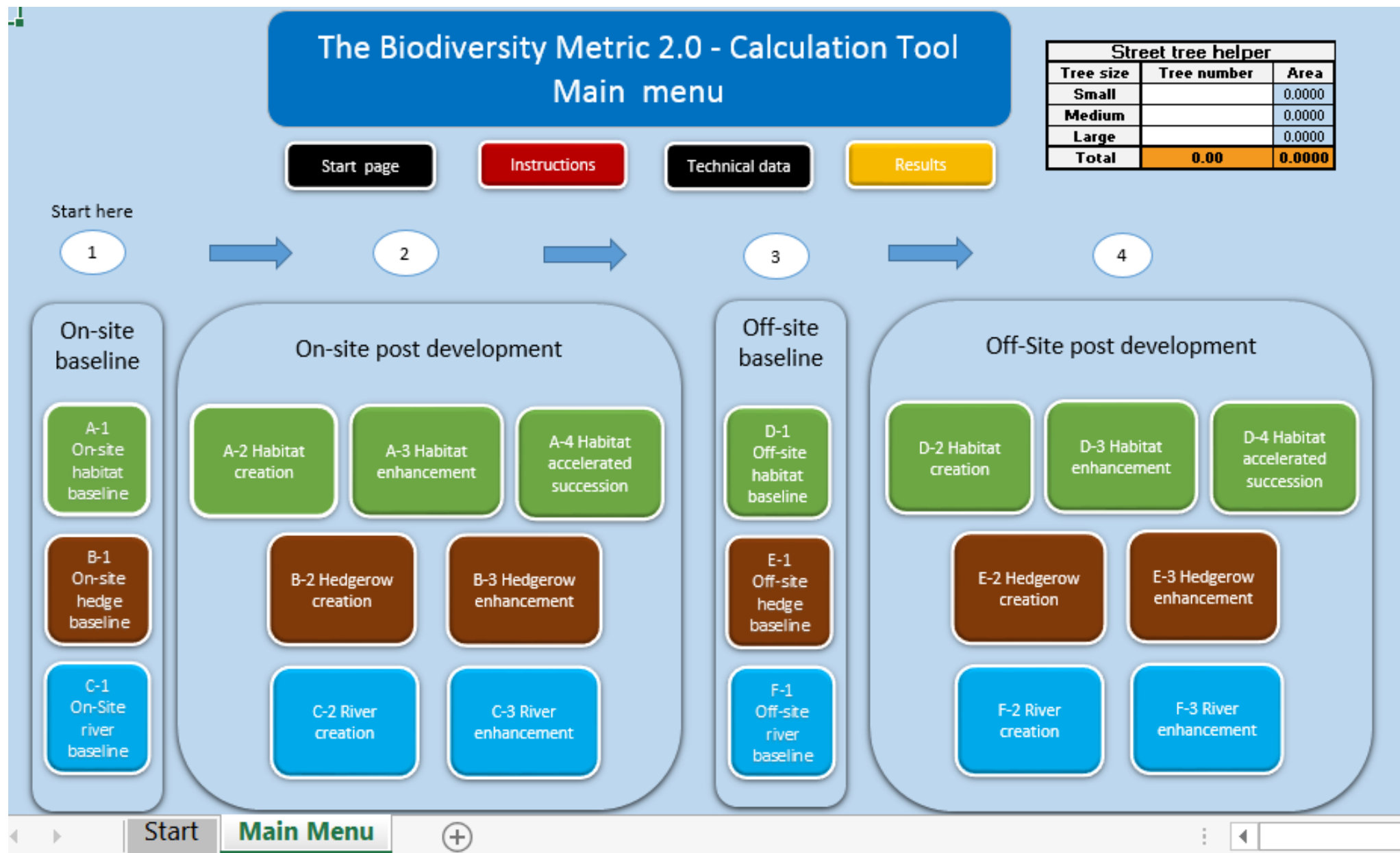 - Can the proposed habitat condition be achieved?

