Biodiversity Accounting
Model Supplementary Planning Document

Guidance

This Guidance applies to the delivery of measurable Biodiversity Net Gains in a consistent and transparent manner across the Buckinghamshire & Milton Keynes.

Buckinghamshire and Milton Keynes Natural Environment Partnership

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Aims of the Guidance

Biological Diversity, more commonly known as Biodiversity, is the term given to "… *the variety of life on Earth and the natural patterns it forms. The biodiversity we see today is the fruit of billions of years of evolution, shaped by natural processes and, increasingly, by the influence of humans. It forms the web of life of which we are an integral part and upon which we so fully depend*"[1].

Whilst Biodiversity has an intrinsic value, it also delivers essential human services - such as food production, climate change adaptation, flood regulation, crop pollination plus numerous other benefits including enhancing our physical and mental well-being.

State of Nature reports[2] document a steady decline in biodiversity within the UK. In response, the UK Government is mandating Biodiversity Net Gain (BNG) to ensure that new developments enhance biodiversity and help deliver thriving natural spaces for communities. Biodiversity Net Gain is an approach that '*leaves biodiversity in a better state than before*'[3].

This guidance, produced in collaboration with the Buckinghamshire and Milton Keynes Natural Environment Partnership (NEP), sets out how Biodiversity Accounting will be used to achieve Biodiversity Net Gain across Buckinghamshire and Milton Keynes. It sets out how the Local Authorities will assess new developments to ensure a biodiversity net gain is achieved in a fair and measured way.

Critical to the understanding of the process is that the **Mitigation Hierarchy** must be followed – so that all possible avoidance, mitigation or opportunities for compensation for losses of biodiversity take place on-site before considering any **off-site provision, which is the last-resort option**. Following the hierarchy means that genuine attempts must be made on-site to reduce impacts on biodiversity as a result of development, and the scheme is not a means to develop and "just pay" for biodiversity gains elsewhere. The mitigation hierarchy is illustrated below at Figure 1, Figure 3 and Figure 7.

Existing habitat and species protections remain. The requirements for BNG do not undermine the existing range of protections, outlined in planning policy and legislation, for protected sites or for irreplaceable habitats. Biodiversity Accounting does not replace the existing requirements for ecological assessment and species surveys.

In summary, this guidance covers two key areas:

- **Biodiversity Accounting**: What is it, and how will the biodiversity value of habitats be 'measured' before, during and after a development?
- **Biodiversity Compensation:** What to do if there is a loss to the biodiversity value of habitats as a result of a development?

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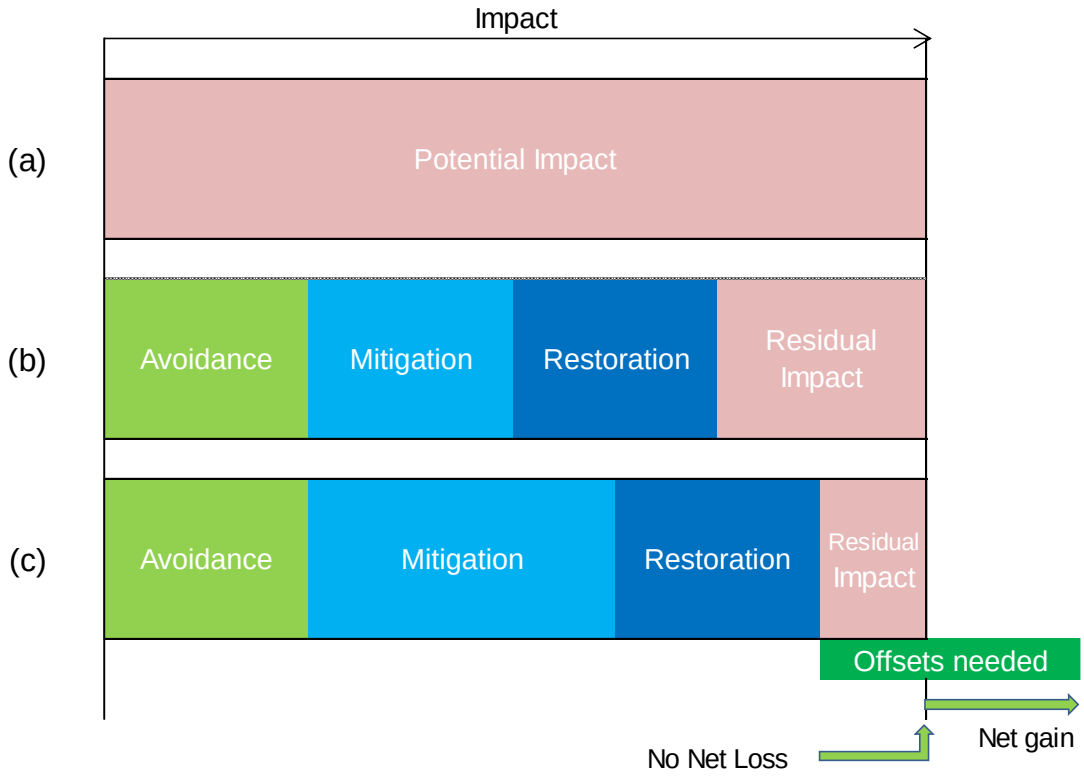
1 Convention on Biological Diversity (CBD), 1992-3

2 State of Nature Partnership, State of Nature Reports (2013-2019) available here: https://www.rspb.org.uk/our-work/conservation/projects/state-of-nature-reporting

3 Baker, J. 2016. Biodiversity Net Gain Good Practice Principles for Development. CIEEM, IEMA, CIRIA, UK.

Figure 1: Components of the mitigation hierarchy to identify residual impacts and subsequent compensation to deliver a Biodiversity Net Gain



Adapted from Cross Sector Biodiversity Initiative, Mitigation Hierarchy Guide 2015. Where:
(a) is the potential negative impact of the proposed scheme on biodiversity;
(b) is the implementation of the mitigation hierarchy - without net gain, leaving residual impacts on-site;
(c) illustrates how net gain can be achieved through on-site design changes; with less of a residual impact on site; and with offsets employed to ensure a net gain overall – only after the implementation of the mitigation hierachy on-site in full.

Planning Policies and Complimentary Guidance

This Supplementary Planning Document (SPD) is underpinned by national and local policies and strategies including:

National

- National Planning Policy Framework (July 2019)
- Planning Practice Guidance (latest)
- Natural Environment and Rural Communities Act (2006): Biodiversity Duty[4]

[4] Sections 40 and 41 of the Natural Environment and Rural Communities Act (2006)

- The HM Government's 'A Green Future: Our 25 Year Plan to Improve the Environment' (2018)
- Forthcoming Environment Act (likely mid-end 2021) – building on the Environment Bill (2019)

Local

- Biodiversity Action Plan: Forward to 2020 for Buckinghamshire and Milton Keynes
- Vision and Principles for the Improvement of Green Infrastructure in Buckinghamshire and Milton Keynes, 2016; and the accompanying green infrastructure opportunities mapping, 2018
- Buckinghamshire Green Infrastructure Delivery Plan, 2013
- Buckinghamshire Green Infrastructure Strategy, 2009
- *[ADD ANY OTHER LOCAL STRATEGIES SPECIFIC TO LOCAL AUTHORITY]*

This guidance provides detailed explanations to deliver Policies within [Name] Local Plan [Adopted Core Strategy]. These include:

- *[SPECIFIC POLICIES AS PER ADOPTED CORE STRATEGY / LOCAL PLAN TO BE ADDED IN HERE]*

Professional Guidance

In 2016, the professional institutes of The Chartered Institute of Ecology and Environmental Management (CIEEM), the Construction Industry Research and Information Association (CIRIA) and the Institute of Environmental Management and Assessment (IEMA) jointly produced **Biodiversity Net Gain: Good practice principles for development** (see Figure 2 below). This document defines Biodiversity Net Gain as follows:

> "*Biodiversity Net Gain is development that leaves biodiversity in a better state than before. It is also an approach where developers work with local governments, wildlife groups, land-owners and other stakeholders in order to support their priorities for nature conservation.*"

In total, ten principles have been established:

Principle 1. Apply the Mitigation Hierarchy

Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere

Principle 3. Be inclusive and equitable

Principle 4. Address risks

Principle 5. Make a measurable Net Gain contribution

Principle 6. Achieve the best outcomes for biodiversity

Principle 7. Be additional

Principle 8. Create a Net Gain legacy

Principle 9. Optimise sustainability

Principle 10. Be transparent

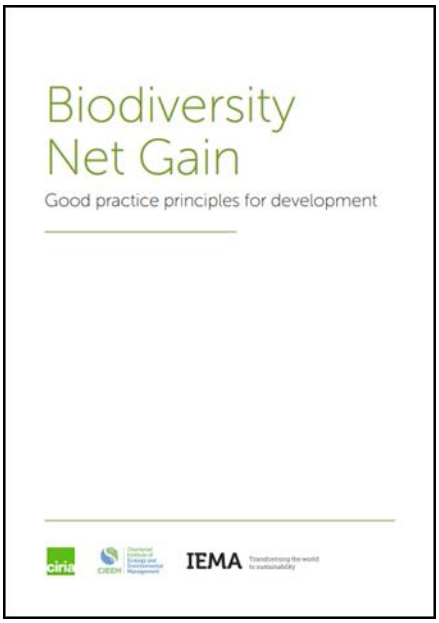


Figure 2: Biodiversity Net Gain Principles (CIRIA, 2016)

This Supplementary Planning Document follows this good practice guidance, ensuring that development within Buckinghamshire and Milton Keynes delivers measurable BNG.

