

## Biodiversity accounting – An introduction

### Information sheet 1

The UK's native wildlife ('biodiversity') has been in serious decline for the last 50 years, especially following the intensification of agriculture since the 1970s. England has lost nearly 500 species of animal and plant over the past 200 years, and extinctions are occurring in every group – birds, mammals and reptiles, insects and flowering plants. A 2012 study by Plantlife estimated that an average English county is losing two species of wild flower every year. Whilst biodiversity does best in protected areas such as SSSI's and Natura 2000 sites, it is collapsing in the wider environment because of continuing pressures from agriculture and failures in planning and development control to properly account for biodiversity. Environment Bank was therefore established to fully address biodiversity impacts from development - to ensure proper compensation for these impacts and secure greater investment into the natural environment.

A system of biodiversity accounting is a way of recognising and quantifying the environmental impact of development, and generating extra investment for habitat creation via appropriate compensation schemes. It is a mechanism that improves the planning system by making it accountable for delivering biodiversity gain and 'sustainable development', as required by the National Planning Policy Framework.



As a policy initiative in the Government's Natural Environment White Paper (June 2011), Defra invited

local planning authorities to test such a system of biodiversity accounting (labeled then as 'biodiversity offsetting') through nationally recognised pilot projects which ended in April 2014. Environment Bank were involved in two such pilots (Essex, and Warwickshire, Coventry & Solihull). We have since scaled-up considerably across the UK with a good number of planning authorities and developers now adopting the mechanism. It has been evident from our extensive experience developing the initiative in the UK that an accounting system for biodiversity is a tool that can act as a common language between developers, planning authorities, farmers and conservationists - from whom we have welcomed feedback and advice that has refined the system we now offer today.

## Why is a system of biodiversity accounting being used?

- The UK will continue to experience high-levels of growth in some areas and we need to ensure that development is contributing to both environmental value and its restoration, as well as economic recovery.
- Until the availability of this biodiversity accounting initiative, compensation for impacts rarely happened because impact assessment has been too qualitative rather than quantitative. It delivered failures for the environment (poor quality and short-term compensation) and failures for those managing or adhering to the process (expensive, complicated, slow). Done well, a system where the impacts on biodiversity are properly accounted for provides an efficient, transparent and effective way of delivering sustainable development. The biodiversity accounting initiative gives clarity, certainty, reduced processing time, and puts the liabilities for delivery in the hands of those with experience in managing land for conservation gain.
- Quantifying impacts of development as a credit requirement enables 'banking' of credits at larger, strategic and more sustainable compensation sites and provides new funding for habitat creation and restoration – See information sheet 11 – Habitat banking.

## How does this accounting & compensation system work?

The system is straightforward – a government-approved metric is applied at a development site to any habitats that will be lost, retained, or enhanced so that both losses and gains are accounted for. The results of these calculations allow for clear, practical and unbiased conversations between developer and planning authority. Where the accounting exercise shows there is an unavoidable residual loss of habitat (- x units) this can be compensated for off-site via a conservation credit purchase, which is a necessary requirement of receiving planning permission. For example, a housing development that impacts an area of grassland in one place could provide compensation by paying for the creation of a new area of grassland somewhere else. This system is distinguished from previous approaches by its measurable and transparent outcomes: the losses resulting from the impact of the development and the gains achieved through the compensation are calculated in the same way. Generally, significantly larger areas of habitat are created and managed under a long-term Biodiversity Management Plan, than is lost through the development.

### Key principles

Environment Bank recognises three key principles for guaranteeing success of the system. Firstly, adherence to the '**mitigation hierarchy**'. Planning authorities should be accustomed to following the mitigation hierarchy when considering potential environmental damage from development. Initially, any potential damage must be avoided if at all possible; if it cannot be avoided then it must be reduced ('mitigated') as much as possible. If damage remains after avoidance and mitigation, then it can be compensated for as much as possible on-site. Whilst this must be done with rigour, on-site compensation has, to date, often been expensive and ineffective. Only after avoidance, mitigation and on-site compensation, can any residual environmental damage be considered for compensation off-site.

