Defra project code: WC 1051

Evaluation of the Biodiversity Offsetting Pilot Programme

Volume 2 (Annex): Pilot Reports

June 2014

Collingwood Environmental Planning Limited

in partnership with

The Institute for European Environmental Policy (IEEP)
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<th>Project title:</th>
<th>WC1051: Evaluation of the Biodiversity Offsetting Pilot Programme</th>
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<td>Contracting organisation:</td>
<td>Department for Environment, Food and Rural Affairs (Defra)</td>
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</table>
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Date issued: June 2014  
Purpose: To describe the inputs, processes and outputs of the biodiversity offsetting pilots and to provide a supporting factual basis for the analytical content of Volume 1: Final Report.  
Version no.: 1.3  
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Reviewed by: Eales, R. and Ten Brink, P. |
| Acknowledgements | The Steering Group would like to thank the pilots for being so generous with their time and insights. They would also like to thank the Complementary Projects, the Natural England advisers and to all of those who provided their time and expertise to the evaluation, including the team at CEP.  
The Project Steering Group greatly valued the efforts and expert help of Ian Smith from Natural England in helping to guide this project and for his dynamic assistance with the production of this final report, on the brink of his retirement. He is most fondly and respectfully remembered. |
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1. Introduction

Introduction to this report

This is Volume 2 (Annex) of the Evaluation of the Biodiversity Offsetting Pilot Programme. Volume 1: Final Report presents the findings and analysis from across the pilot programme. It also includes an introduction to the evaluation and the pilot programme and sets out the evaluation framework and research methods used. Volume 2 (this annex) is intended as a reference document to complement and provide the evidence base for the analysis within Volume 1. It is likely that the reader will dip into individual pilots report for further information; each pilot report is intended as a stand-alone document.

This annex describes each of the pilots in turn. The information is structured by the evaluation themes, consistent with Volume 1: Final Report, and includes the following sections under each pilot:

- Context
- Information sources and data collection
- Governance
- Process and management
- Legal and development planning
- Costs
- Ecological implementation and monitoring
- Lessons
- Status of the pilot after the pilot programme

Biodiversity offsetting projects (case studies) referred to in Volume 1 are reported at the end of each of the pilot reports, where such projects exist.

The biodiversity offsetting pilot programme

The biodiversity offsetting pilot programme was established in April 2012 and was completed in March 2014. It consisted of six voluntary pilot areas that agreed to establish pilot groupings of Local Planning Authorities (LPAs) and other interested stakeholder organisations to pilot the concept of voluntary biodiversity offsetting in England. In so doing, the pilot areas would also test the biodiversity offsetting metric developed by Defra. A fuller description of the pilot programme can be found in Volume 1: Final Report.

The six pilots were:

1. Coventry, Solihull and Warwickshire (CSWAPO).
2. Devon (including three sub-pilots North, South and East Devon).
3. Doncaster.
4. Essex.
5. Greater Norwich.
2. Coventry, Solihull and Warwickshire

2.1 Context

2.1.1 Pilot name
Coventry, Solihull and Warwickshire Biodiversity Offsetting Pilot; referred to as CSWAPO.

2.1.2 Pilot hosts
The lead organisation was Warwickshire County Council; the pilot was jointly hosted / managed by the Coventry, Solihull and Warwickshire Association of Planning Officers (CSWAPO). CSWAPO was formed of: Warwickshire County Council; Coventry City Council; Solihull Metropolitan Borough Council; North Warwickshire Borough Council; Nuneaton and Bedworth Borough Council; Rugby Borough Council; Warwick District Council; and Stratford District Council.

2.1.3 Pilot partners (members of the pilot group)
The hosts CSWAPO and Warwickshire County Council Ecological Services entered into partnership with Environment Bank Limited (EBL) to develop the pilot and deliver biodiversity offsets throughout the sub-region.

