Accounting for biodiversity in planning

A toolkit for Local Planning Authorities in England

THIS TOOLKIT PROVIDES GUIDANCE ON...

- A quantitative assessment of impacts using the Government ‘biodiversity metric’
- Appropriate calculation of any necessary compensation, or offsets
- Transparent discharge of local planning authority’s biodiversity duties
- Examples of Local Plan wording and Supplementary Planning Documents (SPD) to deliver accountability for biodiversity
- Planning Inspectorate case law endorsing delivery of offset sites
- Guidance on producing spatial strategies to target compensation via habitat creation
- Access to support, training and metric validation
- Our services and compensation/offset delivery mechanisms
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Disclaimer: The views and opinions contained within this document are those of Environment Bank, based on our experiences and feedback working with Local Authorities and developers across the country. Each Local Authority must be satisfied with their evidence base prior to making strategic and/or case specific decisions on approach. EB accepts no liability in respect of any decisions made on the basis of the information or advice provided within this toolkit.
### 1 Introduction

Much of the wildlife outside of our protected areas is declining and our current systems of nature conservation are widely recognised to be inadequate (State of Nature report 2013). Better accounting of our impacts on biodiversity, and better methods of mitigating and compensating those impacts, are required to reverse declines (Lawton 2010; Natural Environment White Paper 2011; Ecosystem Markets Taskforce 2013).

This toolkit is designed to help local authorities introduce a transparent and auditable framework for accounting for biodiversity and, therefore, deliver their biodiversity obligations under the NERC Act and their planning responsibilities under the National Planning Policy Framework (NPPF) and Government guidance. The main document provides general information, whilst appendices reference more technical information.

The toolkit and metric allow evaluation of biodiversity loss and gain through development and the assessment of avoidance, mitigation and, where necessary, compensation measures (e.g. through a biodiversity offset scheme). This system gives predictable, accountable and coherent outcomes for biodiversity and contributes to the three pillars of sustainable development set out within the National Planning Policy Framework. It delivers proper ecological accountability for development and is in accordance with the ten principles set out in the ‘Biodiversity Net Gain: Good practice principles for development’ developed by CIRIA, CIEEM and IEMA.

### 2 The biodiversity metric

The biodiversity metric was designed by Natural England and introduced by Defra in 2012 as the main component in Government pilot schemes set up to test ‘biodiversity offsetting’ delivery systems. Compensation (offsets) is the last step of the mitigation hierarchy (first avoid, then reduce, and finally, compensate), and the pilots examined whether such off-site compensation – creating or restoring new wildlife habitat in a different place to where it was lost – was an effective way of ensuring biodiversity loss was properly compensated for.

Following the pilots, local planning authorities (LPAs) across the country are introducing the metric (see 5 The Government biodiversity metric) as an invaluable accounting tool for assessing the impacts of development. The metric is a simple, powerful and transparent step for LPAs, which has now been tested and approved by the planning inspectorate in a number of cases.

The metric does not assume offsets will be required and can, in fact, demonstrate on-site biodiversity gain has been achieved. Applying the metric drives up the quality of on-site mitigation so that there is often no residual impact to be compensated for. If, however, an offset is required, the same metric is used to evaluate the predicted gains at such sites so that no net loss, and preferably net gain, of biodiversity is achieved.

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1 For the purposes of this toolkit ‘mitigation’ refers to on-site habitat retention, enhancement and recreation measures within the development boundary. ‘Compensation’ refers to off-site habitat restoration and creation e.g. as part of a biodiversity offset scheme.
2.1 Working within the mitigation hierarchy

Projects should seek firstly to avoid impacts to biodiversity, then to minimise them and, only lastly, after avoidance and mitigation measures have been taken, should residual impacts be compensated for – which may include permitting a development with an offset requirement.

Figure 1. mitigation hierarchy

Source: Environment Bank (2014), adapted from Business and Biodiversity Offsets Programme

Requiring the use of the metric early in project development means there is a transparent and auditable trail of evidence to demonstrate good planning and design practice and appropriate consideration of what it means to provide ecologically sustainable development – this often reduces costs in the long run when a final residual impact that would have otherwise needed to be compensated for is minimised or avoided.

2.2 Protecting important habitats

All habitats are important, but some e.g. ancient woodland, limestone pavement, are irreplaceable and their loss cannot ever be fully compensated for. The metric (see 5 The Government biodiversity metric) evaluates impacts for a wide range of habitats, but it does not override existing law or policy that protects nationally important sites and species. In essence, the higher the biodiversity value of a habitat the higher the metric score. Therefore, offsetting impacts to unprotected, but ecologically high value habitats, will be greater and more expensive for the developer, compared to farmland, for example. This encourages development away from higher value sites and guides decisions to avoid, minimise and mitigate impacts on the higher value habitats. Thus, the metric both strengthens the mitigation hierarchy and helps minimise ecological impact and offset related costs for businesses.
2.3 Low value habitats

The NPPF aspires to ‘net gain’ or expects no net loss at a minimum. Therefore, it is implied that any biodiversity loss could fail the NPPF’s Sustainable Development principles and could constitute significant harm (see 4.2 When to apply the metric – Significance).

A critical advantage of the metric is that, as well as valuing ‘important’ habitats, it also places a value on poorer habitats that are currently often ignored or forgotten, such as species-poor grassland and farmland, as they may seem insignificant compared to impacts on better quality habitats. The inability of the current planning system to account for the loss of these poorer habitats is a weakness, one that is contributing to the widespread loss of many of our commoner habitats and species. Impacts to lower value habitats are usually easy to mitigate for on-site, but if an offset is needed for such habitats, this can be effectively done through ‘trade-ups’ to the restoration or creation of more valuable habitats. Defra guidance (2012) states:

"Where development is taking place on habitats in the low distinctiveness band, the offset actions should result in expansion or restoration of habitats in the medium or, preferably, high distinctiveness band." (Defra, 2012, paragraph 22).

2.4 Contributing to landscape-scale initiatives

Green Infrastructure programmes usually aim to deliver conservation improvements by creating a ‘coherent ecological network’ of connected core areas (existing areas of importance to biodiversity, often designated sites) to maximise the benefits to wildlife. When offset schemes are needed, local authorities and developers can help fund the creation of these networks by targeting the location of schemes within an agreed spatial strategy (for more information, see 5.1 Strategies for habitat compensation).

3 Why use this tool?

Biodiversity accounting and offsetting are quickly becoming standard practice around the world - there are 40 offsetting systems worldwide with Australia and the US being established the longest. Environment Bank have direct experience, or been in communication with, a number of these systems and keeps a close eye on the successes and learnings in other countries for application in the UK. The examples provided within our information sheet ‘8 International examples’ (go to www.environmentbank.com/library) are just a sample of the many international frameworks quickly developing to halt biodiversity loss.

3.1 Supporting policy

European, national and local policies are increasingly requiring no net loss, or net gain, of biodiversity, requiring all biodiversity impacts to be accounted for, not just impacts to priority habitats. Avoiding, mitigating and compensating for the loss of biodiversity has been an objective of planning authorities for decades. However, in the absence of any quantitative assessment of biodiversity value, decisions have been made via a series of subjective judgments and negotiation between developers and planners, and are, with hindsight, often found to be insufficient (Tyldesley 2012). The metric is designed to provide a consistent, transparent and auditable approach to
assessing the impacts to a range of habitats, treating all developers equally and consistently.

An increasing number of local authorities and developments across the UK are now using the metric and, where offset sites are required, a model of securing and delivering them in the planning system has been tested at officer, committee and inspectorate level. Planning authorities are entitled to use the metric to aid their decision-making wherever and whenever they wish and, should they choose to do so, the metric considers the biodiversity value of all habitats.

Details and context of policies and frameworks that support the introduction and application of a No Net Loss compensation/offsetting strategy using the government metric are provided in Appendix A. These are:

- EU Biodiversity Strategy 2020;
- Natural Environment White Paper 2011;
- NERC Act 2006;
- National Planning Policy Framework (NPPF) 2018;

For a toolkit with policies and approaches more relevant for Wales and Scotland please contact Environment Bank at admin@environmentbank.com

**Other guidance and standards**

‘Planning Practice Guidance (PPG) for the Natural Environment’ (DCLG 2016) and the British Standard for biodiversity in planning (BS 42020:2013) both recommend this system of biodiversity accounting as an appropriate mechanism of delivering biodiversity offsetting. Specific wording is provided in Appendix A.

**Local Plan Policy**

Appropriate biodiversity accounting and compensation, required under the NPPF, can be strengthened and made more specific to local scenarios by inclusion within Local Plans or within Supplementary Planning Documents. Any offset that is required can also be a funding mechanism for meeting local green targets for improved habitat quality, extent and landscape connectivity and could also tie in with biodiversity improvement or conservation target areas. Where local plans are still being drafted there may be opportunities to build upon previous compensation standards or to detail use of the metric specifically as a recommended accounting mechanism.

Where local policy is not in place the NPPF should be referred to and Supplementary Planning Documents and county strategies can be implemented to outline the local approach to biodiversity assessment and offsetting.

Environment Bank can provide a number of examples of adopted (and drafted) Local Plan and Neighbourhood Plan policies where the metric, no net loss to biodiversity and a model for delivery of compensation/offsetting is referenced. Similarly, assistance is also available for the development of Supplementary Planning Documents.

See the following Appendices for examples:

- Appendix B for example wording from adopted Local Policies.
- Appendix C for suggested Local Plan wording.
3.2 Planning Inspectorate case law

Planning applications using the metric are increasingly being granted with requirements to secure offsets and deliver No Net Loss, via conservation credits funding, as compensation for development impacts. Case law is also building as planning applications involving the metric and subsequent offsets are approved by the Planning Inspectorate. For some examples of the case law we have collated see Appendix D. Additional case law is available from Environment Bank, on request.

4 Introducing the tool into your planning system

To receive the most benefits from implementing the metric, a consistent approach should be used to enable transparent accounting and a level playing field for all planning applicants; this standardised approach allows for the most benefits of a streamlined, efficient system and is less open to contest. Whenever an ecological habitat survey is received a metric assessment should be completed to assess the information provided in a standardised, comparable way, to confirm levels of required mitigation and compensation, both on and off-site. With available resources limited for many planning authorities, a number of options are available – these are described below.

4.1 Options for delivery

Consistent universal application (recommended)

- The metric is applied to all planning applications.

In this model of delivery, the metric is applied to all planning applications submitted (typically all minor and major, at LPA discretion) so that ecological survey information is accompanied by impact calculations, which inform planning responses and determination. When local authorities require consistent application of the metric, a standardised, unbiased approach to the planning decisions is promoted. Any negotiations regarding adherence to the mitigation hierarchy can also be facilitated using the impact assessment calculations as an evidenced framework. Understandably, many authorities will be concerned about the start-up time and resources they can provide to this initial step of applying the metric but Environment Bank can provide support in a number of ways:

- advice and support regarding specific calculations using the Environment Bank calculator, which incorporates the Defra metric into a nationally usable, consistent tool (see 5.3 Excel-based calculator);
- discounted training for local authority ecologists;
- full biodiversity impact assessment, calculation and reports for developers at Environment Bank consultancy rates, commissioned by the developer (but potentially at the request of the local authority).
- See 8.2 Our services below for more information.