British Standard 8683: Biodiversity Net Gain

A British Standard on BNG is currently in progress[5]. This outlines in detail the expected standard that developers must meet in order to claim that their development will deliver a biodiversity net gain. It is envisaged that this standard will come in two parts; Part 1: Construction and Part 2: Post Construction.

Once released, the Local Authority will welcome developments that adopt this standard.

Biodiversity Accounting and the Community Infrastructure Levy

The Local Authority has produced a legal position statement[6] on how it considers biodiversity in relation to the Community Infrastructure Levy, describing why biodiversity is not considered to be infrastructure under the CIL, and therefore that the BNG mechanism does not double-charge for biodiversity alongside CIL. This position statement can be found at Appendix A, and will apply until a position statement has been formed by The Government.

How to use this Guide

What Triggers the use of the Biodiversity Accounting Tool?

Delivering BNG will be mandated for proposed developments within the scope of the Town and Country Planning Act 1990[7]. This includes buildings and structures for any use - including: commercial; industrial; institutional; leisure; and housing or other accommodation, where permission from local planning authorities is required.

This guidance document applies to all major and minor applications other than the following exemptions currently suggested by The Government[8]:

- Permitted development[9];
- Householder development, including extensions;
- Nationally significant infrastructure, which falls within scope of the Planning Act 2008[10];

[5] See British Standards Institute webpages (Accessed December 2020): https://standardsdevelopment.bsigroup.com/projects/2018-02413#/section

[6] For the purposes of this model, this is an illustrative statement; the LA would need to agree this with its legal team for its own SPD

[7] Town and Country Planning (General Permitted Development) (England) Order 2015 Available at: http://www.legislation.gov.uk/uksi/2015/596/contents/made

[8] Biodiversity Net Gain and Local Nature Recovery Strategies Impact Assessment (Oct 2019) Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/839610/net-gain-ia.pdf

[9] Development does not in all instances require a planning application to be made for permission to carry out the development. In some cases, development will be permitted under national permitted development rights. http://www.legislation.gov.uk/uksi/2015/596/contents/made

[10] Planning Act 2008 Available at: https://www.legislation.gov.uk/ukpga/2008/29/contents

- Some brownfield sites with marginal viability and substantial constraints. It is expected that full details to be set out in secondary legislation, but considerations are likely to include where sites contain a high proportion of derelict land and buildings and only a small percentage of the site is undeveloped, land values are significantly lower than average, and the site does not contain any protected habitats; and
- Developments that would result in negligible loss or degradation of habitat, for instance change of use of or alterations to buildings.

The Local Authority will follow these exemptions, until such time as exemptions are set out in primary or secondary legislation, at which point those exemptions will be followed.

The delivery of BNG involves the use of a metric, or Biodiversity Accounting Tool, which is used to undertake a Biodiversity Impact Assessment (BIA) to calculate the "units" of biodiversity gained or lost as a result of development on a site. **All development proposals that trigger the use of the Biodiversity Accounting Tool will need to be supported by a BIA**, whether the result overall is positive (gain), negative (loss) or neutral.

The Local Planning Authority can be contacted to clarify if a development proposal triggers the need for a BIA, although a charge may be requested for this advice.

Biodiversity Accounting – The Process

The term "Biodiversity Accounting" in this guidance document relates to the UK BNG Metric approach, which was previously known as Biodiversity Offsetting.

To achieve a BNG, a development must have a higher biodiversity value post-development compared with a pre-development, baseline value.

The Local Authority expects applications to deliver **a minimum of 10% net gain with an aspiration to achieve 20% net gain to assist in meeting local Buckinghamshire and Milton Keynes Biodiversity objectives[11].**

Biodiversity impacts will be measured using an accepted metric calculator (or Biodiversity Accounting Tool, "BAT") – for example Defra's metric[12] or a locally-agreed variant, such as the latest Warwickshire County Council Biodiversity Impact Assessment Calculator[13]. Information on the metric that should be used to reflect the most recent Defra tool and latest good practice is available on the NEP webpages[14].

Please note that the Local Authority may charge to review any alternative metric submitted with an application.

The BIA can be used to inform conditions - such as the contents of a Construction and Environmental Management Plan (CEMP) and Landscape and Ecological Management Plan (LEMP), plus any necessary legal agreements (obligations), and their subsequent discharge.

The BAT is therefore a decision-aiding tool, and can be used in an iterative design process to continually inform successive development layouts to balance biodiversity impacts with developable areas. This is illustrated in Figure 3.

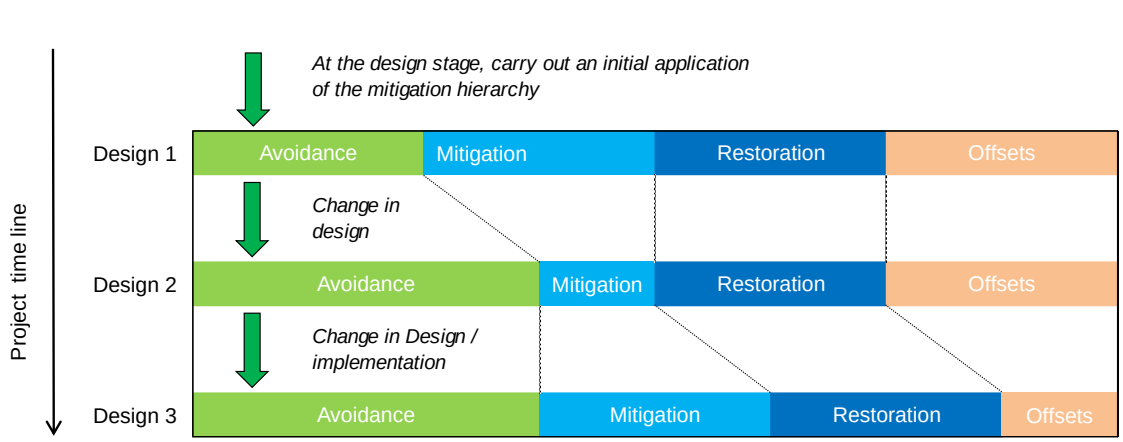
[11] See, for example, the NEP's "Forward to 2020" Biodiversity Action Plan. Available here: https://bucksmknep.co.uk/download/822/

[12] At the time of writing Defra's "test" metric 2.0 and user guides are available here: The Biodiversity Metric 2.0 - JP029 (naturalengland.org.uk); version 3.0 is awaited and it is understood this will become mandatory in line with Environment Act requirements

[13] Available here https://www.warwickshire.gov.uk/biodiversityoffsetting

[14] https://bucksmknep.co.uk/biodiversityaccounting

Figure 3: Increasing the use of avoidance and minimising impacts in project design through iterative application of the mitigation hierarchy using the Biodiversity Accounting Tool to inform successive designs that improve biodiversity impacts.



In this hypothetical example an assessment of the initial design (Design 1) leaves unacceptable impacts remaining after avoidance and mitigation to achieve the net gain required.

Design 2 achieves more avoidance, but it would be unfeasible to restore or offset the potential impacts to the level required.

Design 3 further mitigates potential impacts, reducing the scale of restoration and offsets needed.

Adapted from The Cross Sector Biodiversity Initiative, Mitigation Hierarchy Guide 2015.

Figure 3 also shows how **avoidance and on-site mitigation and compensation must be carried out before any off-site compensation** ("offsets") is planned, i.e. the mitigation hierarchy is followed first; off-site offsets are a last-resort option for ensuring BNG.

Figure 4, below, illustrates how this process fits into the Local Authority planning function. Biodiversity Accounting can be used as evidence that Local Plan nature conservation policies are met, and an environmentally-sustainable development proposal has been submitted. Figure 5 illustrates the four basic stages of the Biodiversity Accounting Process.

Figure 4: Biodiversity Accounting Process Chart within the planning function.