![Figure 1: LPAs participating in the Coventry, Solihull and Warwickshire Pilot](Source: CSWAPO)
2.1.4 Governance arrangements of the pilot

The Warwickshire, Coventry and Solihull local biodiversity offsetting strategy is intended to be delivered through the sub-regional Green Infrastructure (GI) Strategy. It is supported by the Coventry, Solihull and Warwickshire Association of Planning Officers (CSWAPO), which pre-dates the biodiversity offsetting pilot programme. Warwickshire County Council continues to be the lead partner in relation to GI and offsetting. The GI Strategy has a continuing existence beyond the official life of the pilot. CSWAPO was comprised of Chief Planning Officers, and a sub-group of planning officers with policy expertise was set up to assist / steer the GI Strategy and biodiversity offsetting strategy development process. The partnership also had expert advice from members of the Local Biodiversity Action Plan (LBAP) partnership which formed an ecological technical group.

2.1.5 Ecological context of the pilot

The Consultation Draft Sub-Regional Green Infrastructure Strategy (February 2013) indicates that the sub-region is primarily composed of arable land and improved grassland, covering 49% and 29% of the area respectively. The next most common habitat by area is woodland (8%), of which the majority is broadleaved (6% of the sub-region), and neutral grassland (4%). Amenity grassland covers 4% of Warwickshire (including golf courses). The relatively low percentage of woodland habitat cover is seen as of particular concern, as the Forest of Arden landscape is a core part of Warwickshire’s natural environment. Figure 2 is from the LBAP report 2007 – 2010, as included in the Consultation Draft Sub-Regional Green Infrastructure Strategy (February 2013), and shows trends in species and habitats in the sub-region.

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<td>Woodlands</td>
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Figure 2: LPAB species / habitat reporting 2007 – 2010

(Source: Consultation Draft Sub-Regional Green Infrastructure Strategy (February 2013)

Note: A green, upward arrow indicates that positive progress has been made towards achieving the targets set out within the Local Biodiversity Action Plan for that species or habitat. Two horizontal orange arrows indicate that no progress has been made, but there has been no loss to that species/habitat either. A downward red arrow indicates that the species/habitat has suffered a loss and that therefore there has been a worsening in the status of LBAP targets.)
2.1.6 Planning and development context of the pilot

Given the number of LPAs involved in the partnership, an exhaustive list of planning documents has not been included in this report. The sub-regional GI strategy sets out the key planning documentation.

The biodiversity offsetting strategy forms an Annex to the Sub-Regional Green Infrastructure Strategy. The GI Strategy is intended “to provide evidence for the preparation of plans, policies and strategies relating to Green Infrastructure (GI) at a sub-regional level and at a local level.”

It is also intended that the GI Strategy could be adopted as supplementary planning guidance. Thus, the biodiversity offsetting strategy, once the GI Strategy has been adopted, will become an integral part of the planning and development context for the sub-region, and a material consideration in development decisions / planning application approvals. This was felt by the hosts to create a stronger planning requirement to address residual impacts than if the biodiversity offsetting strategy was a standalone document.

Planning and development strategies and policies are listed on the Warwickshire County Council website1 and include:

- **Warwickshire Structure Plan Saved Policies.** The Structure Plan comprises policies and proposals and a key diagram is the strategic land use plan for Warwickshire and forms part of the statutory development plan for the county. It covered the period 1996 – 2011; a number of policies have been ‘saved’ until such time as they are formally replaced by new policies.

- **Minerals development framework** including the Minerals Core Strategy (pre-publication); Minerals Site Specific Allocations (as needed to follow the Mineral Core Strategy); and the Minerals and Waste Development Scheme (March 2012), which sets out the current minerals and waste planning policies that are being applied in Warwickshire. Until the Minerals Core Strategy is adopted a number of policies in the previous Minerals Local Plan have been ‘saved’.

- **Waste development framework** including the Minerals and Waste Development Scheme (as above); the Waste Core Strategy (pre-publication); and Waste Site Specific Allocations (to follow adoption of Waste Core Strategy). Until the Waste Core Strategy is adopted a number of policies in the previous Waste Local Plan have been ‘saved’.