Authorities will also find that, with practice, biodiversity assessment calculations will be quick to do in house and will save time that may otherwise have been spent on lengthy negotiations with developers regarding the significance of their impacts. In addition, developers and consultant
ecologists are becoming increasingly aware of the required processes.

**Case-by-case application**

- The metric is applied by the local authority on a case-by-case basis.

In this model of delivery, local authorities request calculations for certain, larger impact developments, either to test the mechanism in practice or, sometimes, because there are only a proportion of planning applications where the authority feels an impact assessment of this nature is appropriate.

It is worth noting that where ecological survey information is available it is only a small step to undertake the biodiversity impact calculation. Calculation results can then provide a more informed and quantified evidence base for decisions on whether offsite compensation is appropriate.

Local authority case studies on the models for delivering biodiversity accounting and offsetting are provided in Appendix E.

### 4.2 Accuracy and validation

Where ecological consultants working for developers submit biodiversity metric calculations, there can be a number of issues around accuracy and validation of results that authorities need to be aware of.

Firstly, large variations between impact calculations may occur where there may be a misunderstanding of how the metric is applied, particularly through a lack of experience and/or in the absence of clear guidance. Although the Defra metric design is relatively simple, incorrect judgments on how a habitat type is ranked, particularly in terms of the assessment of condition, can cause significant variations in the calculations received by local authorities. Environment Bank’s Biodiversity Impact Calculator tool and supporting guidance is available to all local authorities. By requiring the same tool on all applications, LPA’s receive assessments in a consistent format which in turn generates efficiencies in approach; the tool is also designed in a way that minimises error and allows all developments in a local authority or county to be assessed in a consistent manner. We would recommend that an LPA always ask to receive a copy of the original calculation (not a pdf), and that reasoning for assessment factors, such as condition, are always provided.

Secondly, it is always best if the calculations on biodiversity impact at the development site are done using the same system as the calculations for biodiversity gain at the receptor site. In this way the LPA can be assured of actually delivering no net loss through consistency in biodiversity assessment and the use of a standardised approach.

It is up to a local authority as to how they implement any system. Please note that Environment Bank offer training and validation services on request (see 8.5 Support, training and validation).

### 4.3 When to apply the metric

Public authorities have a specific duty under the NERC Act to consider biodiversity and are required by Government to deliver no net loss (and preferably net gain) of all biodiversity through a series of national policy instruments, making biodiversity assessments and offsets material considerations in
determining all planning applications.

Thus, we recommend that local planning authorities use the metric for all non-trivial planning cases where biodiversity may be affected. In any event, Planning Authorities are entitled to use the biodiversity metric to aid their decision-making wherever and whenever they wish and, should they choose to do so, the metric considers the biodiversity value and offset requirements of all habitats.

The issue, of course, is how to decide what is ‘non-trivial’ and whether this equates to the phrase ‘significant harm’ set out in para 175 of the NPPF, which is yet to be defined in law.

Significance

In considering ‘significance’, note that Defra guidance (2012) states:

“There is no definition of significance. However, the term relates to the magnitude of impacts, either alone or in combination, including those which may be temporary during construction, rather than the size of the development under consideration. Small developments can have significant impacts on biodiversity.”

Certainly, we advise that ‘significant harm’ does not solely refer to impacts to priority habitats (referred to in planning policy terms in para 174 of the NPPF), nor only to designated sites. Current policy (British Standard for biodiversity and planning (BSI 2013); BS42020: 2013 paragraph 5.1) states that impacts to ‘non-priority’ habitats, which also contribute biodiversity value, may also be considered ‘significant’ enough to require offset measures. Biodiversity accounting is designed to demonstrate and deliver No Net Loss of biodiversity for impacts to all habitats which contribute to biodiversity and this includes low value habitats.

So defining ‘significance’ in this context does not have a simple answer. Assessing impacts relates not only to habitat type (priority or not), and extent of habitat loss, but also to other considerations, including distinctiveness, rarity, condition, supported wildlife populations, location, extent of impact on site and local green infrastructure. Larger losses to low value habitats can be just as important to compensate for as smaller losses of high value sites. We have seen local authorities define a significant impact as one where there is a gross biodiversity impact (initial impact of a development prior to onsite mitigation) that cannot be compensated for on-site (after on-site mitigation and enhancement measures) – i.e. a net biodiversity loss as determined by the metric.

Finally, local judgments are also important for determining appropriate levels of significance and so local authorities are encouraged to develop guidance on what impacts they consider to be significant.

As an example, Warwickshire, Coventry and Solihull have a consistent approach to both accounting and compensation, required as part of an adopted sub-regional strategy.

“All minor and major applications will need to calculate Biodiversity Impacts, be this positive (gain), negative (loss) or neutral. Where there is a negative (loss), Biodiversity Offsetting will be triggered.” (Warwickshire County Council, 2013).

Thresholds

A separate approach to ‘significance’ is to set a ‘threshold’ for what is, or isn’t, non-trivial. Either a
threshold could be set, below which the metric is not required to be used - either by area of impact (e.g. 0.1ha+) or development type (e.g. all major developments.) – or a threshold for action could be set after the metric has been applied for applications (e.g. no compensation is required for any development where the residual impact is less than 2 biodiversity units).

Environment Bank strongly recommends the latter approach – as it is a quantitative and evidence-based justification for planning action. If the former approach is to be used, we caution against a threshold being too high. Evidence from the pilots shows that although large-scale major developments do tend to have the larger biodiversity impact, minor developments actually have a larger impact per hectare due to the reduced portion of land available for on-site compensation and therefore contribute significantly to a net loss of biodiversity across a region.

By applying the metric to all applications, thresholds can then be set to determine what level of biodiversity impact is required to be compensated for, or what could be considered a negligible loss and/or potentially better compensated for on-site through species enhancement (e.g. bat boxes). Similarly, however, we caution that it is not just a matter of unit loss, but also the habitat type being lost and its value to the surrounding landscape and other wildlife. Nevertheless, use of the metric allows such judgements to be empirically based, transparent and defensible - rather than the subject of negotiation between the differing opinions of consultants working for different clients.

4.4  **Steps in applying the metric and delivering ‘Measurable Net-Gains’**

The steps taken in an example case are listed below:

1. Planning application is submitted to the local authority with ecological habitat survey information.
2. Local authority review planning application and the Local Government Ecologist (or Environment Bank, on request) assesses the survey information provided, using the metric to calculate the biodiversity impacts and confirm whether there is a biodiversity loss (see the Government biodiversity metric).
3. Comments are provided to the relevant planning officer regarding the biodiversity unit loss (or gain) and any requirement to provide compensation.
4. Additional information may be requested to clarify the results of the impact assessment to ascertain if on-site avoidance or mitigation can be improved.
5. The biodiversity impact is confirmed and any requirement for an offset scheme is secured by condition/s106 obligation on the permission if granted (see Planning conditions and s106 obligations).
6. Prior to commencement of development, Environment Bank will work with the developer to secure an appropriate offset scheme of suitable habitat type, location and conservation credit supply to compensate for the impact, that also meets the local biodiversity offset strategy and approval by the local authority. NB: Any requirement for a long-term on-site ecological management plan should be expected to meet the same standards as off-site compensation (see Finding and securing compensation), and is also secured in the planning permission.

Figure 2. Flow chart of the EB biodiversity accounting/compensation process

Source: Environment Bank (2016).
4.5 Outline and full planning applications

If off-site compensation is required, then how it is secured within the planning system will vary depending on whether the application has full details or is outline with some matters reserved.

Full applications are straightforward as per the process above. Biodiversity impacts are assessed during the determination phase of the planning application and an offset, if required, is secured within the planning permission (see Appendix G for example permission wording). Prior to
commencement of development an appropriate offset site will be identified, approved by the LPA and then implemented.

Outline applications need a 2-step assessment. To provide appropriate comments at outline the assessment and broad compensation recommendations will need to be made and potentially secured within the s106. However, recalculation of the biodiversity impact at the reserved matters application will likely be needed if there are changes in the habitats type or condition of the habitats present, changes to the layout of the development (e.g. increasing net loss) or level of on-site mitigation (e.g. reducing net loss). It is this revised impact that should be compensated for through an appropriate offset scheme.

The 2 step approach of outline and reserved matters can offer some advantages, such that should insufficient information be supplied at outline regarding the level of on site compensation achievable within the scheme, a precautionary approach to the calculations can be taken, with full details (such as an ecological management plan) supplied at reserved matters to inform the reassessment.

4.6 Planning conditions and s106 obligations – securing compensation

When they are required offset sites need to be secured on planning permission, via a planning condition or section 106 obligation. Environment Bank have a database of approved wording for both conditions and s106 obligations for various scenarios, including appropriate definitions to be included within the s106. Example wording is provided in Appendix F, and additional examples are available upon request. We can work with local authorities to further refine this wording for either planning conditions or s106 obligations on a case-by-case basis to suit their requirements.

Community Infrastructure Levy (CIL)

CIL is not viewed as an appropriate delivery mechanism for this system.

Specifically, legal opinion concludes that off-site biodiversity compensation schemes and offset receptor sites selling conservation credits, including ‘habitat banks’ (large sites selling credits to multiple developers – see 8.7 Habitat banks) are not ‘infrastructure’; biodiversity offsets are not needed to support the final development, but as compensation for the impact of development construction. CIL is therefore not an appropriate mechanism for securing and financing compensation sites/habitat banks. In addition, offset schemes are for the purposes of biodiversity and wildlife and do not meet the definition of ‘open spaces’, unlike Suitable Alternative Natural Greenspace (SANGs), which have a purpose for human recreation.

Furthermore, the CIL regulations set out charges per unit area, whilst net biodiversity impact (compensation requirement) is not determined by the area of development – it varies from site-to-site, depending on the land impacted, extent of achievable mitigation and is subject to a bespoke biodiversity assessment, carried out on each development site and associated offset scheme.

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2 Sensu Planning Act 2008 (s.216)

3 Sensu Town & Country Planning Act 1990 (s. 336(1))
**Section 106 obligations**

Site-specific compensation (on and off site) is necessary in some cases, to make the development proposal acceptable in line with national and local planning policy. Government Planning Practice Guidance (2016) explains that development-specific planning obligations can still be used to make development acceptable in planning terms.

Although conditions are a suitable and flexible tool for securing compensation requirements, s106 obligations may be considered more robust by some local authorities, in terms of enforcement (see also **planning conditions**).

Each s106 obligation must meet the three tests set out in the CIL Regulations (2010 – regulation 122) which gave a statutory basis for the tests set out in the NPPF (para. 56):

- a) necessary to make the development acceptable in planning terms;
- b) directly related to the development; and
- c) fairly and reasonably related in scale and kind to the development.

See [Compliance](#) below.

Requirements relating to this system of biodiversity accounting/compensation under conditions and s106 agreement have been accepted by the planning committees and planning inspectorates. Suggested obligation/condition wording is provided in **Appendix F**.