Beta Metric 2.0: Calculation Tool

- Minimal User input – only 5 data inputs:
  - ➤ Habitat Type
  - ➤ Area
  - ➤ Condition
  - ➤ Connectivity
  - ➤ Strategic Significance
- Pre-populated with a list of habitats   and associated multipliers

- Drop-down tabs throughout

- Calculations automated

- Incorporates suggested outcome and Net Gain trading rules

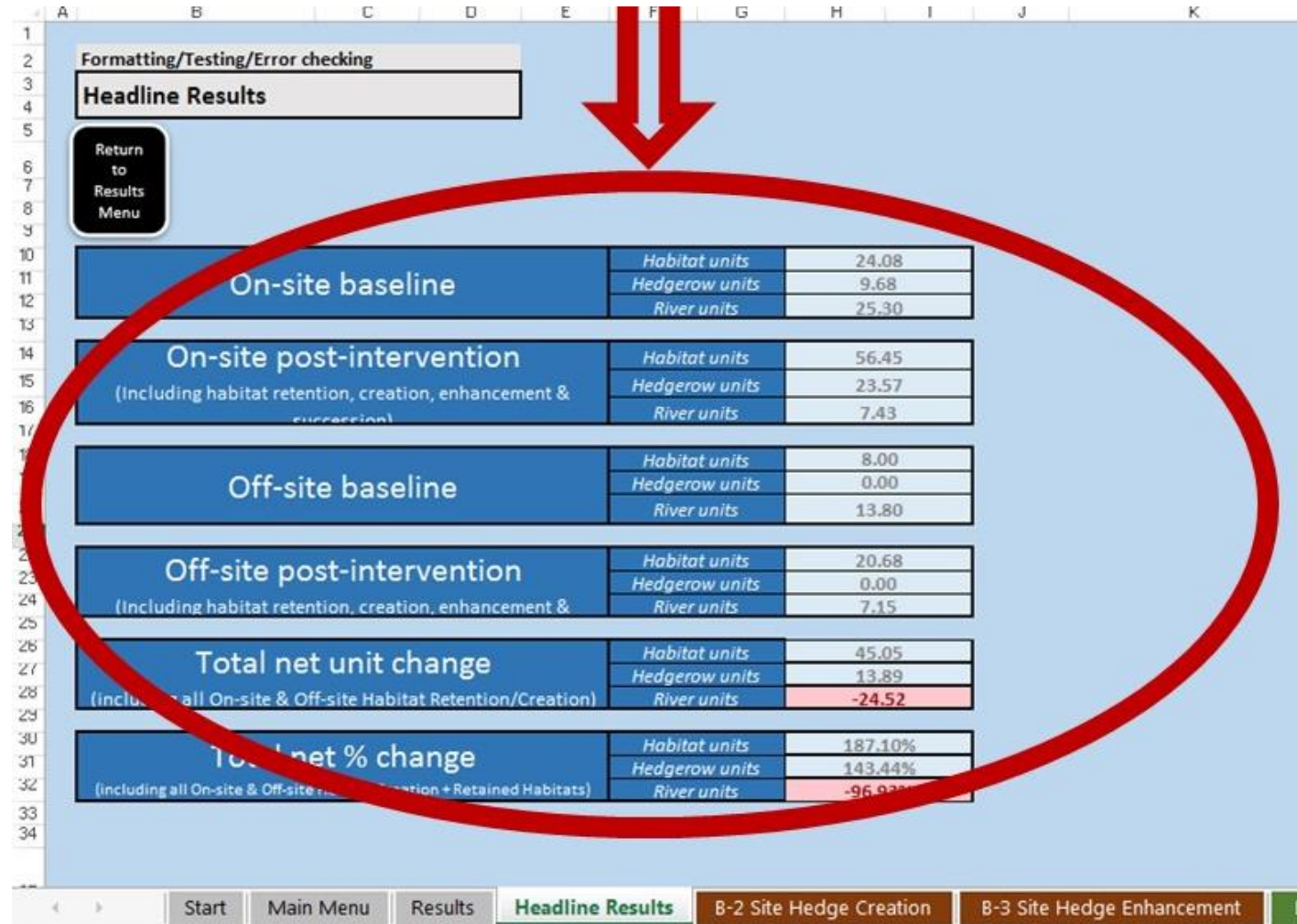- Can account for both on site and off site mitigation and or enhancement

A-1 Site Habitat Baseline

| | Condense / Show Columns | | | Condense / Show Rows | | | | |
| Main Menu | | | | Instructions | | | | |

		Habitats and areas			Habitat distinctiveness	Habitat condition	Ecological connectivity	Strategic significance	Suggested a... habit...
Ref	Broad Habitat	Habitat type	Area (hectares)		Distinctiveness	Condition	Ecological connectivity	Strategic significance	
1	Grassland	Grassland - Other neutral grassland	3		Medium	Moderate	Medium	Area/compensation not in local strategy/ no local strategy	Same broad ha... distinctive...
2									
3									
4									
5									
		Total site area ha	3.00						Total Sit...