Each LPA has their own Local Development Documents and Local Plans which will set out local planning and development policies.

2.1.7 Biodiversity offsetting basic information

By the end of the pilot programme the metric had been applied to over 60 applications; six of which had received planning permission which included the requirement to secure appropriate biodiversity offsetting schemes prior to commencement of development. A biodiversity offsetting requirement was being discussed in approximately 25 other applications, including those where permission details are being finalised and where specific offset schemes are currently being sought prior to permission.

Of the remainder, approximately 20 have been refused permission or withdrawn for non-ecological reasons. Approximately 25 additional applications were assessed as delivering biodiversity gain or causing an ‘insignificant’ impact, such as minor losses to low

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1 http://www.warwickshire.gov.uk/planningpolicies
distinctiveness habitats, and as such were not required to offset under the current system.

### 2.2 Information sources and data collection

In addition to several catch-up discussions, 36 interviews were undertaken across the pilot with a range of stakeholders as shown in Table 1.

#### Table 1: CSWAPO summary of interviews undertaken

<table>
<thead>
<tr>
<th>Interview points</th>
<th>Interviewees in each stakeholder group</th>
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<td>The setting up of the pilot group (Stage 1)</td>
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<tr>
<td>The development of the biodiversity offsetting strategy (Stage 2)</td>
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<td>• Natural England Adviser</td>
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<tr>
<td>Final reflective interview at the end of the pilot (Stage 3)</td>
<td>• Pilot hosts</td>
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<tr>
<td></td>
<td>• Natural England Adviser</td>
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<tr>
<td>LPAs who chose not to participate in the pilot programme</td>
<td>• Local Planning Authority officers</td>
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<tr>
<td>Final reflective interview at the end of the pilot</td>
<td>• Pilot lead</td>
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<tr>
<td></td>
<td>• Natural England Advisers</td>
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<tr>
<td>Using the metric within a planning application</td>
<td>• Pilot lead</td>
</tr>
<tr>
<td></td>
<td>• Metric users including ecological consultants, LPA planners, LPA ecologists and applicants</td>
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<tr>
<td>Interviews around specific projects</td>
<td>• Project stakeholders including ecological consultants, developer agents, LPA planners and ecologists, consultees</td>
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<tr>
<td></td>
<td>• Natural England Officials</td>
</tr>
<tr>
<td></td>
<td>• Ecological consultants and developer representatives</td>
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<td>• Potential offset providers</td>
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</table>

Metric users and projects stakeholders were identified through their inclusion within publicly available planning documents for applications where the metric had been used and, in some instances, where planning permission had been approved with provisions to secure appropriate biodiversity offsetting schemes. Through the review of planning documents, numerous contacts were approached and interviews undertaken with those who responded during the time available for the evaluation.

In addition to planning documents, the following other documents were reviewed: Expression of Interest (EoI) to Defra; Consultation Draft Warwickshire, Coventry and Solihull Green Infrastructure (GI) Strategy including Annex A: Local Biodiversity Offsetting Strategy; emerging Management Plans for potential and actual offsets; and the database of planning applications that are using the metric.

### 2.3 Governance

The Principal Ecologist at Warwickshire County Council was the pilot’s lead officer, supported by the Coventry, Solihull and Warwickshire Association of Planning Officers (CSWAPO). Three years before the pilots were announced, the pilot lead proposed to CSWAPO the development of a Natural Environment Supplementary Planning Document (SPD). At that time, it was broadly agreed that it should be in the form of a GI SPD. After initial work had begun on the GI Strategy, the National Planning Policy Framework (NPPF) was launched which included the potential for biodiversity offsetting. When the biodiversity offsetting pilots were announced (in the Natural Environment White Paper - NEWP) this was seen as a great

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\[2\] The Warwickshire Coventry and Solihull GI Strategy is available at:  
opportunity to provide a mechanism to deliver the GI Strategy. The pilot lead proposed this to CSWAPO who agreed to host the pilot across their LPAs.