**Habitat banks**

The use of s106 obligations is restricted by the CIL regulations but, because CIL does not apply, regulation 123 restricting the number of obligations that can be pooled to 5 or less schemes, does not apply to habitat banks. Furthermore, legal opinion concludes that habitat banks, when properly constituted, meet all the appropriate tests (necessary, directly and reasonably related). S106 obligations have previously been used to deliver several habitat offset schemes.

**Planning conditions**

National guidance suggests conditions are preferable to obligations and ‘Grampian’ style negative conditions – prohibiting commencement within a permission authorising development – are a well understood mechanism for securing the provision of off-site matters. They are less ideal than s106 obligations because of the restrictions on specifying financial undertakings and commitments, but they have been used to specifically deliver biodiversity offset schemes, with wording agreed by the Secretary of State and through the Planning Inspectorate.

Conditions also have the benefit of being more flexible such that, under the right circumstances, they can be imposed at reserved matters stage rather than at outline when a revised calculation will be needed (although the likely requirement for any compensation should be detailed within outline responses) (see 4.4 **outline and full developments**).

In order to comply with the requirements of Circular 11/95 and the NPPF (para. 55), a condition must be:
1. Necessary;
2. Relevant to planning;
3. Relevant to the development to be permitted;
4. Enforceable;
5. Precise; and
6. Reasonable in all other respects.

See Compliance below.

Another advantage to conditions (particularly for smaller developments) is their reduced costs compared with that of preparing a s106 obligation.

**Compliance**

In order to be compliant with NPPF, Circular 11/95 and CIL regulations, offsets, when secured on planning permissions by condition and s106 obligations respectively, must be necessary for the development to meet national and local policy, related to the specific development and reasonable to the scale of the scheme.

Biodiversity accounting and associated offset requirements would meet the three tests set out above if:

- The proposed development site has been, or is to be, assessed for its biodiversity value and may contain habitats, species of flora and fauna which would be harmed by the development and which, but for satisfactory compensatory measures, would be a reason to refuse planning permission for the development ie. the development needs to appropriately compensate its impacts;
- The compensatory measures that could be provided by retaining or re-creating the habitat and/or re-locating the species of flora and fauna elsewhere within the site boundary would not be sufficient to guarantee full compensation of the impacts within the scope or the development, resulting in an overall loss of biodiversity.
- The use of the metric to individually calculate specific development impacts to all habitats ensures that any residual loss and resulting compensation is assessed fairly and is directly related to the development. An offset scheme at the appropriate scale of conservation credits is then required to deliver the necessary biodiversity compensation to make the development compliant with planning policy, as set out in the NPPF (see Appendix A) and local planning policy where appropriate. The costs of the offset scheme are directly tied to the management and monitoring required to generate the required conservation credits.
- The loss of biodiversity on this site could be adequately compensated by the enhancement of biodiversity 'receptor' sites elsewhere, selected to meet any potential habitat requirements and assessed as likely to deliver an appropriate biodiversity offset using metrics as per the Government's guidance on metrics and multipliers and as set out in Defra's documentation (see the Government biodiversity metric);
- Enhancement of the identified biodiversity receptor sites could be achieved via the purchase of conservation credits.

Satisfaction of the remaining three tests would depend upon the wording of the planning permission and the delivery mechanism for the off-site compensation scheme. It is suggested that
the wording in Appendix F would meet those tests.

Compensation sites need to be secured in a robust and enforceable way. Environment Bank delivers schemes secured through legal agreements and cover the legal ‘securing of long-term funds’ issue. If needed, the requirement for use of a conservation broker or an Environment Bank Conservation Credit Purchase Agreement (CCPA) and Conservation Bank Agreement (CBA) (see Legal agreements) can be referenced within the condition or otherwise considered as part of the ‘Compensation Scheme’ which is approved by the LPA prior to commencement.

4.7 Example planning responses

Each response will have to be tailored to the development and the issues discussed above, such as whether a development is full or outline and if a recalculation will be needed at reserved matters (see 4.4 Outline and full developments). A template planning response, which addresses biodiversity impact calculations, resultant loss and subsequent offset requirements is provided in Appendix G. Environment Bank also have a range of other planning response templates that can be provided on request.

5 The Government biodiversity metric

The Government metric is a biodiversity accounting tool used to quantify losses and gains. It is recognised as the industry standard and has been developed through full and widespread consultation with stakeholders across all relevant sectors. The metric calculates the scale of a habitat impact or an enhancement by multiplying the area (hectares), distinctiveness (habitat type) and condition (quality) of each habitat parcel.

When losses are assessed – where impacts to habitats will occur - the calculation provides a negative score as habitat is being lost to development. This provides an evidence base for discussions regarding on-site avoidance and mitigation and off-site compensation requirements.

When gains are assessed – where habitats are enhanced or created on-site, or off-site – a similar calculation is made but risk factors that account for difficulty and temporal delays are also applied. The score will be positive where gains are being delivered. Habitats that are more difficult to restore or that will take a long time to reach a set target condition will score lower, these generate fewer credits and therefore a larger area is required area to deliver a sufficient offset.

When on-site gains do not outweigh on-site losses and a net biodiversity loss is calculated, this negative biodiversity loss becomes an offset requirement. When offsets are matched to impacts they are assessed using the same metric to balance predicted gains against the losses to ensure no net loss will be achieved.

The metric has the advantage of enabling an assessment of the biodiversity value and impacts to all habitats, not just priority habitats under NERC 41, enabling robust delivery of the No Net Loss principal. In addition, Defra (and Environment Bank) promote a ‘no down-trading’ policy within the metric, whereby habitat loss must be compensated by habitat of the same value or higher - loss of high distinctiveness habitats such as lowland meadow and broad-leaved woodland must be compensated for like-for-like.
In addition to the difficulty and temporal factors applied to the gain calculations, a spatial factor is also applied to account for the location of the offset receptor site in the local landscape. That is, if a site is not within an area identified as strategic for biodiversity enhancement by the local authority (see 5.1 Strategies for habitat compensation below), the credit value of the site is reduced and, again, a larger area will be required to deliver the appropriate compensation (in conservation credits).

5.1 Strategies for habitat compensation

Habitat restoration and creation strategies, funded through offset schemes, should support national and regional targets for biodiversity enhancement and landscape connectivity, and seek opportunities to support the delivery of local habitat and species priorities. Spatial strategies should locate compensation in areas where biodiversity improvements are likely to have the most beneficial results at a strategic scale. The location of receptor sites can be based on map-based guides prioritising local landscape-scale objectives, such as restoring habitats in areas that will enhance landscape connectivity or expand existing sites of biodiversity importance. Strategies can be based on:

- Biodiversity Opportunity Areas / Conservation Target Areas;
- Nature Improvement Areas;
- Living Landscapes;
- Habitat and connectivity mapping.

As mentioned above, a spatial factor is applied to calculations at offset sites outside strategic areas, resulting in a larger area of compensation to deliver the same biodiversity gains.

If a strategy is not in place, this is not an issue – Environment Bank can work with authorities to generate these strategies or work with the relevant local authority to gauge requirements (e.g. sites must be found within the authority boundary or within a particular radius from the development) prior to searching for sites to ensure offset schemes meet local priorities for conservation.

5.2 Online calculator

Environment Bank has developed an indicative calculator for assessment of biodiversity impacts, this is available and free to access online at the following web address; www.environmentbank.com/impact-calculator

This simple version of the calculator is a useful tool for getting a feel for the metric, however, please be aware that it is not suitable for site specific calculations which may need to take into account on-site mitigation, down-trading, indirect impacts and offset measures.

5.3 Excel-based calculator

Excel-based calculators for applying the government metric - one for assessing development impacts (losses or gains) and one for assessing the gains (compensation) at the offset receptor site - were developed in partnership by Warwickshire County Council and Environment Bank as part of the Defra pilot. These calculators have been further developed by Environment Bank and are now available for use nationally. The calculators provide a standardised method of assessment using the Defra metric, but also incorporate best practice modifications learnt and shared with local
authorities since their original development in 2012. Our impact assessment calculator for development projects can be provided, on request, to accompany this toolkit. It should be noted that the Warwickshire calculator has locally relevant adjustments of the Defra metric and is not appropriate for use out of the county.

Although this calculator is designed to be intuitive with easy habitat input, a review of any calculations and associated survey information is still required to ensure that assessments are correctly implemented and appropriate to the site situation, especially for first time users. As well as on-going support to local authorities, Environment Bank offer training for local authority ecologists and validation of calculations for specific developments (see 8.2 Our services).

6 Compensatory habitat schemes - offsets

6.1 Approving an scheme

A number of elements need to be taken into account by local authorities when selecting and approving schemes that deliver habitat compensation. When brokering offset schemes Environment Bank addresses various issues by using a set of standard procedures and taking additional measures on a case-by-case basis to ensure each scheme is likely to be appropriate and satisfactory prior to presenting it to the local planning authority for final approval. Each authority should ensure the standards they require of compensation are appropriate and applied to all schemes and should keep a registry of all schemes approved in their area.

Site selection

For each offset receptor site required the local authority will need to approve the site selection. Aspects that may need to be considered and weighed-up include:

Required:
- Credit gain is sufficient
- Any like-for-like requirements for high distinctiveness habitat loss have been met
- That additionality can be demonstrated (where biodiversity gain and proposed management at a site is additional to that which is already in place with secure funding under, for example, an agri-environment scheme).

Potential considerations:
- Target habitats are appropriate (if a like-for-like requirement is needed or to meet local targets)
- Site is within a strategic biodiversity area
- Site is within the local authority boundary
- Site is within a set distance of development

Delivery and Standards

In approving the site the local authority will need to be consistent in the standards required and will also need to be satisfied that delivery will be assured, such that the following are appropriate:
- Management period, e.g. 25 years;
• Site location, e.g. to enhance landscape connectivity, within 15km of a development;
• Site survey information, biodiversity gain (credit) calculations and management plan are available. Habitat target and scale are appropriate;
• Sufficient funds have been allocated to deliver management long-term, anticipating costs such as capital works, negative impacts to income, potential need for management cost contingency, legal, administration, monitoring, reporting, foreseeable risks, insurance and inflation;
• A delivery mechanism is available – e.g. enforceable legal agreements to ensure management is undertaken;
• Monitoring and reporting arrangements have been made, to ensure management is being delivered as per the legal agreements.

The activities and documents above, collectively with verified biodiversity impact calculations, provide Local Authorities with ‘Standards’ for this system. Ensuring such Standards are adhered to, be it by a conservation broker or a developer, is important for maintaining the integrity of the system.

**Determination vs commencement**

An important consideration for a local authority is **when** they require final approval of the offset scheme. Most authorities are satisfied that compensation is secured after permission is granted but prior to commencement of development (including all ground clearance works - from an ecological perspective the offset delivery needs to be initiated at the stage of impact, not at occupation of dwellings).