The second key principle is to recognise that there are **limits to what can be compensated for and when**. That is, compensation via the sale of conservation credits does not apply in situations where there is potential for damage to a protected wildlife site (such as SSSIs) unless there are categorical overriding circumstances, which is highly unlikely. The existing legislation to protect nationally important sites is there for good reason, and this system cannot be used to circumvent that. Furthermore, there are some habitats where this type of compensation is not appropriate even if they are outside a protected area – habitats that are impossible to re-create, ancient woodland for example.

The third key principle for England requires **additionality** of conservation outcome – in other words, funds generated for a compensation site must be used only to deliver land management that is extra to what already was, or was about to, happen. Generally, that will eliminate the spending of funds on designated protected areas, because these are already eligible for Government funding and are almost all under existing management plans. In wider terms too, conservation credit funding should not be used to reward land managers for work that they are already paid for under Higher Tier Countryside Stewardship schemes.

Strict observance of these key principles – mitigation hierarchy, limits to applicability and additionality of outcome – will ensure permitted development delivers real environmental gain.

### The metric

The biodiversity accounting system is underpinned by a metric that calculates the ecological value of both development impact and habitat restoration/creation. It is important that impacts, and any subsequent compensation, are calculated consistently across the country so that there is equality for both buyers and sellers of conservation credits.

Environment Bank uses the national metric recommended by Defra, developed by Natural England in consultation with a range of experts and tested over two years by the pilot areas. The metric is based on an assessment of habitat type and condition. Habitat types are classified into three bands of 'distinctiveness' which are: priority habitats as defined in the NERC Act 2006 (high), semi-natural habitats (medium) and managed habitats, such as arable farmland (low).

Compensation arrangements must be like-for-like or better, i.e. one can compensate for the loss of semi-natural habitats only with the creation of priority or other semi-natural habitats, not through creating some lesser quality habitat. 'Trading up' options allow for the loss of poor quality habitat, such as farmland, to be compensated for with the creation of high quality habitat.

The ecological value of the habitat lost to development is a function of its distinctiveness, its condition and the area lost – scores are assigned to all three variables and multiplied together to arrive at the number of units lost. To compensate for a loss, the same or more units ('conservation credits') must then be delivered through habitat creation or restoration at another site that is going to be managed for wildlife (the 'receptor' site or compensation site).

The number of credits delivered by the compensation receptor sites are also a function of the type, condition and area of the habitat being created or restored. But additionally, there are a further range of 'multipliers' applied to the creation of habitat because there are a number of risks to take account of – spatial, temporal and delivery.

Habitats that are reliably easy and quick to create, and which are created close to the site of loss and within a local greening strategy, all have low risk and therefore the multipliers used approach (parity) 1:1. Receptor sites for habitats that are trickier or take a long time to restore, or are a long way from the original impact and outside a greening strategy, have higher risk – in these cases multipliers apply which could, in extremis, scale up to go times or, most often, up to five times the habitat that was lost.

Although this metric creates a level playing field within and between different developments, applying the metric requires experience, high quality ecological field skills and independence. Firstly, this ensures consistency of application. It is essential that different (perhaps neighbouring) planning authorities are asking for the metric to be applied consistently (for instance, in assessing what is or isn't in 'medium' condition). Secondly, it ensures that calculations are independent and unbiased in all circumstances.

## Why use Environment Bank?

Environment Bank is an independent broker who will:

- calculate impacts (conservation credit requirements) for developers
- calculate conservation credits available for sale from potential compensation (receptor) sites
- register providers/receptor sites
- facilitate the creation, purchase and tracking of credits, using legal agreements and certificates
- ensure the long-term management, monitoring and reporting of receptor sites.