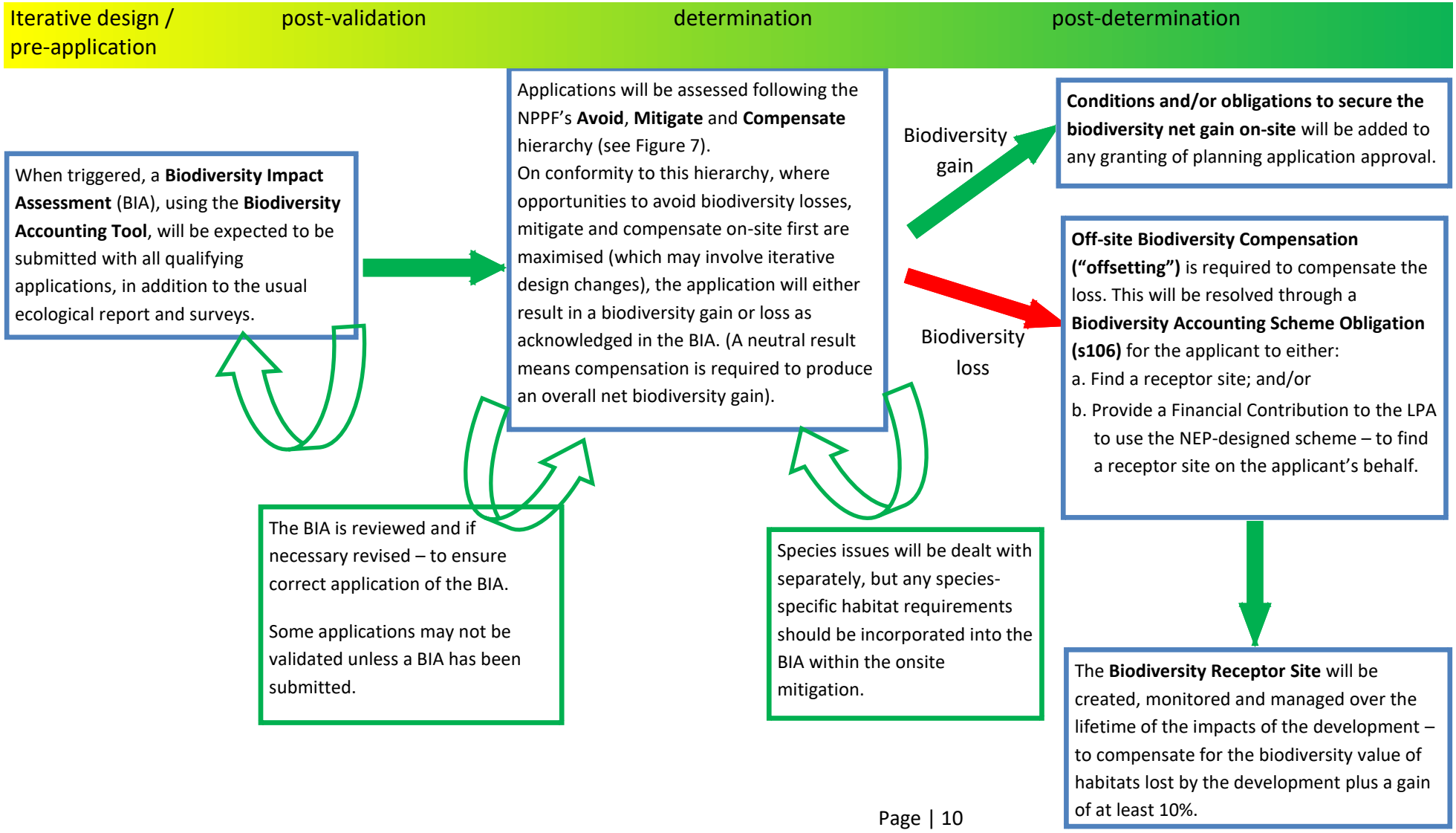
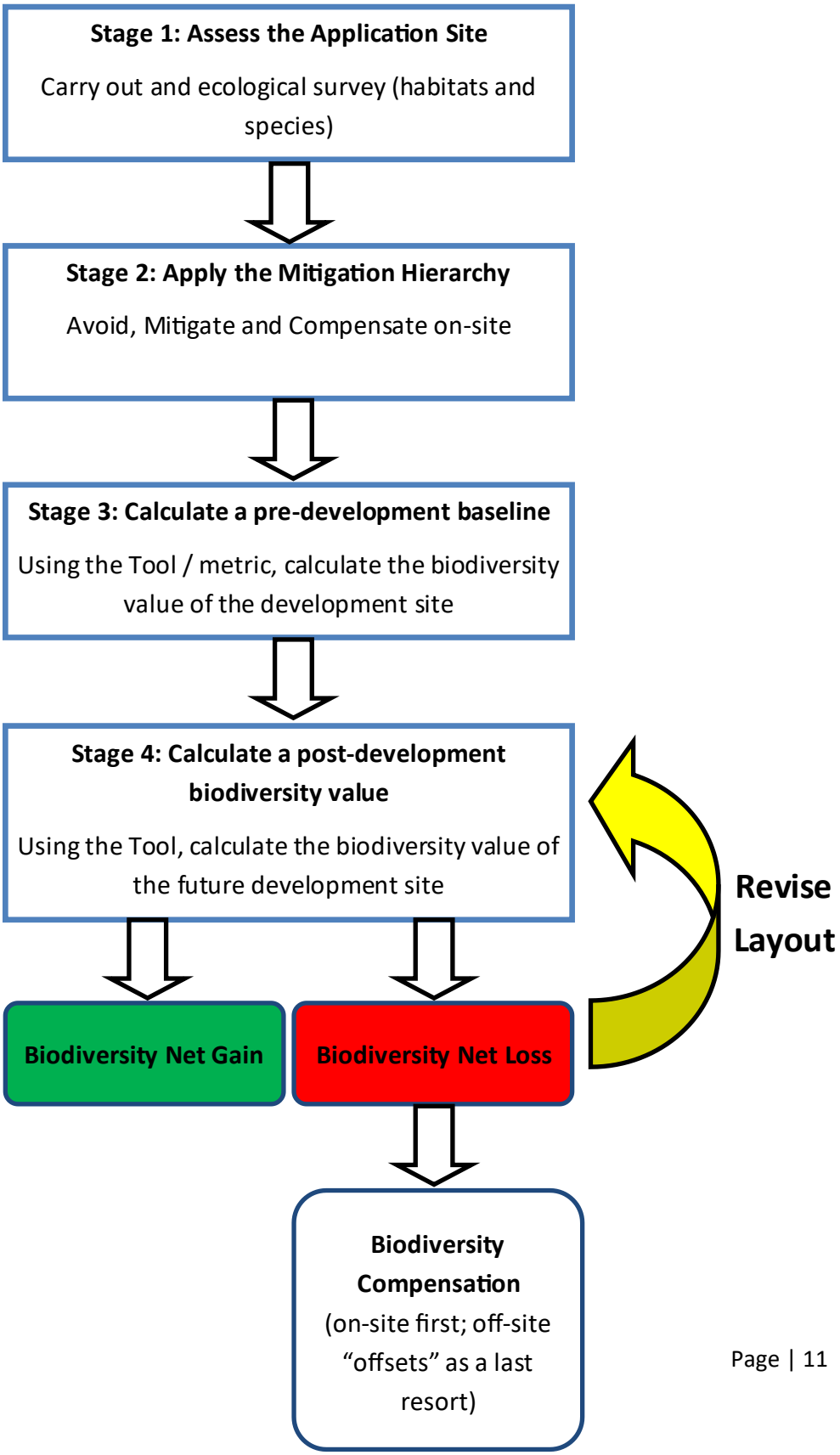


Figure 5: The Four Stages of the Biodiversity Accounting Process

The Biodiversity Accounting process consists of four basic stages, represented as follows:



How it works – overview

Biodiversity Accounting Tools are spreadsheets where information is input about habitats on-site, and what is planned for habitats as a result of development. The tool applies formulae (for example, based on the latest available Defra metric calculations and guidelines) to work out whether the plans for the habitats on-site result, post-development compared with pre-development, in an overall residual biodiversity gain or loss There is a separate assessment for hedgerows and rivers.

Overall, the tools work to calculate:

- The "units" of habitat required to ensure at least a 10% biodiversity gain compared with habitats impacted as a result of development;
- The length (in metres) of hedgerows that must be replaced as compensation if hedgerows are removed on-site, of the same or higher distinctiveness to those lost; and
- Rivers impacts and compensation required.[15]

For the Defra tool, links to Defra's detailed guidance of how to use the entire tool, and access to the tool itself, will be provided on the NEP website[16]. User guidance for the Warwickshire Calculator is also available[17]. The NEP will keep a published list of BATs it considers suitable on the NEP website.