On occasion, potentially for more contentious proposals, a local authority or applicant may request that an offset site is identified prior to determination of the planning application. This is still a viable option and does allow for final accurate costs to be known at this stage. However, in these cases, it will usually be unreasonable to ask that an offset provider commits an area of land as compensation for a specific development, when commencement of works, and therefore funding of the offset management, may not occur for a number of years. Therefore, receptor sites found pre-determination should either receive funding (via a credit sale) at permission, or Environment Bank option agreements are explored so that a scheme can be ‘held’ until commencement.

In areas where there is a high demand, Environment Bank is establishing habitat banks (see 8.7 Habitat banks) where large habitat restoration projects can be costed up-front, with work on some beginning prior to specific demand. Credits are brought forward for sale and sold over time to multiple developments requiring offsets. Habitat banks enable location pre-selection, pre-known costs and a ready land supply where smaller compensation requirements, particularly from small-scale development, can benefit from the economies of scale – all of which may contribute to satisfying the above issue.

### 7 Case Studies

Hundreds of impact calculations have now been done for developments across England using the government metric. Biodiversity offset compensation schemes are now operating on the ground in multiple counties, with more in the pipeline as consented developments move towards
commencement. See Appendix H for case studies demonstrating the full process in practice.

8 Environment Bank

This section details our process in doing biodiversity accounting calculations and securing offset sites as well as the services we are able to offer to local authorities and developers.

8.1 UK & International Standards

Environment Bank has developed standards that adhere to Government guidance for introducing and using this system of biodiversity accounting.

The Business and Biodiversity Offsets Program (BBOP) Standard for Biodiversity Offsets (2012) also steers our activities to achieve international recognition of how good compensation sites should be delivered. Because Defra have designed a system that is already based on BBOP’s Standard, Environment Bank’s standards automatically align with both.

8.2 Our services

Based on our experience of working with local authorities, we are able to provide local authorities with the assurances that impact calculations are done, and any subsequent offsets are arranged, with the highest of standards in place. Evidence from international experience shows that using an intermediary, such as Environment Bank, in compensatory credit markets, is highly advantageous for reducing costs to buyers and sellers and helping to provide guaranteed delivery (Coggan et al. 2012). Although local authorities can certainly introduce an impact accounting system (and model of offsetting using credits) without the support of a broker such as Environment Bank, we think brokers are vital to the long-term integrity of offset delivery standards and we’d like to offer our support services to authorities who want to utilise our expertise.

Environment Bank’s suite of services, from facilitating introduction of biodiversity accounting within the planning system, to providing impact assessment calculations and brokering credit sales to secure offsets, are available to local authorities, developers (and site providers) and are summarised below:

- Review and assess potential offset site demand and supply in your area (see 8.3 Demand/supply analysis below).
- Advice and support during the production of:
  - Local Plan policy wording (see example wording at Appendix C)
  - Supplementary Planning Documents (see example wording at Appendix I)
  - Spatial compensation strategies
- Help with the online indicative biodiversity calculator
- Bespoke calculations for developments (see 8.4 Calculations and reports below)
- Assistance with the Environment Bank excel-based calculator
- Training for planning officers and local government ecologists on the impact assessment/metric and calculator (see 8.5 Support, training and validation)
- Training and support for consultant ecologists if a local authority wishes to pass on the Environment Bank calculator
• Verification of calculations submitted by consultant ecologists (see 8.5 Support, training and validation)
• Source, verify and secure offset schemes (see 8.6 Finding and securing compensation)
  - Advising developers and applicants on the process and their options
  - Providing scheme information for approval by local authorities
  - Advising landowners to ensure offset schemes are appropriate and deliverable
  - Implementation and ongoing monitoring of offsets to ensure long-term success, with reporting to the local authority
• Finding and establishing habitat banks.

We would like to emphasise that we provide free of charge advice and support to local authority ecologists and planning officers both in the inception of a No Net Loss and accounting strategy and in on-going planning decisions.

8.3 Demand/supply analysis

Environment Bank is able to undertake an economic viability analysis to explore offset opportunities at county and regional scales. A demand/supply study examines:

• The potential scale of compensatory requirements through use of a forecasting model based on land uptake through development;

• Habitats most likely to require offsets, to develop guidance for strategies;

• The potential conservation credit payments per habitat type;

• Biodiversity gains that can be delivered through a set of habitat enhancement projects that could sell credits to developers and whether this meets compensation demands.

• Preliminary costings to demonstrate what credits might cost and the potential for project delivery in different local authority areas.

• Running workshops for the relevant planning authorities to communicate results and to encourage development of local strategies for establishing a system of biodiversity accounting and compensation via offsetting.

8.4 Calculations and reports

Environment Bank offers developers a number of different reports, which may be of interest to local authorities, where sufficient information is provided to enable decision making regarding calculations of impact and any associated offsets.

An Environment Bank ‘assessment report’ is an independent assessment of the ecological survey information and development proposals at a potential development site. The Government metrics are applied and both loss from development impacts and gain from on-site mitigation and enhancement are taken into account, to determine if there is a residual biodiversity loss. Any remaining conservation credit requirement needed to deliver appropriate compensation and No Net Loss is also detailed. The assessment methodology is also described, along with the next steps for offset delivery. If required, Environment Bank will work with the LPA on permission wording to secure an offset.
Post permission and prior to commencement of development a search for a suitable biodiversity compensation receptor site (an offset) will be undertaken. This is based on the conservation credit requirement previously assessed and within the local vicinity of the development. Discussions will be had with the local authority to provide guidance on location strategies. The biodiversity offset scheme will be fully prepared and an ‘offset scheme delivery report’ produced, to be submitted to the local planning authority for approval. Once the scheme has been approved, full funding will be secured (though a purchase of conservation credits) and delivery legal agreements signed, before certification will be provided to enable planning discharge and development can comments.

The submission report will contain details of:

- Site location and landscape value
- Ecological baseline
- Target habitat and biodiversity benefits
- Long term, adaptive ecological management plan
- Monitoring details
- Details of delivery mechanisms
- Confirmation of full scheme costs
- Templates for the two key delivery legal documents, the CCPA and CBA.

Legal agreements will have been prepared with the developer and offset landowners by the time of submission.

When required by the developer or planning authority, this search and scheme preparation process can be undertaken in stages pre or post planning determination. The preliminary search can be particularly useful when completed as part of the active planning process to determine the availability of sites.

**Stage 1 - Preliminary sites search and report:** A review of what compensation habitat management is necessary to inform a desk-based search, to investigate the availability and suitability of local biodiversity compensation receptor sites. This process will generate multiple site options and a broad estimate of scheme cost. This gives the developer practical operational information on whether the biodiversity issues are tractable, whether compensation delivery is achievable, and at what cost. A selection of sites allows preferred options, based on biodiversity benefits, location and scheme costs, to be taken forward to stages 2 and 3.

**Stage 2 – Outline offset proposal:** The preferred option(s) from the Stage 1 preliminary search are progressed to make up an outline of the final proposal, with a confirmed ecological baseline and a more detailed plan of the habitat restoration project, including management activities and estimated costs. Site visits will be undertaken to confirm existing site conditions and ensure informed consent and interest from landowners.

**Stage 3 – Final scheme proposal and submission:** The scheme, as reported in the stage 2 outline proposal, will be fully prepared and a report on the scheme produced to be submitted to the local planning authority for approval, as detailed above.

### 8.5 Support, training and validation

Environment Bank routinely undertakes biodiversity impact calculation on behalf of developers and
offers free support to local authorities who wish to apply the metric to developments. If a local authority ecologist has received an EIA or PEA and applied the metric, Environment Bank staff can check the calculations prior to a planning response being provided to the planning officer and applicant. Local authorities should be cautious about the calculations received from consultants as experience has shown large variation in calculations. Expertise is growing, but there is a risk that calculations will not reflect the true impacts of development if they are done incorrectly. Environment Bank can, however, offer training to local consultant ecologists if local authorities wish to implement this model of delivery (as also described in 4.1 Options for delivery – Accuracy and validation). Our training will standardise the results received and as part of the fee paid by the trainees, Environment Bank offer support and validation of calculations for planning applications submitted.

Environment Bank also offer assessment and validation services (commissioned by the developer) to provide the local authorities with the assurances they need to trust calculations that accompany a planning application.

8.6 Finding and securing compensation

If compensation is required by a developer, based on a residual unit loss using the calculator, and the local authority has applied a planning condition, or s106 obligation, the following steps are followed by the Environment Bank to ensure a high quality, acceptable offset receptor site is found and secured in a timely manner.

- The requirements of the offset site are confirmed with the local authority, with regard to:
  - the credit requirement specific to the impact (biodiversity loss);
  - any like-for-like habitat type requirements; and
  - any restrictions on where a site must be located (particularly if a local authority has developed a strategy).

- To find an appropriate site there are a number of options:
  - Search of the existing Environment Bank database, the Registry, for suitable registered local sites that match the compensation requirement. Sites are registered at Bronze, Silver and Gold stages and it is these sites that are first searched when a request is made to Environment Bank. A web interface of the Registry database can be found on the Environment Bank website - http://www.environmentbank.com/the-registry.php
  - Environment Bank work with partner AB Sustain, local land agents, nature conservation organisations and other contacts to generate new potential offset sites. AB Sustain (the environmental division of Associated British Foods) have access to thousands of farmers across the country who may be potential site providers; and
  - Utilise an already available local bank site, if one is available (currently being investigated in a number of authorities across the country), which can sell credits immediately.

- To determine that sites found are suitable options:
  - Ecological surveys are undertaken and long-term, adaptive management plans are produced.
  - Environment Bank explores potential compensation/conservation credit costs to ensure they are reasonable, in terms of the development and long-term offset delivery; and
  - A number of options may be put forward to provide choice for the developer and local
Legal agreements

At the time an offset site is secured, legal contracts are required to ensure a credit purchase is made by the developer and that long-term management of the site is ensured. Environment Bank provide a developer with a Conservation Credit Purchase Agreement (CCPA) and, separately, the receptor site landowner with a Conservation Bank Agreement (CBA) for signature.

Conservation Credit Purchase Agreement

If not done already, prior to a conservation credit purchase to fund the offset scheme, the credit price is confirmed for the developer so that payment can be made soon after signing of the CCPA. The CCPA outlines for the developer the number of credits being purchased, the price to be paid and how the purchase links to the planning permission condition/obligation being discharged. The CCPA is signed by the developer and Environment Bank and payment is made soon after.

Conservation Bank Agreement

The CBA is the contract between Environment Bank and the landowner managing the offset site. It signs up the landowner to the long-term management plan and contains clauses regarding payments, delivery and a restriction that is placed on the title of the land.

Clauses in the CBA cover:
- the way the funds are held in a dedicated client account;
- release of the funds to the landowner based on their management plan and monitoring;
- a title restriction to ensure subsequent landowners take on management of the site and receive the appropriate payments to do so; and
- the process of conflict resolution and enforcement if the contract is breached and management is not taking place.

A local planning authority can also choose to be signatory to the CBA to allow for compliance control over delivery of the offset delivery – however, in many cases (as already indicated to Environment Bank in previous cases) authorities will usually be comfortable that, through Environment Bank, they can have access to the site (via EB) and will receive reports on progress without needing to be a signatory to the agreement.