All of the CSWAPO partners signed up to have a ‘duty to cooperate’ function under the Localism Act, including for the GI Strategy and offsetting pilot. The initial proposal (in the EoI) was that there would be a formal Memorandum of Understanding (MoU) between the CSWAPO partners in relation to the offsetting pilot. However, this was not established due to the voluntary nature of the whole process.

The CSWAPO pilot had a three-tier governance structure with the CSWAPO group of Chief Planning Officers providing a high level review. The responsibility for developing the biodiversity offsetting (and the GI Strategy) was delegated to a sub-group. There was also a separate technical group of local ecological experts who met to discuss specific questions relevant to the metric (Figure 3). This arrangement was felt to have worked well with individuals communicating back to their organisations as required and the pilot hosts providing coordination between all the groups as necessary.

![Figure 3: CSWAPO Governance arrangements](image)

The pilot was offered the resources of a full time project officer funded by Environment Bank Limited (EBL). This offer was taken up and this officer was in post from April 2013 and continued to provide support beyond the pilot end date (March 2014).

### 2.3.1 The role of Natural England

The Natural England advisor was involved from the outset in the strategy development process, including attending meetings and discussing (e.g. via email exchanges) early drafts and issues that might emerge in the implementation of an offsetting strategy and how to overcome them. The input to the strategy development process was described as being very practical and hands-on, and was seen as being very valuable to both Natural England and the Pilot. Natural England was also involved through the formal consultation procedures. Natural England commented / inputted through this process, including on the GI strategy more generally and provided specific input on the biodiversity offsetting strategy annex.

The pilot host felt that Natural England was less involved in the implementation of biodiversity offsetting through the sub-region than the hosts would have ideally liked. Natural England decided not to engage within specific applications as their policy was to prioritise higher impact applications only.

### 2.4 Process and management

#### 2.4.1 The biodiversity offsetting strategy

The biodiversity offsetting strategy (as part of the GI Strategy) was developed to consultation draft, with the public consultation ending in April 2013. There were 39 responses to the consultation. The GI Strategy was adopted by all relevant LPAs in December 2013; however,
biodiversity offsetting strategy (Annex A) remains formally un-adopted until a decision has been made on national biodiversity offsetting policy.

The GI Strategy drew upon Making Space for Nature^3^ and was intended explicitly to deliver the objectives of the NEWP^4^ and NPPF^5^, with the central aim being a net gain in biodiversity in the sub-region. The Defra principles^6^ were also used from the outset of the process of developing the Strategy. Other considerations in the Strategy development include a definition of ‘in perpetuity’, spatial prioritisation and priority species or habitats (based on strategic locations identified in the GI Strategy).

Data input to the GI and biodiversity offsetting strategy included: Habitat Biodiversity Audit^7^ partnership opportunity mapping; GIS boundary / field level map (which are annually updated (20% per year) leading to a ‘new’ map every five years); and Biological Record Centre species data. In addition, local knowledge was garnered through technical group meetings to draw on local expertise in relation to specific species, habitats and issues.

The principles set out within the biodiversity offsetting strategy are expressed as whether an area is considered to be strategic for a particular habitat type. This was significant as the spatial multipliers within Defra’s metric means that in a non-strategic area an offset site will need to be three times the size to meet the conservation credit requirement. In reality, these multipliers have been found to be lacking subtlety. Towards the end of the pilot programme, these were reduced from those recommended by Defra after discussion with the pilot technical group^8^.

Box 1: Habitat mapping within the CSWAPO pilot

The available habitat mapping was used to assess abundance of particular habitat types within individual 1km grid squares to determine grid squares already deemed to have suitable habitat functionality and connectivity.