Beta Metric 2.0: Calculation Tool

Calculation Tool – Headline Results

The 'Headline results' provides a breakdown of the biodiversity units lost and gained, other key data and the percentage change.

Calculation Tool – Detailed Results

More detail and graphics can be found in the 'detailed results'
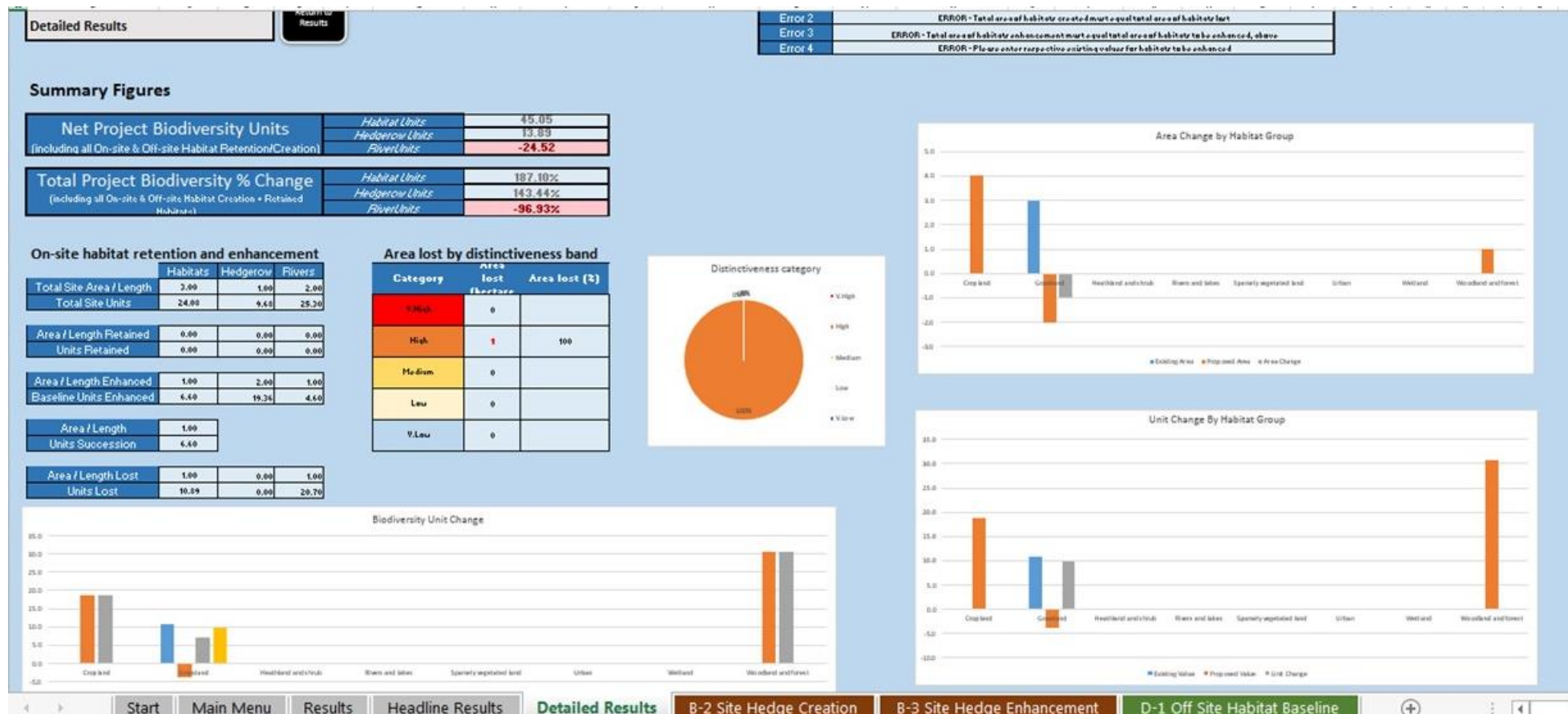
Final Thought

- Metric is a tool

- Ecological advice + local plan/SPD key

  - What metric?
  - BNG in what developments?
  - What quantum of gain?
  - Managed for how long?
  - What spatial priorities?
  - What monitoring/reporting?
  - Etc……

Thanks

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