Compliance

Compliance of delivery at individual sites is ensured via the CBA contractual clauses. Regular monitoring is undertaken (see CBA appendices) and landowners not compliant with the agreement, who have deliberately breached their contract and not delivered their management plan may need to pay the money they have received back to Environment Bank so that another site can be funded to create the compensation required. In addition, if requested, local authorities can request access to the property to monitor progress themselves.

CBA appendices

Although the management plan for an offset site may come in different formats, Environment Bank have developed guidance to ensure that ecologists and landowners collect and prepare sufficient information for accurate calculations and gain to be achieved via appropriate management. To accompany the management plan, the full workings of the credit calculations done by Environment...
Bank are attached to the CBA to demonstrate what gain will be achieved.

A payment plan outlining capital and annual management payments and any contingency funds is also attached to the CBA. Environment Bank work with the landowner to confirm what proposed management and biodiversity uplift is reasonable and achievable; a payment plan is agreed and is dependent on the habitat type and management involved.

A monitoring and reporting plan will also be required. Annually, landowners will be expected to provide a brief annual report of their site’s progress and completed works, accompanied by evidence as appropriate. Environment Bank will also conduct site visits to ensure work is being undertaken and that target habitat outcomes are being achieved. Planning authorities and government agencies will also want reporting and monitoring of offset sites, which can be provided by Environment Bank, as required.

**Management period**

Although the Defra pilot guidance states that in-perpetuity management at offset sites is “preferable”, from Environment Bank’s involvement in the Government pilots and since, in practice, Natural England and the local authorities we have worked with have been flexible on the length of management plans.

Experience has shown that supportable scheme length is determined by development viability and supply. A costed management period, to be funded by the developer, must be agreed with the LPA. However, due to inflation, very long-term schemes run the risk of becoming exorbitant in terms of development viability and planning tests. This funded management period closely links to available supply as it is evident that landowners are unwilling to engage in the processes when post-scheme management is required without further funding. There is also reluctance, due to land management restrictions and uncertain futures, to engage with very long-term schemes likely to impact upon future landowner(s).

Therefore to ensure a viable and deliverable system, to avoid deterring the large proportion of landowners and to ensure that a greater coverage of land is captured in the system, with better potential for biodiversity gains, Environment Bank expect a minimum of 25 years management, but not necessarily in-perpetuity. If a local authority requires a particular length of management at a compensation site (for instance, 50 years) Environment Bank will work to secure a landowner that can deliver management for that period although the costs may be significantly greater.

**Discharging a condition or obligation**

A letter of sale is provided to the developer after receipt of payment to Environment Bank of the full conservation credit price. This letter confirms that payment has been received and outlines how the credits purchased are sufficient to meet the compensation requirement. Attached to this letter a developer will also receive a Conservation Credit Certificate for the credits purchased, which can be forwarded to the planning authority to demonstrate that the approved offset scheme has been funded and the relevant planning conditions or s106 obligations have been discharged, allowing development to commence.

8.7 Habitat banks
Developers seek information on compensation costs in advance, competitive prices and a quick turnaround. Smaller requirements can sometimes be expensive to deliver and arranging a site can take time if one has not been identified beforehand. Setting up a local habitat bank enables large sites (20-100+ha) to be used as a receptor for multiple small impact developments. Large habitat bank sites can be surveyed and the proposed management costed and confirmed up-front, enabling cost savings through economies of scale. Then, management can either commence per parcel as per credit demand, or on the whole site, prior to demand and with appropriate investment.

Large habitat restoration projects are also usually better for wildlife as they may be less isolated, more robust in dealing with change and can be selected to ensure strategic biodiversity placement (nearly all will be considered strategic due to their size). Larger or specialised requirements will still usually need a bespoke scheme rather than a bank, although the local authority will have final approval of any site or bank.

### 8.8 Recording and tracking credits

When a CBA has been signed, the conservation credits of a proposed biodiversity receptor site become active. Usually an associated CCPA will be signed at the same time and these credits become immediately ‘spent’, with appropriate Conservation Credit Certificates being provided to the landowner and developer. Sometimes the CBA may cover land for which the conservation credits are not sold. In this instance, the landowner will be provided with certification confirming the remaining credits available as future compensation schemes. Typically, a landowner will have other land not yet managed as a receptor site, but that has the potential for biodiversity gain - these potential conservation credits can also be discussed and tracked, but management is not yet obligated.

A key role for Environment Bank, as broker, is to accurately track different credit types available at different sites in one central national registry (the Registry), to ensure no double accounting takes place; recording both spent sites (commenced schemes) and, available and potential conservation credits. This allows an efficient, streamlined framework for Environment Bank to provide reports to local authority and government as to the number and location of commenced schemes and credits available. Environment Bank will annual send a Local Authority data of EB offsets schemes within the area and it is recommended that each Local Authority keep record of all schemes approved within their authority; to facilitate monitoring and reporting, prevent double offsetting and prevent development of offset sites.

### 9 References

http://shop.bsigroup.com/ProductDetail/?pid=000000000030258704

The Business and Biodiversity Offsets Program (2012) Standard for Biodiversity Offsets
http://bbop.forest-trends.org/pages/guidelines

CIRIA, CIEEM, IEMA (2016) Biodiversity Net Gain – Principles and Guidance for UK construction and developments


Department for Communities and Local Government (2016) Planning Practice Guidance for the Natural Environment: Biodiversity, ecosystems and green infrastructure
http://www.gov.uk/guidance/natural-environment

Department for Communities and Local Government (2016) Planning Practice Guidance for Planning Obligations
https://www.gov.uk/guidance/planning-obligations


Department for Environment, Food and Rural Affairs (2012) Biodiversity Offsetting Pilots: Information note for Local Authorities

Department Communities and Local Government (2012) National Planning Policy Framework


HM Government (2006) Natural Environment and Rural Communities Act
http://www.legislation.gov.uk/ukpga/2006/16/section/40


HM Government (1990) Town and Country Planning Act
IUCN (2016) Policy on Biodiversity Offsets


Appendix A - Supporting policy

Policies and frameworks that support the introduction of a No Net Loss or Net Gain strategy for biodiversity using the government metric are provided below.

**Natural Environment White Paper**

The UK Government’s Natural Environment White Paper: The Natural Choice: securing the value of nature (HM Govt. 2011) introduces a number of policies to conserve the environment, one of which is the system of accounting, termed biodiversity offsetting. The White Paper states that the Government:

- “will establish a new voluntary approach to offsetting” (which they have done with a framework of guidance and a national metric system designed by Natural England and launched by Defra);
- “test this in a number of pilot areas” (which they did during 2012-2014);
- expects any system “to be managed locally”;
- gives a broad definition of biodiversity.

Use of the metric may still be considered voluntary (although at a local level it may be mandatory in some areas), but the assessment of impacts and compensation for biodiversity losses is not. This is a robust and accountable system where on-site, and off-site losses and gains are held to the same standard with long term delivery ensured.

**NERC Act**

Under S.40 of the Natural Environment and Rural Communities (NERC) Act (2006) local planning authorities must “have regard to the purpose of conserving biodiversity”. Government guidance for LPAs in doing this is summarised in the Planning Practice Guidance (2016). This poses the question: Is there a statutory basis for planning to seek to minimise impacts on biodiversity and provide net gains in biodiversity where possible? To which the answer given is:

“Yes. Section 40 of the Natural Environment and Rural Communities Act 2006 places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity. A key purpose of this duty is to embed consideration of biodiversity as an integral part of policy and decision making throughout the public sector, which should be seeking to make a significant contribution to the achievement of the commitments made by Government in its Biodiversity 2020 strategy”.

**National Planning Policy Framework**

The NPPF (DCLG 2018) has a golden thread of sustainability running through it and a recurring theme of biodiversity compensation, “minimising impacts on and providing net gains for biodiversity” such that biodiversity assessment and compensation should be taken into account when determining planning applications. The metric offers the appropriate tool for this as well as a
mechanism to deliver biodiversity gain both within individual developments and across a region:

Core land-use planning principles underpin both plan-making and decision-taking. Planning should “contribute to and enhance the natural and local environment” and “encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains – such as developments that would enable new habitat creation” (para. 118, NPPF, 2018).

The planning system should contribute to and enhance the natural environment by “minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures” (para. 170, NPPF, 2018).

When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by ensuring that “if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused” (para. 175, NPPF, 2018). The guidance goes on to state “opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity”.

It is incumbent on local planning authorities to move away from biodiversity losses and towards gains for the environment and to secure as such within their local plans. “Local plans and spatial development strategies should be informed throughout their preparation by a sustainability appraisal that meets the relevant legal requirements. This should demonstrate how the plan has addressed relevant economic, social and environmental objectives (including opportunities for net gains). Significant adverse impacts on these objectives should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where significant adverse impacts are unavoidable, suitable mitigation measures should be proposed (or, where this is not possible, compensatory measures should be considered)” (para. 32, NPPF, 2018)

Land use should be optimised where possible “plans should contain policies to optimise the use of land in their area and meet as much of the identified need for housing as possible” (para. 123 NPPF 2018). Where there is little benefit to retaining on site habitats (i.e due to fragmentation, degradation) developers can maximise their densities, and local authorities can permit development, without any loss of biodiversity if they enter into an offset agreement.

Other guidance and standards

‘Planning Practice Guidance for the Natural Environment’ (DCLG 2016) and the British Standard for biodiversity in planning (BS 42020:2013) both recommend the system of biodiversity offsetting as an appropriate mechanism of delivering biodiversity compensation. BS42020 states:

“One means of delivering compensation is through biodiversity offsetting. Where it is not possible to offset any residual harm at the location where the impact occurs, biodiversity offsets may be undertaken at an alternative location agreed with the decision-maker. Such measures ought to be secured through a planning obligation and ought not to be used in place of any applicable statutory requirement.”
Appendix B – Local Policy wording - Examples

Below are examples of Local Plan wording which have been adopted by Local Authorities in England. Environment Bank is able to provide other examples (adopted and drafts) referencing the metric, compensation delivery models, offsetting and no net loss of biodiversity.

**Lichfield District Council; Staffordshire**

Local Plan adopted February 2015:

The following is extracted from “Lichfield District Local Plan Strategy 2008 – 2029” adopted February 2015:

“Policy NR3: Biodiversity, Protected Species & their Habitats

Development will only be permitted where it:

- Protects, enhances, restores and implements appropriate conservation management of the biodiversity and/or geodiversity value of the land and buildings;
- Minimises fragmentation and maximise opportunities for restoration, enhancements and connection of natural habitats (including links to habitats outside Lichfield District); and
- Incorporates beneficial biodiversity and/or geodiversity conservation features, including features that will help wildlife to adapt to climate change where appropriate

- **Delivers a net gain for biodiversity and/or geodiversity in the district.**

Proposals should particularly seek to contribute towards the United Kingdom Biodiversity Action Plan (UK BAP) priority habitats and species in Lichfield District, and any additional Staffordshire or National Forest Biodiversity Action Plan species...”

A Biodiversity and Development Supplementary Planning Document supports this policy, April 2014.