For habitats - This section describes how the Warwickshire Biodiversity Assessment Calculator[18] calculates the net change in biodiversity due to development. Other BATs may vary slightly, but the ideology will be the same. Using the Biodiversity Accounting Tool allows a standardised formula to be used to calculate the overall biodiversity impact of a development. This "**residual habitat impact score"** is based on the condition and extent of habitats affected comparing before and after the proposed development. The tool also takes into account i) plans for current habitats to be retained, enhanced or lost; and ii) the value of losses to habitats from indirect impacts of development, iii) proposed on-site mitigation (creation or enhancement) and iv) the required minimum percentage gain (10%).

If, after all opportunities on-site to avoid, mitigate and compensate have been exhausted (which may involve alternative designs), and the applicant's development still results in a residual loss, then habitat compensation will be required to ensure at least a 10% biodiversity gain post-development compared with the pre-development current habitat value of the habitats affected (aspiring to 20% wherever possible).

The **Residual Habitat Impact Score is** expressed in Biodiversity "Units". The amount of compensation required must ensure that the development results in at least 10% more units of biodiversity than pre-development for the habitats affected.

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15 The Government has also committed to launching a simplified process for smaller developments

16 https://bucksmknep.co.uk/biodiversityaccounting/ (NB the provision of a localised, Buckinghamshire and Milton Keynes Biodiversity Accounting Tool is to be determined once Defra releases the next iteration of its metric, version 3.0)

17 Available here https://www.warwickshire.gov.uk/biodiversityoffsetting alongside user guidance notes

18 Available here https://www.warwickshire.gov.uk/biodiversityoffsetting alongside user guidance notes

The minimum 10% net biodiversity gain expectation can be achieved through both on-site and offsite compensation. **However - only where on-site opportunities are exhausted should off-site compensation be sought.** The off-site compensation could be on land either already owned by the applicant or elsewhere; and the nature of the compensation could be creating new habitat or by restoring current, degraded habitat.

For hedgerows – step 5, below, must be followed. Hedgerows (including those on the development boundary) should be retained, enhanced and created on site wherever possible, in line with the mitigation hierarchy. However, if they are removed, they must be replaced by hedgerows of the same or higher distinctiveness, on-site first, of a length dependent on the distinctiveness of hedgerow habitats lost.[19]

Rivers assessment follows a similar process to habitats (see step 6, below), although measured in kilometres.

Figures 1, 3, 4 and 5 show how BNG is considered and implemented in the planning decision-making process, and emphasise the requirement to follow the mitigation hierarchy.

The steps outlined below describe how the tool works in more detail. These steps need to be followed, using the appropriate BAT, to calculate if your planning application will have a positive (gain) or negative (loss) biodiversity impact.

Calculating a Biodiversity Impact – Positive or Negative

The BAT applies the steps outlined below using a specially-designed spreadsheet. The habitats assessment process is replicated at Figures 6a and 6b as examples, which cover steps 1-4 described below.

ADVISORY NOTE: For larger minor or major applications or projects it is advised that an ecological consultancy is employed to carry out the assessment.

[19] According to the criteria in the Defra 2012 Guidance Appendix. Defra (2012) Biodiversity Offsetting Pilots Technical Paper: the metric for the biodiversity offsetting pilot in England (Appendix 3). Accessed January 2021. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69531/pb13745-bio-technical-paper.pdf

Figure 6a: Indicative Image of a Biodiversity Accounting Tool (based on Warwickshire Impact Assessment Calculator)– Steps 1 and 2

Buckinghamshire and Milton Keynes - Habitat Impact Assessment Calculator

KEY	
	No action required
	Enter value
	Drop-down menu
	Calculation
	Automatic lookup
	Automatic Condition setting
	Result

Local Planning Authority:	Aylesbury Vale
Site name:	adb
Planning application reference number:	
Assessor:	
Date:	

Please fill in both tables
Please do not edit the formulae or structure
To condense the form for display hide vacant rows, do not delete them
If additional rows are required, or to provide feedback on the calculator please contact WCC Ecological Services 01926 418060

													Habitat Biodiversity Value					
		Existing habitats on site Please enter all habitats within the site boundary			Habitat distinctiveness		Habitat condition		Spatial Factors				Habitats to be retained with no change within development		Habitats to be retained and enhanced within development		Habitats to be lost within development	
Cf code	Target Note	Phase 1 habitat description	UK HabCode habitat description	Habitat area (ha)	Distinctiveness	Score	Condition	Score	connectivity		local plan		Area (ha)	Existing value	Area (ha)	Existing value	Area (ha)	Current Habitat Value
		Direct Impacts and retained habitats																
1																		
2																		
3																		
4																		
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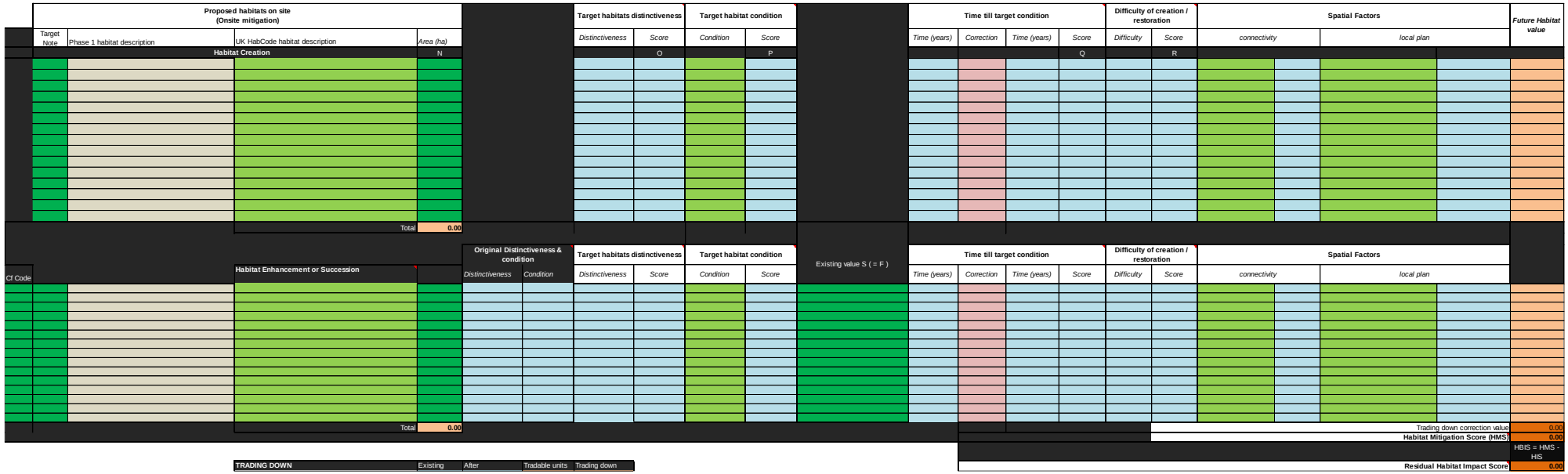
			Total	0.00								Total	0.00	0.00	0.00	0.00	0.00	0.00
																Site habitat biodiversity value		0.00
Before/after impact			**Indirect Negative Impacts** Including off site habitats	K										Value of loss from indirect impacts				
	Before																	
	After			0.00														
	Before																	
	After			0.00														
	Before																	
	After			0.00														
	Before																	
	After			0.00														
	Before															Habitat Impact Score (HIS)		0.00
	After			0.00												Replacement percentage		10%
			Total	0.00										0.00				
																Biodiversity Net Gain Target Score (BNGTS)		0.00

Figure 6b: Indicative Image of a Biodiversity Accounting Tool– Steps 3 and 4



	Proposed habitats on site (Onsite mitigation)				Target habitats distinctiveness		Target habitat condition			Time till target condition				Difficulty of creation / restoration		Spatial Factors				Future Habitat value
	Target Note	Phase 1 habitat description	UK HabCode habitat description	Area (ha)	Distinctiveness	Score	Condition	Score		Time (years)	Correction	Time (years)	Score	Difficulty	Score	connectivity		local plan		
		Habitat Creation		N		O		P					Q		R					
			Total	0.00																

				Original Distinctiveness & condition		Target habitats distinctiveness		Target habitat condition		Existing value S (= F)	Time till target condition				Difficulty of creation / restoration		Spatial Factors				
Cf Code		Habitat Enhancement or Succession		Distinctiveness	Condition	Distinctiveness	Score	Condition	Score		Time (years)	Correction	Time (years)	Score	Difficulty	Score	connectivity		local plan		
			Total	0.00																

				Trading down correction value	0.00
				Habitat Mitigation Score (HMS)	0.00
					HBIS = HMS - HIS
				Residual Habitat Impact Score	0.00

TRADING DOWN	Existing	After	Tradable units	Trading down

Step 1 – Calculate Site Habitat Biodiversity Value and the Habitats Impact Score

(i.e. calculate the biodiversity value of existing habitats on-site, taking into account what will be retained, enhanced or lost through development)

This involves the identification of all the habitats on-site and an assessment of their condition and ecological distinctiveness. The area of these habitats will need to be measured in hectares. This will also include land required for service provision (e.g. works compounds), or that may be subject to indirect impacts (e.g. the lighting of, or hydrological impacts on adjacent land).