*Independent brokerage removes conflicts of interest from the planning system – Environment Bank brings national and international expertise in calculating the impacts of development and securing biodiversity compensation.*

Environment Bank is **not** a 'habitat bank', we are a broker of off-site compensation and experts in biodiversity accounting - we do not own or manage land, our role is to register potential sites and to match them to the needs of developers and local planning authorities - the right type of site, of the right size, in the right place, at the right time, for the right cost.

## The process – a step-by-step guide

1. A developer, after working through the normal mitigation hierarchy of the planning process with their local planning authority, finds they (and/or the authority) need a quantitative measure of their impacts that also takes into account on-site mitigation and enhancement efforts.
2. The developer (or planning authority) contacts Environment Bank who apply the metric as part of a biodiversity accounting exercise for the development. This is normally done using existing analysis presented in a Preliminary Ecological Appraisal or full Environmental Impact Assessment that accompanies the planning application, although it may occasionally require a site visit.
3. If the calculation yields a residual impact that the planning authority accepts can be compensated for by a conservation credit purchase off-site, this will be specified in a condition or obligation on the planning permission.
4. Environment Bank search their register for a suitable matching site that could deliver the conservation credits required to meet the planning condition. If we do not have a suitable site

already registered, we actively and efficiently search for land using our partners (such as AB Agri) with access to over 10,000 farmers and landowners in the UK.

5. When a site is found, Environment Bank calculates the number and type of credits that the proposed site management will deliver. The approximate price of the credits i.e. the price of the long term land management, is set by the land manager. There is no 'set price' for a grassland credit – rather, the price at any particular site reflects the cost of delivering a detailed long-term management plan and the subsequent biodiversity gain at that site.
6. If the developer and planning authority agree that the receptor site found is suitable, the developer will purchase the credits from that site.
7. Thereafter, our legal and fiscal systems assure the planning authority that the site and management plan has been arranged independently and delivery will be overseen and guaranteed in the long-term.
8. Separately, local land managers (farmers, landowners, conservation charities, etc) interested in attracting funding for conservation land management, have been registering their sites on Environment Bank's national registry (The Registry – see Information sheet 10).

### **Receptor sites & landowner registration**

Almost any land can be proposed as a compensation receptor site – there are no upper or lower barriers to the size of the site, nor to the ambition of the habitat restoration or creation project. However, for a site to be eligible to receive funding it must be able to demonstrate the intention for long-term land management that delivers reliable gain in biodiversity value. Land that is already receiving other conservation funding, of any sort, may not be eligible because 'additional' direct benefits must be demonstrated.

Landowners interested in listing their property on the Environment Bank Registry can request an Expression of Interest (EOI) form from Environment Bank (see contact details below) or visit our website to submit an online EOI. At this point a landowner may receive a site visit to collect further information although an EOI is usually all that is needed at this stage - until a local developer shows interest in the site. Registration of a site (and subsequent estimation of credit value) does not commit the landowner to any action, nor does it affect the status of the land. For more information, see our information sheet 3 - Guidance for Landowners.

### **Planning authorities & developers**

Local Planning Authorities and developers in any part of the country may choose to apply a system of biodiversity accounting to a development. Environment Bank would be delighted to discuss how the system works, apply the metric to a development and/or search for compensation sites. We have also developed local supplementary planning guidance and local plan wording that planning authorities can use to embed biodiversity accounting into their planning and development control system. Please also see information sheets 2 & 4 – Guidance for Local Planning Authorities & Developers.

We also have a free 'one-stop-shop' toolkit to help you implement the mechanism into your planning system – this is now downloadable direct from our website at the link below.

## More information

See <http://www.environmentbank.com/library.php> where you will find information sheets for landowners, planning authorities and developers, and our free toolkit for planning authorities.

## Contact us

See our website ([www.environmentbank.com](http://www.environmentbank.com)), call us 07710 192295 (Louise Martland), or send us an email - [admin@environmentbank.com](mailto:admin@environmentbank.com)