The following is extracted from the “Biodiversity and Planning SPD; Stage A4 Compensation and Biodiversity Offsetting”:

“6.28. Compensation shall be considered as the last resort, with preference always given to protection in entirety followed by appropriate mitigation...

6.32. Before compensation or biodiversity offsetting can occur the value of the habitat to be lost must be calculated...

6.34. Compensation and biodiversity offsetting schemes must produce habitats of greater biodiversity value than of what is being lost through the development. LDC considers the minimum increased amount or ‘replacement percentage’ to be set at 25% above the biodiversity unit value of the habitats lost.”
Vale of White Horse District Council; Oxfordshire

Local Plan adopted December 2016:

The following draft policies have been extracted from "Local Plan 2031 Part 1: Strategic Sites and Policies, adopted 14th of December 2016";

"Core Policy 46: Conservation and Improvement of Biodiversity

*Development that will conserve, restore and enhance biodiversity in the district will be permitted.* Opportunities for biodiversity gain, including the connection of sites, large-scale habitat restoration, enhancement and habitat re-creation will be actively sought, with a primary focus on delivery in the Conservation Target Areas. **A net loss of biodiversity will be avoided.**

...Development likely to result in the loss, deterioration or harm to habitats or species of importance to biodiversity or of importance for geological conservation interests, either directly or indirectly, will not be permitted unless: ...

iii. measures can be provided (and secured through planning conditions or legal agreements), that would avoid, mitigate against or, as a last resort, compensate for the adverse effects likely to result from development.

...It is recognised that habitats/areas not considered above (i.e. Nationally or Locally designated and not priority habitats) can still have a significant biodiversity value within their local context, particularly where they are situated within a Conservation Target Area and/or they have good potential to be restored to priority habitat status or form/have good potential to form links between priority habitats or act as corridors for priority species. These habitats will be given due weight in the consideration of planning applications. **If significant harm to these sites cannot be avoided (through locating on an alternative site with less harmful impacts) it will be expected that mitigation will be provided to avoid a net loss in biodiversity or, as a last resort, compensation will be required to offset the impacts and achieve a net gain in biodiversity.**

The Local Plan includes this supporting information on biodiversity:

“6.122. Opportunities to incorporate biodiversity in and around developments will be encouraged. The Vale was the first Council in the UK to use biodiversity offsetting to provide compensation for the impacts of development. Biodiversity offsetting is a mechanism used to secure compensation for the impacts of development for the creation or restoration of important habitats elsewhere. Offsetting is used to ensure that development schemes do not result in a net loss in biodiversity particularly where it is not possible to avoid or mitigate the impacts of a development proposal on-site. Biodiversity offsetting will be considered as a means of compensating for loss of biodiversity through Core Policy 46, but only where avoidance and on-site mitigation have been discounted as options.”
Ribble Valley Borough Council; Lancashire

Local Development Plan adopted December 2014:

Local Plan for Ribble Valley, ”Core Strategy 2008-2028”; formally adopted on 16 December 2014;

"Key Statement EN4: Biodiversity and Geodiversity

The Council will seek wherever possible to conserve and enhance the area’s biodiversity and geodiversity and to avoid the fragmentation and isolation of natural habitats and help develop green corridors. Where appropriate, cross-Local Authority boundary working will continue to take place to achieve this.

Negative impacts on biodiversity through development proposals should be avoided. Development proposals that adversely affect a site of recognised environmental or ecological importance will only be permitted where a developer can demonstrate that the negative effects of a proposed development can be mitigated, or as a last resort, compensated for. It will be the developer’s responsibility to identify and agree an acceptable scheme, accompanied by appropriate survey information, before an application is determined. There should, as a principle be a net enhancement of biodiversity.

... For those sites that are not statutorily designated and compensation could be managed through a mechanism such as biodiversity offsetting via conservation credits.”

North Warwickshire Borough Council; Warwickshire

Local Plan adopted October 2014:

The following is extracted from ”Core Strategy Forming part of the Local Plan for North Warwickshire Adopted October 2014”

"NW15 Nature Conservation

... Development that damages habitats and features of importance for nature conservation will only be permitted where there are no reasonable alternatives to the development taking place in that location. Where appropriate, developments will be required to help enhance these features and/or secure their beneficial management. Development will be resisted where it leads to the loss of irreplaceable habitats and features, such as ancient woodland or veteran trees unless it can be demonstrated there are overriding reasons and benefits that outweigh the loss.

Development should help ensure that there is a net gain of biodiversity and geological interest by avoiding adverse impacts first then providing appropriate mitigation measures and finally seeking positive enhancements wherever possible. Where this cannot be achieved, and where the development is justified in terms of the above criteria, the Local authority will seek compensation and will consider the use of biodiversity offsetting as a means to prevent biodiversity loss. In doing so, offsets will be sought towards enhancements of the wider ecological network in the Borough or sub-region in line with local, regional and national priorities for nature conservation."
Stratford-on-Avon District Council; Warwickshire

Adopted Core Strategy 2011 to 2031

The following policies have been extracted from the adopted Core Strategy which was adopted on 11 July 2016:

“Policy CS.6 Natural Environment

... Proposals will be expected to secure a net gain in biodiversity by:

... Where a development will have a negative impact on a biodiversity asset, mitigation will be sought in line with the mitigation hierarchy. Impacts should be avoided and, if this is not possible, mitigated. Where there would be a residual impact on a habitat or species and mitigation cannot be provided on site in an effective manner, developers will be required to offset the loss by contributing to appropriate biodiversity projects elsewhere in the area. Where an impact cannot be fully mitigated or, as a last resort, compensated for, then planning permission will be refused.”

Cheddington Neighbourhood Area; Aylesbury Vale; Buckinghamshire

Neighbourhood Development Plan adopted September 2015

Policy 6: Green Infrastructure & Biodiversity

Development proposals must contribute to and enhance the natural environment by ensuring the protection of local assets and the provision of additional habitat resources for wildlife and green spaces for the community, especially protected and endangered species such as badgers, Pipistrelle bats, Brown Long-eared bats and Nobel Chafer beetles. ... The Neighbourhood Plan includes the following supporting information on biodiversity accounting and compensation:

"4.33 ... Developments must deliver no net loss to biodiversity and where possible a net gain by applying the Biodiversity Impact Assessment Calculator. If significant impacts are identified appropriate mitigation or compensation measures will be required in accordance with the calculator. These measures should be targeted to benefit local conservation priorities e.g. traditional orchard and Noble Chafer Beetles.”

Appendix C – Suggested Local Plan wording

The text below is an example template for inclusion of a biodiversity accounting/compensation system in a Local Plan.

Conserving and enhancing the natural environment

1. The District/Authority supports a rich variety of natural habitats and species. Many of these are of regional, national and international significance. The council expects that the planning system should contribute to the conservation and enhancement of these and to the ecological systems that support them. In accordance with the NPPF, development
control policies will seek to maximise the benefits of planning decisions to biodiversity, within the context of sustainable development.

2. New developments will only be permitted if proper consideration is given to the nature conservation value of the development site. Development proposals which would result in significant harm to a biodiversity or geodiversity interest will only be considered after alternative sites that would result in less or no harm have been assessed and discounted. In the absence of alternative sites development proposals must include adequate avoidance and mitigation measures. Where harm cannot be prevented or adequately mitigated against, appropriate compensation measures will be sought.

3. In order to accurately determine whether no net loss and enhancement or net gain to biodiversity can be delivered by development, the Council/Authority expects that, when requested, precise ecological assessment by suitably qualified people to accepted national standards be undertaken, sufficient to determine net impacts/change.

4. The government matrix for determining and quantifying existing biodiversity value and the consequent measures required to ensure net gain provided by ‘Biodiversity Offsetting’, is considered an appropriate mechanism for determining current ecological value, what compensation measures are required, if any, and for delivering net gain.

When determining development proposals the Council will ensure that, where possible, decisions will minimise impacts and result in net gains to biodiversity.

Appendix D – Planning Inspectorate case law – Examples

Stretton Croft, Rugby Borough Council

“...Although there would remain some biodiversity loss, this could be compensated for through a biodiversity offsetting scheme in accordance with the principles set out in the NPPF....... Overall, I conclude that the proposal, together with the proposed ecological mitigation, would comply with Government policies in the NPPF particularly in relation to protected species and to biodiversity interests within the wider environment. Indeed the proposals go beyond the requirements of national and local planning policies in relation to biodiversity and would provide a net enhancement, qualitatively and quantitatively, of biodiversity and habitat interest. There would be a significant benefit in nature conservation terms which would be brought about by the grant of consent in this case.”

Land North of Harbury Lane, Warwick District Council

“WCC Ecology require biodiversity offsetting for the loss of existing habitats and biodiversity as part of a S106. This requires compensatory works to achieve a net increase in biodiversity through the provision of suitable habitats to the south adjacent to the Tach Brook, or if this site is not granted permission, then provision elsewhere offsite that the developer would be required to fund....... Since the impact on ecological matters can be addressed this would not represent a negative impact of the scheme, whilst the improvements that would be required to biodiversity and the provision of enhanced habitats would represent a benefit.”

Accounting for biodiversity in planning | October 2018
Killingworth, North Tyneside Council

“Having had regard to the issues and views reported by the Inspector..., the Secretary of State agrees with his conclusion that there is a realistic probability of securing compensatory offsets to overcome the residual adverse impact on biodiversity that would arise from the appeal development. The Secretary of State further agrees that this would need to be achieved through the imposition of a condition that is capable of realising the conservation compensation necessary to ensure compliance with UDP policy E12/6, the thrust of the Framework advice on biodiversity and the underpinning legislative background in the NERC Act and the 2012 Regulations...... [However] The Secretary of State considers that, before granting consent for the appeal proposals, he wishes to be satisfied that a scheme is in place that will overcome the residual adverse impact on biodiversity that would arise from the appeal development by securing compensatory offsets.”

Appendix E – Options for delivery

Consistent universal application

Example: Warwickshire, Coventry & Solihull (WCS)

Local authorities, after an introductory period, are encouraged to follow the Warwickshire model of introducing the system in a partially mandatory way – but requesting that all minor and major planning applications submitted to Authorities within the sub-region are already accompanied by ecological survey and impact calculations using the metric. However, individual habitat surveys and impact assessments of householder applications are not requested within Warwickshire, and case-by-case exemptions are made for minor developments with small area impacts to low value habitats.

The WCS project began when the Coventry, Solihull and Warwickshire Association of Planning Officers, led by Warwickshire County Council Ecological Services, formed one of the 6 Defra pilots. During the pilot (Apr 2012 - 2014), a partnership was formed with Environment Bank where training and support to planning officers and ecologists was provided, with the subsequent improved delivery of any required offsets across the sub-region. WCC ecologists provide high-level support and ecological advice on nearly all applications, through Service Level Agreements to most of the local planning authorities within the sub-region, and assess impacts of all applications using the government metric. For a few authorities with more restricted resources the system is applied on a more case-by-case basis primarily to major developments.