In this step, areas that are to be 'retained' and areas to be 'retained and enhanced' within the development need to be recorded, as well as the area of habitat lost.

Each habitat will have a "Current Habitat Value" that can be measured, using the Biodiversity Accounting Tool, in biodiversity "units". [20]

Current Habitat Value = Distinctiveness x Condition x Area (x spatial factor)

The tool adds together the biodiversity units (current habitat value) for all the habitats on-site, to give a site-wide habitat biodiversity value; the **site habitat biodiversity value**.

The losses to habitats as a result of indirect impacts are then also taken into account[21] to produce an overall **Habitat Impact Score.**

Habitat Impact Score = ∑all current habitat values of habitats to be lost or degraded plus loss from indirect negative impacts

The BAT therefore allows the user to specify which habitats will be lost, retained and protected from development, or retained and enhanced, according to the development proposals.

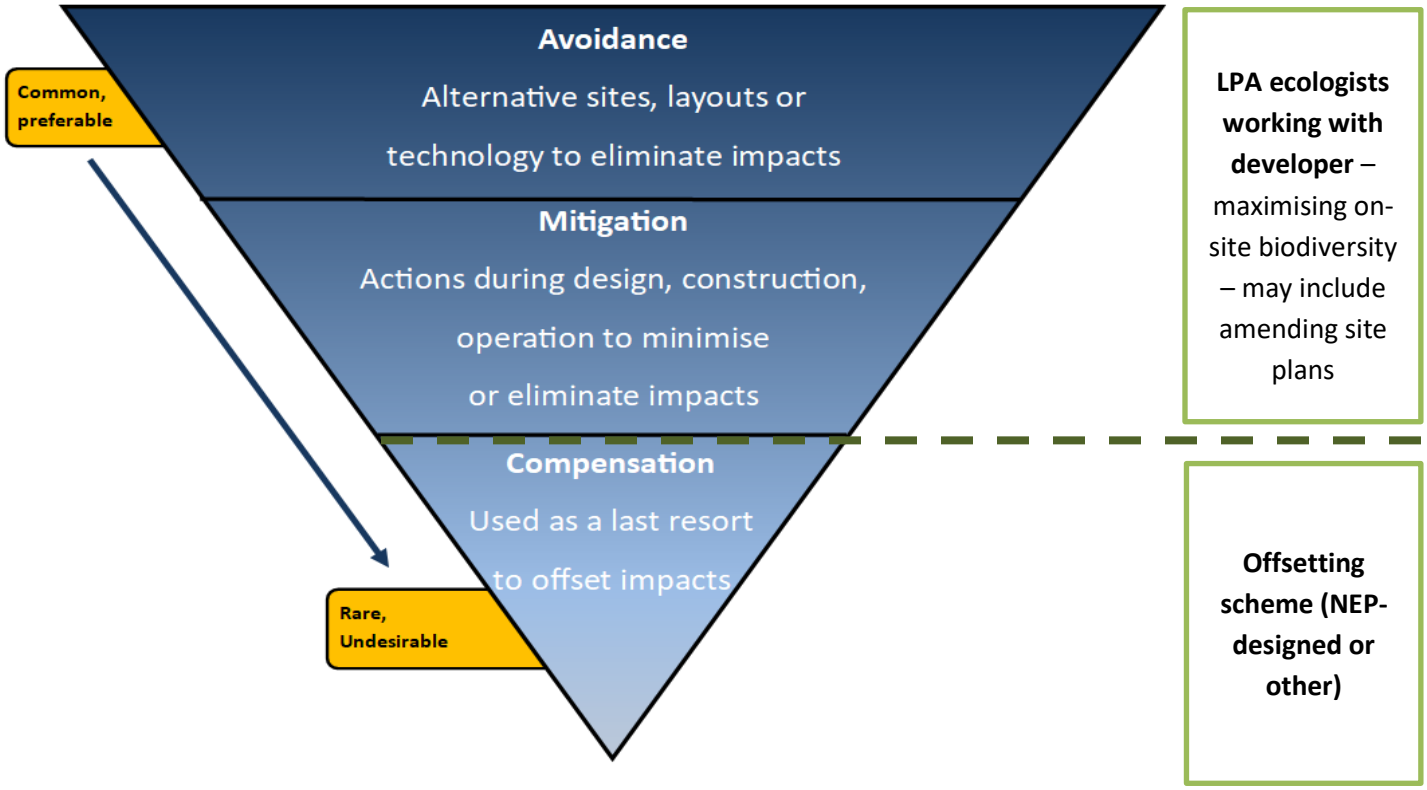
*ADVISORY NOTE: The BATs will show valuable habitat that should be avoided, and in so doing demonstrate whether there is compliance to **the Mitigation Hierarchy (Figure 7)** that is referenced in the NPPF and Local Plan Policies. For example, high distinctiveness habitat should be retained and enhanced. If it is to be lost it needs to be clearly justified within supporting documentation.*

Development can be refused if the mitigation hierarchy has not been followed.

[20] NB –the "Spatial factor" in the formula is an incentivising factor that promotes compensation to support sub-regional strategies – for example those identified by the NEP. Described below – see section "Sourcing a Biodiversity Accounting Scheme"

[21] In the Warwickshire Biodiversity Impact Assessment Calculator

Figure 7: The Mitigation Hierarchy (adapted from Raymond Sumo University Online Learning and Bat Conservation Trust)



Step 2 – Ensuring Biodiversity Net Gain of at least 10% above the Habitat Impact Score

(identifying the Biodiversity Net Gain Target Score – what is required to achieve a minimum 10% gain)

The BAT compares the biodiversity value of the existing site (baseline) against the anticipated future biodiversity value of the site to calculate the net change in biodiversity value. This is presented in both biodiversity units and as a percentage of the biodiversity value of the habitats lost or degraded as a result of development.

A key principle of BNG is that the biodiversity compensation provided must produce habitats of measurably greater biodiversity value than that lost through the development.

The existing "Forward to 2020" Buckinghamshire & Milton Keynes Local Biodiversity Action Plan ([22], sets a target to increase the overall extent of Priority Habitat by 1,070 ha- equating overall to a 20% increase.

[22] A key evidence base for all Core Strategies (see Biodiversity Action Plan: Forward to 2020 for Buckinghamshire and Milton Keynes (Buckinghamshire and Milton Keynes Natural Environment Partnership) Available at: https://bucksmknep.co.uk/projects/forward-to-2020-biodiversity-action/ within the sub-region; as will be the new Biodiversity Action Plan due in 2021, and the forthcoming Local Nature Recovery Strategy

All Local Planning Authorities within Buckinghamshire and Milton Keynes, therefore, consider an **aspirational net gain increase or 'replacement percentage' to be 20% above the current habitat value.**

However, until such time that a mandatory national net gain target is introduced, the Local Authorities **expect applications to deliver at least a 10% net gain**[23]. This is the minimum that would be expected.

The replacement percentage may be increased if, for example, ecological networks must be maintained and/or to avoid fragmentation of important current habitats. In the Tool, the replacement percentage biodiversity gain needed (10%) is added to the Habitat Impact Score to produce the **Biodiversity Net Gain Target Score.** This is the amount of biodiversity units needed altogether to compensate for the anticipated impacts of the development to the on-site habitats, taking into account any habitats planned to be retained, enhanced or lost, and any indirect impacts on them[24].

Biodiversity Net Gain Target Score = Habitat Impact Score + replacement percentage

ADVISORY NOTE: Early engagement with the Local Authority could be beneficial, either if you are unsure whether or your application will require an assessment or to a verify baseline value. This advice may be at a charge but may include advice on how to proceed that will reduce further delays and costs.

Step 3 – Calculate the Future Biodiversity Value of Habitats on the Site

(Taking account of proposed mitigation of habitats on-site, through creation or enhancement)

By using the final or indicative landscape plan, (after application of the mitigation hierarchy – see Figure 7) all future habitats are scored using the same process as Step 1, based on their distinctiveness, condition score and area.

Additional 'factors' are included in the calculation of future habitat values to compensate for the difficulty of the creation / restoration (difficulty factor) and the time it will take for these habitats to be created or restored (temporal factor)[25] The spatial factor aims to incentivise compensation habitat in areas of local importance.[26] From this information a future biodiversity habitat value can be calculated for **each proposed habitat.**

Future Habitat Value = Distinctiveness x Condition x Area x Spatial x Temporal x Difficulty factors

[23] The 10% should be applied to / compared with the current habitat value – i.e. the existing habitats on-site within the red line boundary - until such time as further government guidance is released on this and becomes mandatory.