- Strategic areas are those 1km grid squares where additional habitat enhancement will help to raise that square to a core functioning area (20% coverage).
- Semi-Strategic areas are 1km grid squares that already have 20% habitat coverage.
- Grid squares with less than 5% coverage are deemed non-strategic with regard to offset location.

The draft biodiversity offsetting strategy also included the proposition that very small scale applications (such as for household extensions) which involved small areas of land take could be required to pay a standard, small fixed sum to account for the loss of biodiversity, based on average biodiversity impact. It was not considered efficient to apply the metric individually in these instances. During the consultation this option received mixed responses; crucially it was noted that there was no collection mechanism in place and it was likely to be a challenge to administer so this option has yet to be implemented.

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^7^ Habitat Biodiversity Audit (HBA) is a Local Authority partnership managed by Warwickshire Wildlife Trust that produces a computerised field-by-field/boundary-by boundary habitat map, with each field re-surveyed every five years.

^8^ At the end of the pilot programme CSWAPO were trialling 1, 1.5 and 2 rather than 1, 2 and 3.
Consultation around the biodiversity offsetting strategy

Organisations involved in the development of the GI and biodiversity offsetting strategy and the metric included: Natural England; Warwickshire Wildlife Trust, Forestry Commission, Environment Agency, Royal Society for the Protection of Birds (RSPB), Canals and Rivers Trust, and English Heritage. Overall the pilot lead indicated that the support these organisations provided was "extraordinarily useful", and a very important resource in developing the wider GI Strategy and in turn the biodiversity offsetting strategy.

In addition, a number of developers and potential offset providers provided input, e.g. Jaguar Land Rover, Wildlife Trusts, Home Builders Federation (HBF), planning consultants (a potential advisor on offsets), Woodland Trust, National Farmers Union (NFU), Country, Land and Business Association (CLA) and AB Sustain.

As the GI Strategy and biodiversity offsetting were proposed to be adopted as a SPD it was subject to wide ranging consultation, following due planning process (i.e. following the Statement of Community Involvement). Thus a very wide range of organisations, stakeholders and the general public have had the opportunity to comment. For example, the consultation draft strategy was sent to all LPA mailing lists, made available through the public consultation website, and letters sent to anyone who had previously commented on local plans.

2.4.2 The metric

Process

By the end of the pilot, the pilot hosts had developed a process whereby the majority of applications used the metric to quantify their biodiversity impact, including: all proposed major developments; all proposed minor developments (excepting those for which the LPA ecologist felt ecological survey was not required in areas with consistent LPA ecologist advice); and, case by case in other areas.

During this period, the metric had been applied to 63 applications. This scale of use of the metric and potential offset delivery was unique to the pilot and was achieved by LPA ecologists using the weekly lists of applications to identify instances where the metric should be used and engaging with the applicants at an early stage. Initially the LPA ecologists were populating the metric for each application, but over time the pilot required ecological consultants to use the metric on their applications and to provide supporting information.

This was possible through concerted capacity building with ecological consultants. In total, 115 attendees from 65 consultancies participated in targeted training events coordinated by the pilot host and EBL. Other ecological consultations were involved with more informal case specific guidance and training. In addition, seminars were run for each LPA to enable planning officers to have a better understanding of biodiversity offsetting, what was required and how it fits into the planning process.

Having applied the metric the pilot and the LPA ecologists were requiring compensation for ‘significant loss’ based on professional judgement and on a case-by-case basis. The metric result provided the evidence base to underpin this decision, but only when placed in a local and regional context relating to the habitats being lost within the development. The pilot hosts highlighted that any residual loss may in itself be a reason for recommending a refusal of planning permission. It is also important to note that other ecological issues, such as species or statutory / non-statutory site impacts, may have also been reasons for recommending a refusal of planning permission.