When first implementing the system the local government ecologists undertook the accounting assessments internally using information provided within ecological surveys, with training and support provided to the ecologists by Environment Bank. Due to the positive feedback from this approach and the will to progress by the authorities (and to enable more widespread application such that all developments are treated fairly), with training and support provided by Environment Bank, metric calculations are now completed by consultant ecologists when undertaking the original site survey work and ecological reports. This encourages any residual impacts to be taken into account early within the planning process. Final calculations and resultant biodiversity impact score to be approved by the local authority.
If a residual biodiversity impact is determined and the on-site mitigation package cannot be reasonably revised to reduce the calculated compensation requirement, a s106 planning obligation accompanies any resultant planning permission. The use of planning conditions is also now being considered.

In addition to the training and support to ensure consistent application of the metric, as a dedicated broker, Environment Bank work with developers and the local planning authorities to bring forward appropriate compensation options that match specific development requirements and adhere to the local strategy. Any compensation sites are approved by the local authority and delivered prior to commencement of development, but can also be identified prior to determination of the planning application at the request of the local authority or applicant.

Feedback from Warwickshire indicates that this consistent approach of assessing applications is particularly welcomed by developers. Environment Bank are working with a number of authorities who are in the early stages of implementing this ‘mandatory policy’ approach to biodiversity impact assessment and compensation requirements.

Case-by-case basis

Example: Essex

Within Essex the County Council ecologists entered into partnership with Environment Bank, forming another of the government pilots, to enable independent calculations where requested by local authorities or developers. Local authorities within Essex assessed which developments were likely to require compensation on a case-by-case basis and then would request that Environment Bank provided the impact calculations to inform decision-making regarding the application and the level of compensation required.

Although in this model the metric is only applied when a local authority feels that the impacts would normally (i.e. historically) warrant off-site compensation (thereby not accounting for less important habitats – such as farmland – to which the metric would also attribute a biodiversity value), it was still important to a number of Essex authorities that transparent calculations using the government metric were provided to aid their decision making regarding particular applications.

Environment Bank is working with other authorities in a similar manner, such as in Buckinghamshire, Lancashire and Oxfordshire, where local authorities request that the metric is applied for particular developments where residual impacts are expected and which are not considered acceptable. We provide bespoke advice and support on all development applications for these authorities.

Appendix F – Suggested obligation/condition wording

An off-site biodiversity compensation scheme, or offset, can be secured within the planning permission via s106 or planning condition. Environment Bank has a database of approved wordings of each for a number of different scenarios - including definitions to be included within the s106 - and can work with a local authority to develop the appropriate wording for condition or s106 to suit
their requirements.

A form of the wording below has been used successfully in a number of cases as S106 and condition, including in across Warwickshire, Coventry and Solihull, Ribble Valley in Lancashire, Rochford in Essex and in North Tyneside where permission, with a compensation requirement, have been granted by officer, committee and by the SoS.

Here follows example wording, based on approved planning permissions, which can be adapted for use as either a condition or a s106:

Prior to the commencement of development a scheme for offsetting biodiversity impacts on the site shall be submitted to the local planning authority. Any proposed offsetting scheme shall include:

- Details of the offset requirements of the development in accordance with the current Defra biodiversity metric, which has been calculated to comprise xxx conservation credits of [habitat type];
- The identification of a receptor site or sites which generate a minimum xxx available conservation credits;
- The provision of evidence of arrangements that secures the delivery of the offsetting scheme;
- A management and monitoring plan (which shall include for the provision and maintenance of such offsetting measures for a period of not less than 25 years from commencement of development).

Any site clearance cannot be undertaken prior to the condition being discharged and the development shall not be commenced prior to the written approval of the scheme by the local planning authority. The developer shall thereafter secure and implement such measures in accordance with the requirements of the approved scheme.

Appendix G – Planning responses

Here follows example planning response wording, to inform determination of an outline planning application; other ecological issues such as protected sites, species and lighting will also need to be included. The below wording can be revised to take into account site specifics and to inform a full development proposal, alternatively Environment Bank have other response templates available upon request.

Example: Ecological response to an outline application

Using the information available within the Preliminary Ecological Appraisal report prepared by xxx on xxx, which recorded the presence of xxx habitats, a Biodiversity Impact Assessment has been completed for the proposed development. Please see the assessment attached. It calculates that there will be an indicative xxx unit residual loss to biodiversity through the proposal, primarily due to the loss of xx ha of xxx habitat. This results in an xx% loss of impacted habitats across the site, which we would consider to be a significant impact and contrary to the policies within the NPPF and Local Plan. It is therefore recommended that a scheme for compensation/biodiversity offsetting is implemented as part of the application, should it be proposed for approval, to be secured within the
However we acknowledge that this scheme is only at outline stage and that the final development layout is likely to be revised, and we therefore recommend that consideration be given to amendments to the scheme to include avoidance measures and a higher level of ecological mitigation on-site. When consulted at the Reserved Matters stage, if the finalised layout and landscaping includes such revisions and amendments that the Biodiversity Impact Assessment will need to be recalculated, this may reduce or remove the requirement for off-site compensation. Conversely, if the scheme has been amended to result in a larger land take or other additional impacts then this may cause a larger compensation/offset requirement.

An ecological landscape management plan will also be required to secure management of the on-site ecological features at the standard detailed within the Preliminary Ecological Appraisal and impact calculation, for a minimum of 25 years. We recommend that this be submitted with the reserved matters application to fully inform the revised calculation.

Prior to commencement of development a scheme appropriate to compensate for the residual impacts will need to be proposed and approved by the LPA and thereafter implemented prior to commencement of works.

Please see www.environmentbank.com for more information and contact Louise Martland
lmartland@environmentbank.com – 07710192295 - to discuss possible offset receptor sites in the area.

The National Planning Policy Framework states:

“The planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principal.

- If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.”

Local Policy states:

When determining development proposals the Council will ensure that, where possible, decisions will minimise impacts and result in net gains to biodiversity.

The following s106 provision/planning condition is proposed to secure the compensation scheme.

Insert s106 or planning condition wording, as above in Appendix E.
Appendix H – Case studies

Case study 1: Vale of White Horse, Oxfordshire

A local authority in Oxfordshire (South and Vale) contacted Environment Bank in February 2013 interested in applying the metric to assess the impacts and calculate an offset scheme for a housing development in the Vale of White Horse. The developer had agreed to explore use of the mechanism as a way to deliver any residual off-site compensation.

Environment Bank applied the government metric to the information available in the developer’s Environmental Impact Assessment. The impact calculations, reasoning and final number of conservation credits needed to compensate for the residual impact were provided to the developer and local authority.

The development is on a relatively small site (<4ha, 98 homes), and, based on a reassessment conducted in June of 2013, is host to species-poor semi-improved habitat. Therefore, the habitat being removed is of medium distinctiveness and in poor condition and the total biodiversity impact and conservation credit requirement was 14.6. Although impact calculations, with a resulting compensation requirement, were applied to an earlier survey of the site, the local authority accepted Environment Bank’s revised calculations based on the reassessment report prepared by the ecological consultants.

The local authority requested that Environment Bank secure a suitable compensation site prior to the planning application being granted permission. The developer agreed but queried whether they could make a minimum viable purchase of the credits at permission, with the remaining credits to be purchased prior to commencement of the development.

A nearby site, owned by a non-governmental conservation organisation, over 2 ha in size, where poor condition calcareous grassland can be brought up to good condition over 15 years was put forward. Costings were prepared by the landowner, verified by Environment Bank, and accepted by the LPA and developer. From an Environment Bank assessment of the site and of the management plan proposed, it was determined that the management would generate sufficient credits over a 15 year period.

Using s106 obligations, the LPA secured the developer’s commitment to fulfil the compensation requirement prior to commencement of development. Shortly after permission was granted, a payment was made by the developer for the purchase of the credits, which was inclusive of all capital, management, administration, legal and broker costs. The purchase was made using Environment Bank’s legal agreement, the Conservation Offset Purchase Agreement (COPA) – now the ‘Conservation Credit Purchase Agreement’, which was signed by the developer and Environment Bank.

The offset site was secured and the credits created via the signing of Environment Bank’s Conservation Bank Agreement (CBA) by Environment Bank and the landowner. Although the local authority (South and Vale) had the opportunity to also be signatory to the CBA, they trusted Environment Bank’s model of delivery and decided this was not required. The appendices to this CBA include the title plan and register to the site, management plan with monitoring/reporting,
payment plan, and condition report with credit calculations. Based on the payment plan, Environment Bank will pay the landowner annually, on receipt of satisfactory monitoring, from a dedicated client account where the total funds will be held over the 15 year period.

We would note that this was an early example of biodiversity offsetting and the local authority now require longer term schemes.

**Case study 2: Stratford-on-Avon, Warwickshire**

A residential and sports facility development upon predominantly agricultural land had very limited space within the development to achieve any on-site compensation measures. Although the biodiversity value of the site was low, the planning authority requested an impact assessment and agreed a net biodiversity loss of 10.61 with the developer and their consultant ecologists. The requirement for compensation to be secured prior to commencement of development was included as an obligation within the s106 agreement. Environment Bank were contacted to undertake a search for an appropriate site. Although options were brought forward, the final compensation site was provided by the original landowner of the development site. Environment Bank worked with the landowner to identify an area of land at the right scale to meet the requirement, which would deliver the best biodiversity opportunities whilst having a minimal impact to the farm business. A parcel of organic land used for silage production was selected within an area identified as strategic for grassland connectivity by Warwickshire County Council. The site was within 6km of the development and within the same Local Authority. A 30-year management plan was developed with the landowner, whereby the flora of the grassland would be enhanced and managed as a traditional, species-rich hay meadow. The developer discharged any ongoing obligations via one payment, to cover management, monitoring and brokerage for 30 years – the first instalment has already been paid by Environment Bank to the landowner, who has begun site management with sward enhancement works.

**Appendix I – Example Supplementary Planning Document Content**

The following is intended to act as example content for Supplementary Planning Documents (SPD). The guidance within this document is written from the planning authority’s perspective and is a generic template into which locally specific detail and amendments would be included by an individual authority. The SPD would sit alongside any other SPD relating to biodiversity – this document describes only the biodiversity accounting and offset system that is applied (using a metric) as a way of clearly quantifying and assessing impacts to biodiversity and set standards for use in a particular authority – other areas relating to biodiversity (for example, protected species) are not covered in this document.

**How to use this document**

We have provided a standard expectation for how the system can working at optimum efficiencies for planning authorities, developers and the environment, based on our experience and legal advice. However, we are happy to provide tailored advice to Authorities who may wish to explore other
options for implementation.

**Introduction**

This Supplementary Planning Document (SPD) relates to policies concerning biodiversity in existing development plans for [Local Planning Authority]. It applies to all categories of development for which planning permission is required and includes a framework for assessing impacts to biodiversity using a biodiversity accounting system (a metric). This guidance is intended to accompany [Local Planning Authority]’s Supplementary Planning Document for Biodiversity as an additional transparent and auditable mechanism for assessing applications.

This SPD outlines:

- How the Council will assess planning applications, which will have an impact on biodiversity.
- The information applicants will need to provide to enable the Council to apply the government metric to quantify and assess impacts.
- The standards expected for impact calculations and any offset delivery.