[24] In the Warwickshire Biodiversity Impact Assessment Calculator

[26] NB –the "Spatial factor" in the formula is an incentivising factor that promotes compensation to support sub-regional strategies – for example those identified by the NEP. Described below – see section "Sourcing a Biodiversity Accounting Scheme"

For habitats identified for **retention and/or enhancement** in Step 1, their current habitat value will also need to be taken into consideration.

The Future Habitat Value for each proposed habitat type should then be added together to calculate the expected total biodiversity value, in units, of the future habitat.

However, first **the principle of "No Trading Down" needs to be applied**. Habitats should always be compensated for on a like-for-like, or like-for better basis. There should be no "trading down" of habitat distinctiveness; it is not appropriate to compensate for the loss of a higher distinctiveness habitat (e.g. a meadow grassland) with a lower distinctiveness habitat (e.g. amenity grassland). Trading down is addressed by applying a "Trading Down Correction Factor" whenever this happens. (NB the Trading Down Correction Factor does not avoid trading down in itself; but requires additional compensation if Trading Down happens; identified in the Tool).

So the total **"Habitat Mitigation Score"** is **the sum of all future habitat values plus a trading down correction factor.**

Habitat Mitigation Score = ∑[Future Habitat Value] + Trading Down Correction Factor

ADVISORY NOTE: Landscape Plans must show all the ecological mitigation and compensation measures contained within the Biodiversity Accounting Tool. For Outline planning applications Future Habitat Values will be based on the indicative layout plan. This assessment will inform the wording of conditions or an obligation where it is likely that the actual losses will be calculated on the approval of reserve matter submissions plus mechanism to resolves any biodiversity loss to habitats.

Step 4 – Overall Biodiversity Impact

The final step, to identify the total habitat impact of the proposed development, is to work out whether the habitat mitigation score is greater or less than the biodiversity net gain target score.

Subtract the Biodiversity Net Gain Target Score from the Habitat Mitigation Score to calculate the Residual Habitat Impact Score for the site.

Residual Habitat Impact Score = Habitat Mitigation Score - Biodiversity Net Gain Target Score

- A **positive figure/unit** illustrates a **Net Biodiversity Gain;**
- A **negative figure/ unit** illustrates a **Net Biodiversity Loss**

A net loss of biodiversity will result in the development proposal being refused.

ADVISORY NOTE: A Biodiversity Accounting Tool should be used to inform how the development will proceed. It details which habitat will be protected and managed during construction, and how it will be managed into the future. It forms part of any Construction Environmental Management Plan (CEMP) and Landscape & Ecology Management Plan (LEMP) (or equivalent) conditions. Therefore, it is important for it to be as realistic as possible.

Step 5 – Hedgerow Assessment

Hedgerows are a very important feature of the English countryside and **should be retained, enhanced and created on development sites wherever possible, in line with the mitigation hierarchy**. Their contribution, by area, to biodiversity in the landscape is far greater than even the most biodiversity rich habitats.

However, if a development results in the loss of hedgerows, **that loss will need to be compensated for with like-for-like habitat – the creation of new hedgerows.**

Given their importance, hedgerows are not treated as just another habitat within the Biodiversity Accounting Process Steps 1 to 4. Applicants are required to employ the NEP Hedgerow Assessment[27],and not the Defra Hedgerow Assessment Tool. The NEP's assessment methodology is simpler and is considered by local experts to provide a better compensation for lost hedgerows than is calculated with the Defra tool; hedgerow replacement is also a priority habitat targets in the Biodiversity Action Plan for Buckinghamshire and Milton Keynes.

It is also considered that **the only appropriate offset projects for hedgerows lost should be creation** (i.e. planting new hedges) – the replacement or "compensation" hedgerow. This is due to the complexity of defining restoration and assigning metres of offset requirement to hedgerow restoration work.

Subject to the hedgerow regulations[28] (which set out criteria for determining "important" hedgerows, permitted works and offences, when a hedgerow should be retained and when it could be removed) requirements relating to hedgerow replacement as a result of hedgerows affected by development are to be measured in metres, rather than in biodiversity units.

ADVISORY NOTE: Hedgerows and linear features can provide the linkages between habitat blocks and are essential for a functioning Green infrastructure. If these linkages are broken by the development, then the development may be refused despite an overall net gain being achieved.

[27] Available on the NEP website: Biodiversity Accounting – Buckinghamshire & Milton Keynes Natural Environment Partnership (bucksmknep.co.uk)

[28] Hedgerow Regulations (HMG, 1997) http://www.legislation.gov.uk/uksi/1997/1160/contents/made

As with other habitats, **an assessment of the distinctiveness (based on the hedgerow type) of the hedgerows impacted by development is required. This includes hedgerows on the development boundary.** The distinctiveness of the hedgerow lost will affect the compensation length required, which is calculated by using a simple multiplier, as shown in Table 1 below. The distinctiveness is automatically applied by the calculator when the hedgerow type is entered. The hedgerow types available are taken from those used in the Warwickshire, Coventry & Solihull metric and based on Phase 1 habitat types.

Table 1: Multiplier showing the lengths of compensation hedgerow required for different distinctiveness of hedgerow lost

Distinctiveness of hedgerow lost	Multiplier applied
High	3
Medium	2
Low	1

(NB – The hedgerow lost includes any on the development boundary)

All hedgerows created as compensation must be of at least the same or higher distinctiveness to those lost. In other words, and in line with Defra rules on trading down, a lower distinctiveness hedgerow cannot compensate for a higher-distinctiveness one lost to the development.

The methodology for hedgerow creation as a result of hedgerow loss is therefore[29]:

i) For each hedgerow habitat on the proposed site, including the development boundary, note the length (metres) and distinctiveness (high, medium or low) and whether the hedge will be retained, enhanced or lost.

ii) Identify the lengths and distinctiveness of future (post-development) hedgerow features on the site – i.e. those created.

iii) The overall offset requirement length to be created depends on the distinctiveness of the hedgerow lengths of habitat lost (Table 1). So, losing, for example, 50m of low distinctiveness hedgerow means that 50m x 1 = 50m of hedgerow should be replanted. And losing 50m of high distinctiveness hedgerow means 50 x 3 = 150m of replacement hedgerow should be planted.

iv) All replacement lengths of hedgerow must apply the "no trading down" principle according to the distinctiveness of the hedgerows lost.

This methodology therefore takes into account the length and quality (distinctiveness) of hedgerows affected by development, and the distinctiveness of any future hedgerows planned for the site (e.g. retained features and those created). It then calculates the required length of hedgerow that must be

[29] The hedgerow metric and related guidance and classifications is provided on the NEP website

created to compensate for the losses and employs the "no trading down" principle to ensure the quality of hedgerow being created is at least the same or higher.

Although this describes how hedgerows should be dealt with, **the approach also applies to other woody linear features such overgrown hedgerows including lines of scrub or rows of trees.**

Step 6 – Rivers

River impacts are calculated using similar formulae to that of habitats as outlined in steps 1 to 4, however they are measured in kilometres. The factors that influence the Distinctiveness, Condition and kilometre values are Time to Target Condition, Difficulty to Create, Strategic significance, and water-course or riparian encroachment.

Step 7 – Overall Biodiversity Net Gain – Is Compensation Required?

If the Residual Habitat Impact Score is still negative (loss), despite following attempts to revise a proposal to avoid and mitigate /compensate for impacts on-site according to the mitigation hierarchy (see Figure 7), **then offsite Biodiversity Compensation ("offsets") will be required.**

To compensate for the losses, one or more Biodiversity Accounting "Schemes" (biodiversity offset projects) will be required to be delivered - either through a planning condition or obligation. These schemes must deliver biodiversity units equivalent to a 10% net gain, and ideally be of the same habitat type as that / those lost.

This offsite compensation can be achieved by either one or both of the following mechanisms:

I. The applicant sources their own biodiversity offset – for example via a third party broker or using already-owned land (provided the proposals meet offsetting requirements); and/or

II. The applicant makes a financial contribution to the Local Planning Authority, for the LPA to arrange offsetting activities on behalf of the developer, for example using the NEP-designed scheme.

ADVISORY NOTE: The development's impact can be significantly altered by "greening" layouts, making enhancements to unused land or using green roofs.

Sourcing a Biodiversity Accounting Scheme

Before a Biodiversity Accounting Scheme (i.e. the offset project) can commence, the existing baseline habitats on the land intended for compensation will need to be valued, in biodiversity units, by undertaking a Biodiversity Impact Assessment (BIA), using a similar method outlined in Steps 1 to 4 above. In addition to this BIA, a Spatial Factor will be included.