The UK government supports the use of SPD to set out detailed guidance on the way in which development plan policies will be applied in particular circumstances. The Government is also supportive (since testing 2012-2014) of Local Planning Authorities introducing a biodiversity accounting system (using the government metric) as a way of measuring impacts to biodiversity. SPD must be consistent with development plan policies and national planning policy guidance and may be taken into account as a material planning consideration in planning decisions. The policy context is given below.

**Policy context**

The policies and frameworks that support the introduction and application of a No Net Loss compensation strategy using a biodiversity accounting system, or ‘biodiversity offsetting’ (the government metric) are:

- EU Biodiversity Strategy 2020;
- Natural Environment White Paper 2011;
- NERC Act 2006;
- National Planning Policy Framework 2012

For further details and context of these policies, as well as case law examples, please see Appendix x.

**Other relevant guidance and standards**

‘Planning Practice Guidance for the Natural Environment’ (DCLG 2016) and the British Standard for biodiversity in planning (BS 42020:2013) both recommend this system of biodiversity accounting (‘offsetting’) as an appropriate mechanism of delivering biodiversity compensation.

This approach is supporting within [county] by [Natural England, local Wildlife Trust, Environment Agency and RSPB.]
Development Plan Policies

Policies in existing adopted development plans for [Local Planning Authority] relating to nature conservation and biodiversity are set out in Appendix x of this document. The following development plan policies are relevant:

- Policy X: xx xx Plan (year-year) (adopted year).
- Policy X: xx xx Plan (year-year) (adopted year).
- Policy X: xx xx Plan (year-year) (adopted year).

Relevant policies in associated Neighbourhood Area plans are as follows:

- Policy X: xx xx Plan (year-year) (adopted year).
- Policy X: xx xx Plan (year-year) (adopted year).
- Policy X: xx xx Plan (year-year) (adopted year).

Assessing impacts - biodiversity accounting

As per the National Planning Policy Framework and described in the [Supplementary Planning Document – Biodiversity], the Council must achieve No Net Loss of biodiversity at development sites and across their Authority. The relative weight given to biodiversity factors will depend on the particular circumstances of the site and proposal, but can be more easily assessed if impacts (losses) to biodiversity, along with any gains (via mitigation and enhancement) are quantified. To do this, a government metric (tested in five county-sized pilots in 2013/2014) must be applied by to all minor and major planning applications (described further below).

The preferred assessment tool of the [Local Planning Authority] is the Environment Bank National Biodiversity Impact Calculator. This tool allows efficient and standardised calculation of impacts utilising the Defra metric. Please check with Environment Bank to ensure use of the most up-to-date calculator. To enable a standardised approach in assessment other calculators or tools will not be accepted.

[Environment Bank note that we are happy to work with Local Authorities to tailor the calculator to their authority or region; as in Warwickshire, Coventry Solihull, where habitat distinctness categories within the calculator reflect local, rather than national, distribution.]

The mitigation hierarchy

Planning applicants must demonstrate the following mitigation hierarchy has been followed;

- impacts to biodiversity have been avoided, then,
- minimised, before,
- any compensation is considered; first onsite and then offsite.

The metric described below will be used by the Council in consideration of adherence to the mitigation hierarchy.

The biodiversity metric

The biodiversity metric was designed by Natural England and introduced by Defra in 2012 as the main component in Government pilot schemes set up to test ‘biodiversity offsetting’ delivery systems. Compensation (offsets) is the last step of the mitigation hierarchy (first avoid, then reduce,
and finally, compensate), so the pilots were largely examining whether the biodiversity accounting system itself was a useful tool for assessing losses and gains at development projects – an evaluation of the pilots (along with feedback from pilot hosts) and testing in [county or local authority] concluded it was.

The metric does not assume compensatory sites will be required and can, in fact, demonstrate on-site biodiversity gain has been achieved. If an offset is required, the same metric is used to evaluate the predicted gains at compensation sites so that no net loss, and preferably net gain, of biodiversity is achieved.

All habitats are important, but some e.g. ancient woodland, limestone pavement, are irreplaceable and their loss cannot ever be fully compensated for. The metric evaluates impacts for a wide range of habitats, but it does not override existing law or policy that protects nationally important sites and species (see [Supplementary Planning Document – Biodiversity]). In essence, the higher the biodiversity value of a habitat the higher the metric score. Therefore, compensation for impacts to unprotected, but ecologically high value habitats, will be greater compared to farmland, for example.

The metric calculates the scale of a habitat impact or enhancement by multiplying the area (hectares), distinctiveness (habitat type) and condition (quality) of each habitat parcel.

When losses are assessed – where impacts to habitats will occur - the calculation provides a negative score as habitat is being lost to development. This provides an evidence base for discussions regarding on-site mitigation and off-site compensation requirements, as per the mitigation hierarchy.

When gains are assessed – where habitats are enhanced or created on-site, or off-site – a similar calculation is made but risk factors that account for difficulty and temporal delays are also applied. The score will be positive where gains are being delivered. Habitats that are more difficult to restore or that will take a long time to reach a set target condition will score lower, these generate fewer credits and therefore a larger area is required area to deliver sufficient mitigation or compensation.

**Residual loss**

When on-site gains do not outweigh on-site losses and a net biodiversity loss is calculated, this negative biodiversity loss could become an offset requirement, if approved by the Council.

There is a ‘no down-trading’ policy within the metric, whereby habitat loss must be compensated for with habitat of the same value or higher - loss of high distinctiveness habitats such as lowland meadow and broad-leaved woodland must be compensated for like-for-like.

In addition to the difficulty and temporal factors applied to any gain calculations (on and off-site), a spatial factor is also applied to account for the location of a compensation receptor site in the local landscape. That is, if a site is not within a [xxx] area identified in the [xx eg. strategic greening plan], the credit value of the site is reduced and, again, a larger area will be required to deliver the appropriate compensation (in conservation credits).

Strategic factors, dependant on development location (e.g. proximity to development and contribution to landscape connectivity) are as follows:
• Strategic: x1
• Semi-strategic: 1.5
• Non-strategic: 2

Offset compensation schemes within a strategic area are preferred. Non-strategic schemes are permitted but the conservation credits generated by sites must be reduced by a factor of 2.

[Environment Bank are able to work with Local Authorities and counties to develop a strategic plan. More specific detail and maps should be included here.]

**Thresholds**

While there is no minimum size of development or impact for which this system applies, applicants should contact the Council to confirm the following information is required if they are unsure.

Applications which do not require an Environmental Statement still require the information below, unless the Council has advised otherwise.

Please refer to [Local Authority SPD – Biodiversity] for guidance on other survey and species requirements, e.g. for protected species.

**Information required**

So that impacts on biodiversity interests can be properly assessed using the biodiversity metric, applicants are required to submit the following information to the Council:

**Habitats**

Identification of all habitat types present at the site, including non-priority habitats, such as agricultural land. A short description of the habitat may be necessary for the Council to confirm the habitat type (for example; to distinguish between unimproved and semi-natural grassland).

Detail regarding any statutory or non-statutory nature conservation designations.

**Area**

Survey material showing the location and area (in hectares) covered by each habitat type.

**Condition**

A description of the condition of each habitat type. If different ‘patches’ of one habitat type exist between which the condition of the habitat varies, then these should be identified (for example; semi-improved grassland A – 1.2 ha - moderate condition; semi-improved grassland B – 4ha - poor condition).

Condition should be assessed using the Farm Environment Plan (FEP) Manual. Each condition assessment should be accompanied by a brief description, or reasoning, to support the assessment made. If a habitat condition assessment is not found in the FEP manual, another method of assessing condition should be employed, with supporting reasoning included.

**Losses vs. gains**

How each of the habitats (and habitat patches) described above will be affected by the proposal
must be identified – i.e. will they be lost, retained, or enhanced in some way.

Any on-site mitigation or enhancements (gains) proposed must be accompanied by further information regarding the target habitat type and condition to be achieved through management, the time period within which this target will be achieved, and a supporting outline (or full) management plan. The Council will not consider any gains (credits) to balance losses calculated without this information.

Any offset proposals where biodiversity gains are proposed will be dealt with in the same way as the point above.

The above information may also be required for indirect impacts to habitats adjacent to the site.

Results from the assessments above may best be summarised in a table, with accompanying map. See Appendix xx for an example table.

Early pre-application discussions with [Local Planning Authority]’s Environmental Advice team are recommended to clarify the information required above. Further information is also available on the [Local Planning Authority] website www.xxx. In some cases, the Council may be able to supply information about a site from its own [xxx] Biological Database, or direct applicants to an appropriate source of data such as the [xx] Biodiversity Records Centre.

Where existing information is insufficient, the applicant may be required to supply information for assessment in the form of new survey work. Assessments should be carried out by qualified, suitable experienced environmental consultants using recognised methodology and at an appropriate time of year (see [LPA] Supplementary Planning Document – Biodiversity for more detail).

**Standards for offsets**

In addition to the standards set above for assessing impacts using the biodiversity metric, if compensation is required, any offset schemes will be required to adhere to the following set of standards.

**Site selection**

For each offset receptor site put forward by an applicant [Local Planning Authority] will approve the site selection by considering the following:

**Required**
- Credit gain is sufficient
- Any like-for-like requirements for high distinctiveness habitat loss have been met
- That additionality can be demonstrated (where biodiversity gain and proposed management at a site is additional to that which is already in place with secure funding under, for example, an agri-environment scheme).

**Potential considerations**
- Target habitats are appropriate (if a like-for-like requirement is needed or to meet local targets)
- Site is within [xx eg. strategic greening plan]
- Site is within the [Local Planning Authority] boundary
• Site is within [x km] distance of the development

**Delivery**

In approving an offset [Local Planning Authority] will also need to be satisfied that delivery will be assured, such that the following are appropriate:

• Management period, e.g. 25 years;
• Site survey information, biodiversity gain (credit) calculations and management plan are available;
• Sufficient funds have been allocated to deliver management long-term, anticipating costs such as legal, administration, monitoring, reporting, foreseeable risks, insurance and inflation;
• A delivery mechanism is available – e.g. enforceable legal agreements to ensure management is undertaken;
• Monitoring and reporting arrangements have been made, to ensure management is being delivered as per the legal agreements.

**Appendix x – Relevant policies & case law**

[Environment Bank can provide content for the relevant appendices; alternatively information can be extracted from this planning toolkit.]

Policies and frameworks that support the introduction of a No Net Loss strategy for biodiversity using the government metric are provided below.

• EU policy
• Natural Environment White Paper
• NERC Act
• National Planning Policy Framework
• Other guidance and standards
• Local Planning Authority Local Policy
• Neighbourhood Plan policies
• Planning Inspectorate case law – Examples

**Appendix xx - Example habitat assessment table**

*Extract from the Environment Bank calculator*
If you are interested in finding out more about biodiversity accounting, offsetting and No Net Loss / Net Gain policies please contact us:

Email: admin@environmentbank.com
Phone: 07710 192295
www.environmentbank.com