The Spatial Factor is an incentivising factor that promotes compensation in areas that support sub-regional strategies –such as focussing efforts in Biodiversity Opportunity Areas and other strategic sites as set out in local biodiversity strategies[30].

Providers of the offsetting scheme are landowners with land available for habitat restoration or creation or a broker may have Biodiversity Accounting Schemes or approved mechanisms that match development losses.

ADVISORY NOTE: The ultimate decision regarding whether the proposed compensation is acceptable or not lies with the local planning authority. Developers should consult with the relevant local planning authority early in the process when securing a receptor site to check its suitability.

Use of the biodiversity accounting scheme designed by the Buckinghamshire and Milton Keynes Natural Environment Partnership (NEP), is preferred.

However, in cases where compensation is arranged through a third-party broker, the Local Planning Authority will require an additional 10% Reporting Fee[31].. This fee is to keep a register of compensation sites, monitor their progress, and monitor sub-regional priorities that have been adopted by the authority. The Local Authority may also use this information in its Annual Monitoring Report to measure the effectiveness of its Biodiversity Net Gain policies.

Compensation sites will need to meet the following standards and will be secured by condition or legal agreement associated with any planning consent.

Proposals for off-site compensation measures, collectively referred to as a Biodiversity Accounting Scheme, will require:

a) A methodology for the identification of any receptor site(s) for accounting measures;

b) The identification of any such receptor site(s);

[30] Such as the NEP's Biodiversity Action Plan or Local Nature Recovery Strategies.

[31] Covering the costs of reviewing reports on progress required from the broker, updating database of offset sites and progress, updating strategic maps used by the NEP's Expert Technical Advisory Panel periodically, sample spot-checks on site progress towards achieving promised net gains, and formal reporting over 30 years.

c) The provision of arrangements to secure the delivery of any compensation measures (including a timetable for their delivery); and

d) A Biodiversity Accounting Management and Monitoring Plan (BAMMP) including details of the provision and maintenance of any compensation measures, following good practice guidance[32].

ADVISORY NOTE: The BAMMP is the evidence that the Biodiversity Impact caused by the development will be compensated, and that a Biodiversity Net Gain will be achieved. Assurances to this effect should be provided to the local planning authority as part of a planning application. It may take some time to prepare this evidence, as ecological surveys are often seasonal. It is therefore important not to leave producing a BAMMP until the last minute.

Biodiversity net gains should be secured for the lifetime of the impacts of the development. Under the NEP-designed scheme, the priority for offsets, therefore, will be on already-owned land (e.g. by local authorities or willing landowners) or land purchased to secure net gains for the lifetime of the impacts of the development[33].

[32] See, for example, the Warwickshire CC good practice guidance https://api.warwickshire.gov.uk/documents/WCCC-863-793

[33] NB - The current Government proposed text for the Environment Act states that a site's enhancement must be maintained for at least 30 years after completion of a development, which also accords to the length of compensation required under the Hedgerow Regulations 2007, Section 8.4b. The Government's response to the net gain consultation states that "…*in practice, a thirty year minimum can sometimes amount to funding in perpetuity if the funds for 30 years are invested prudently*". The NEP-constructed scheme requires both on-site and off-site biodiversity net gains to be maintained for the lifetime of the impacts of the development, in line with the BNG Good Practice Principles and the underlying intentions of the Government's emerging policy.

Biodiversity Financial Contribution

Should a developer wish not to arrange their own biodiversity offset project(s), either on their own site or on a brokered site, then the Local Authority, in partnership with the NEP, operate an alternative option - a **financial payment option - known as a Biodiversity Financial Contribution.**

This is where developers pay a contribution, under full cost recovery principles, to the LPA, which then takes responsibility to organise the required biodiversity accounting schemes, monitor their progress towards meeting the required units of biodiversity gain, take action where necessary to ensure the gains are achieved, and to formally report on their progress.

In determining the amount payable under these arrangements, the **Local Authority** will set an amount that encourages adequate supply of Biodiversity Accounting Schemes (offset sites) to meet the need for biodiversity offset units across the whole of the Local Authority Area.

The **Biodiversity Financial Contribution is index-linked and is the sum total of the following three components:**

1. **A Biodiversity Accounting Payment (BAP):** the cost of carrying out the offset, including, for example, set-up and habitat creation costs, securing any interests in land, and costs associated with managing the offset site over 30 years.

2. A **Contingency Payment (CP)**(Insurance Fund)

3. An **index linked Management Payment (MP)** to cover the costs of finding and selecting offsets and overseeing monitoring and reporting of offset schemes over a minimum 30 year period.

The NEP webpages[34] include a financial calculator that can be used to determine the Biodiversity Financial Contribution.

This **Biodiversity Financial Contribution** will be paid to the Local Authority in accordance with the planning condition or legal agreement. The Local Authority will spend monies received for the purpose of achieving a net gain in biodiversity.

On receipt of the agreed sum, based on full cost-recovery principles, monies will be split into three funds and spent as set out below.

[34] www.bucksmknep.co.uk/biodiversityaccounting

1) Biodiversity Accounting Fund

This fund will be used either to pay Biodiversity Accounting Scheme providers or used directly by the Local Authority to secure net biodiversity gain via the creation or enhancement of habitats, and the project's long-term management, to compensate for the loss associated with the development. The Fund will be used to:

- Carry out works, or secure the carrying out of works (including legal costs) for the purpose of habitat creation and/or enhancement;
- Purchase interest in land with a view to carrying out work, or securing the carrying out of works for that purpose;
- Carry out works, or secure the carrying out of works for the long-term management of the habitats (minimum 30 years);
- Produce a Biodiversity Accounting Management and Monitoring Plan for the habitats to be created or enhanced;
- Report on progress towards achieving the stated habitat aims, including ecological surveys.

While the preference is to use the NEP-designed scheme, alternatively this could be arranged through a broker, or by separate legal agreement arranged by the lead Local Authority. These arrangements will be detailed within a legal agreement, in accordance with an approved Biodiversity Accounting Management and Monitoring Plan.

2) Contingency Fund

This fund will be formed from the pooling of the individual contingency payments and will be used to secure additional biodiversity enhancements or other ecological projects that enhance biodiversity. These enhancements will compensate for Biodiversity Accounting Schemes that do not fulfil their ecological objectives.

3) Management and Monitoring Fund

This fund will cover the costs associated with finding offset schemes and the administrative costs of monitoring and reporting on net gains achieved via the Biodiversity Schemes funded through the Biodiversity Accounting Fund. The Fund will be used to:

- Locate suitable biodiversity offset schemes;
- Assist landowners to bid for offset funding;
- Collect data and manage databases to record biodiversity offset schemes and their progress,
- Reviewing Habitat Management and Monitoring Plans to ensure compliance and suitability;
- Support the NEP's Expert Technical Advisory Panel, to be used to determine where best to locate schemes based on supply of units and agreed local biodiversity priorities;
- Sample on-site monitoring and formal reporting on scheme progress;

- The administration of all funds;
- Legal fees associated with setting up schemes, not covered elsewhere.

Further information on how the NEP-designed biodiversity accounting scheme works is available on the NEP website[35], including the process for how the Expert Technical Advisory Panel will operate to advise which offset projects should be supported by the Biodiversity accounting fund, and the selection criteria to be taken into account by that Panel in selecting suitable offset sites (including, for example, that biodiversity accounting schemes must be located as close as possible to the area of loss, contribute to local biodiversity priorities as set out in the NEP's Biodiversity Action Plan and strategic mapping).

[35] See www.bucksmknep.co.uk/biodiversityaccounting

Glossary

Biodiversity Accounting Tool	An excel spreadsheet tool used to calculate the habitat biodiversity impact of a development.
Biodiversity Accounting Payment (BAP)	The element of a financial contribution that covers the costs to find, establish and pay for the management of a Biodiversity Accounting Scheme.
Biodiversity Accounting Scheme	A scheme that will deliver biodiversity enhancements that shall not be less than the Residual Habitat Impact Score.
Biodiversity Financial Contribution	The contribution due by the developer for a specific Biodiversity Accounting Scheme.
Biodiversity Impact Assessment (BIA)	The process of evaluating the habitat biodiversity impact of a development.
Baseline Value	Biodiversity value of the current habitat on the offset site in Biodiversity Units.
Biodiversity Loss	A negative Biodiversity Unit score.
Biodiversity offset broker	These intermediary players can support the biodiversity offset system by registering potential offset sites and matching them to the needs of the developers and local planning authorities. They can also facilitate the development of offset arrangements on new land.
Biodiversity Units	A measure of the biodiversity loss or gain calculated as the product of the area, condition and distinctiveness of the habitat lost.
Condition	The state of habitat, which includes their physical, chemical, and biological characteristics.
Construction and Environmental Management Plan (CEMP)	A condition placed on an approved planning application to secure nature conservation during the construction phase of the development.
Contingency Payment (CP)	The element of a financial contribution that will be used to secure additional biodiversity enhancements should any Biodiversity Accounting Schemes not fulfil their ecological objectives.
Current Habitat Value	Is the Distinctiveness x Condition x Area (x Spatial Factor).

Distinctiveness	A collective measure of biodiversity and includes parameters such as species richness, diversity, rarity and the degree to which a habitat supports species rarely found in other habitats.
Ecosystem Services	Our health and wellbeing depend upon the services provided by ecosystems and their components: water, soil, nutrients and organisms. Ecosystem services are processes by which the environment produces resources utilised by humans, such as clean air, water, food, and materials.
Habitat Mitigation Score (HMS)	∑[Future Habitat Value] + Trading Down Correction Value.
Landscape and Ecology Management Plan (LEMP)	A condition placed on an approved planning application to secure nature conservation after the construction phase of the development has finished
Management and monitoring Payment (MP)	The element of a financial contribution that and will be used to cover the costs associated with collecting data, managing, monitoring, reporting and regulating the progress of Biodiversity Accounting Schemes.
Priority Habitats and Species	Species and habitats published in the UK Biodiversity Action Plan as conservation priorities which are under threat because of their rarity and rate of decline. Those found in England continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework as habitats and species of principal importance.
Receptor Site	The land where the Biodiversity Accounting Scheme will be delivered.
Residual Habitat Impact Score	The total number of biodiversity units necessary to account for the biodiversity impacts from the development.
Risk Factors	Include delivery risk, spatial risk and temporal risk. These are multipliers within the metric calculation that help manage ecological risks associated with offset delivery.
Target Habitat	The habitat to be created or enhanced by the proposed offset.
Trading Down	Lower Distinctiveness habitat cannot compensate for Higher Distinctiveness habitat, were this to happen it would be termed as 'trading down'.

Acronyms

BAMMP	Biodiversity Accounting Management and Monitoring Plan
BAP	Biodiversity Accounting Payment
BIA	Biodiversity Impact Assessment (the assessment resulting from using a Biodiversity Accounting Tool / metric to record habitat data and calculate likely net gains or losses resulting from proposed development)
BAT	Biodiversity Accounting Tool (i.e. a calculator or metric)
BNG	Biodiversity Net Gain
BNGTS	Biodiversity Net Gain Target Score
CBD	Convention on Biological Diversity
CEMP	Construction and Environmental Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CIRIA	Construction Industry Research and Information Association
CP	Contingency Payment
HMS	Habitat Mitigation Score
HIS	Habitat Impact Score
IEMA	Institute of Environmental Management and Assessment
LEMP	Landscape and Ecology Management Plan
MP	Management Payment
NEP	Buckinghamshire and Milton Keynes Natural Environment Partnership (The area's Local Nature Partnership)
NPPF	National Policy Planning Framework
SPD	Supplementary Planning Document

References

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Biodiversity Action Plan: Forward to 2020 for Buckinghamshire and Milton Keynes (Buckinghamshire and Milton Keynes Natural Environment Partnership) Available at: https://bucksmknep.co.uk/projects/forward-to-2020-biodiversity-action/

Biodiversity & Planning in Buckinghamshire, March 2014 [including Milton Keynes] Available at: http://www.buckinghamshirepartnership.gov.uk/media/1022528/Bucks_planning_online_FINAL.pdf

Biodiversity Net Gain and Local Nature Recovery Strategies - Impact Assessment https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/839610/net-gain-ia.pdf

Buckinghamshire Green Infrastructure Strategy (Buckinghamshire green infrastructure consortium, 2009) Available at: https://www.aylesburyvaledc.gov.uk/sites/default/files/page_downloads/CD-ENV-010-Buckinghamshire-Green-Infrastructure-Strategy-Bucks-CC-April-2009-.pdf

Buckinghamshire Green Infrastructure Delivery Plan, (NEP,2013) Available at: http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwiO5snN2ZTnAhWyVBUIHZlVAcYQFjAAegQIBRAB&url=http%3A%2F%2Fwww.chiltern.gov.uk%2Fmedia%2F5014%2FBuckinghamshire-Green-Infrastructure-Delivery-Plan-Buckinghamshire-and-Milton-Keynes-Natural-Environment-Partnership-August-2013-%2Fpdf%2F5326-Bucks-GI-Delivery-Plan-FINAL-ISSUE_2013_08_07_low_res.pdf%3Fm%3D635877761809270000&usg=AOvVaw3TDdtzsFEze-oBtn_Kz07c

The Business and Biodiversity Offsets Program (BBOP) is a partnership between companies, governments and conservation experts to explore biodiversity offsets. http://bbop.forest-trends.org/

Defra Guidance for Developers 2012 http://www.defra.gov.uk/publications/files/pb13743-bio-guide-developers.pdf

Defra Guidance for Offset Providers http://www.defra.gov.uk/publications/files/pb13742-bio-guide-offset-providers.pdf

Guidance for Developer and Guidance for Offset Providers - Appendix 1 http://archive.defra.gov.uk/environment/biodiversity/offsetting/documents/1204-bio-offset-pilot-appendix.pdf

Hedgerow Regulations http://www.legislation.gov.uk/uksi/1997/1160/contents/made

Information for Local Authorities http://www.defra.gov.uk/publications/files/pb13744-bio-local-authority-info-note.pdf

Natural Environment and Rural Communities Act (2006) Available here: http://www.legislation.gov.uk/ukpga/2006/16/contents

Making Space for Nature, John Lawton, 2010 http://www.official-documents.gov.uk/document/cm80/8082/8082.asp

Vision and Principles for the Improvement of Green Infrastructure in Buckinghamshire and Milton Keynes, (Buckinghamshire and Milton Keynes Natural Environment Partnership, 2016) Available here: https://bucksmknep.co.uk/projects/vision-and-principles-for-the-improvement-of-green-infrastructure/

Warwickshire County Council Biodiversity Impact Assessment calculator (latest version available here: https://www.warwickshire.gov.uk/biodiversityoffsetting)

APPENDIX A – Biodiversity Accounting and the Community Infrastructure Levy – Legal Position (Model provided by the NEP)

The Council believes that the obligation can satisfy the tests in Regulation 122 because, there is agreement that it is necessary to have in place measures to ensure that the development should not result in a net biodiversity loss. Because the developer has the freedom to achieve this through on-site and/or off-site measures at its election, with resort to a contribution only if it so chooses or other measures have failed, it does not exceed what is necessary. The measures are directly related to the development because they concern the mitigation or offsetting of its impacts on biodiversity and they are reasonably and fairly related because they use a recognised methodology based on objective evidence to calculate those impacts and compare them with the proposed response to achieve equivalence.

We consider Regulation 123 to be irrelevant because biodiversity offsetting measures do not involve the provision of "infrastructure" within the meaning of section 216 of the Planning Act 2008. Defra have stated that "*biodiversity offsets should not be classed as infrastructure because they do not enable the development to function, nor do they provide any facility for those living within or using the new development.* ***There are also practical reasons which make funding biodiversity offsets through CIL inappropriate compared to case-by-case Section 106 agreements.*** *However, the Department for Communities and Local Government lead on the CIL policy and they advise: "that it is difficult to be definitive about what does and doesn't fall into the definition of infrastructure. Section 216 (2) of the Planning Act 2008 sets out what infrastructure includes but is not a definitive or exhaustive list. In the past when this has been raised by other authorities in respect of other types of infrastructure, we have advised the authority to seek their own legal advice on how something should be funded through developer contributions. The advice would be the same here*". (Defra, pers. comm. to Warwickshire County Council, 2015).

An example of an offsetting project would be the creation of a woodland, typically not open to the public, to provide a habitat for flora and fauna. Such projects are not within or ejusdem generis with the types of infrastructure listed in section 216 and reference to the dictionary indicates that defining characteristic of "infrastructure" is that it supports human (rather than animal or plant) activity.

It is not necessary to take a purposive approach to defend this interpretation but, if a purposive approach were taken, **it would reinforce the case that biodiversity offsetting projects are not infrastructure.** This is because biodiversity offsetting is practically impossible to include in infrastructure delivery plans as the amount, type and cost likely to be required in an area cannot be determined until the detail of specific development proposals have been supplied and assessed. Similarly, there are considerable practical difficulties in identifying at the time of preparing a planning obligation the specific offsetting project that would be implemented**. In consequence, the community infrastructure levy is not a funding mechanism that is appropriate, or even capable, of providing satisfactorily for such projects and so an interpretation of "infrastructure" which avoids its application is consistent with the purposes of that regime.**