Where significant loss was identified the LPA ecologists and ecological consultants often engaged in negotiations to reduce this loss through appropriate on-site compensation, where this could be successfully delivered on site. Where, after these negotiations, there was residual loss the LPA ecologists recommended biodiversity offsetting as an appropriate mechanism to deliver offsite compensation, to be secured by s.106 agreements; with the potential that permission could be refused if a willingness and ability to offset was not
acknowledged. Using this process the biodiversity offsetting scheme package did not need to be agreed prior to permission, but prior to commencement of development. However, some developers preferred to have the details confirmed prior to determination of the planning application. The CSWAPO biodiversity offsetting strategy includes a flow chart of the process for biodiversity offsetting (see Figure 4).

![Flow chart of the process for biodiversity offsetting](image)

**Figure 4: Summary of the Local Biodiversity Offsetting Process**
(Source: CSWAPO GI strategy, Annex A)

**Impact**

Generally, metric users stated that the CSWAPO metric calculator (or Biodiversity Impact Assessment tool as it was termed within the pilot) was effective in quantifying and communicating biodiversity loss from individual applications.

The effect of the use of the metric was considered, by the pilot hosts, LPA ecologists and the majority of the ecological consultants, to be improvements to on-site mitigation and compensation assessment in a way that was consistent with the mitigation hierarchy. In those applications where residual impact was calculated, this process was considered by the pilot hosts and LPA ecologists to have delivered substantial off-site compensation requirements compared with the previous system. In addition, they thought that this investment would not have been secured without the metric, generating significant potential biodiversity benefits.

The capacity building provided by the pilot hosts was identified as very valuable to the ecological consultants, helping them overcome the initial learning curve to using the metric.
Most metric users and the LPA ecologists noted that although the use of the metric had some additional information requirements, for example habitat condition and greater detail around habitat areas, these were relatively minor.

All of the metric users with an ecological background considered that the metric was a simple and transparent tool for quantifying biodiversity loss. Non-ecological metric users, such as planning officers and developer representatives, cautioned that the ‘biodiversity unit’ used by the metric was not particularly intuitive (since it has no ‘real’ unit of measurement). They were also not always clear on how to respond to the information that the metric was presenting. For example, what were the costs and how might these be addressed. Within the pilot, this was addressed through discussion with the pilot hosts or LPA ecologists.

Opinions from metric users were more varied concerning the efficiency of the metric. Many stated that it helped speed up the process of negotiating and agreeing mitigation and compensation, but that the impact of streamlining across the whole planning application process could be relatively limited where other development issues were significant. A minority, especially users engaging with the metric for the first time or those who had not attended the training events, stated that the additional processes and requirements meant it took longer.

**Development of the metric**

The metric included in the biodiversity offsetting strategy is based on the Defra national habitat metric. The presentation and detail of the metric evolved in CSWAPO over time.

Local ecological consultants worked with Warwickshire CC to test the metric formula on live planning applications. As the use of the metric increased, feedback from metric users was noted and incorporated into revision of the local offsetting metric calculator and guidance.

The metric was developed during the length of the pilot programme (see Table 2). These changes were discussed and agreed with the expert ecological technical group. The demand for these changes emerged from the pilot hosts’ experience of using the metric, input from partner Environment Bank and feedback from metric users. Adaptations and revision of the metric calculator conformed to Defra guidance and version 17 of the CSWAPO Biodiversity Impact Assessment calculator. The approach used was endorsed by Natural England.

The final version of the metric is highly-automated and comes with guidance for users. Other changes included changing the distinctiveness factors from a three to a five point scale to account for the subtleties that were emerging from the use of the metric.

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### Table 2: CSWAPO changes to the metric over time

<table>
<thead>
<tr>
<th>Version and date of changes</th>
<th>Changes made / issues resolved</th>
</tr>
</thead>
</table>
| V18 07/02/2014              | • Additional distinctiveness categories to include medium-low 3 and medium-high 5 included.  
                             | • Updated distinctiveness categories as per technical group.  
                             | • Guidance document updated.  
                             | • Technical group approved change of strategic areas to 1, 1.5 and 2.  
                             | • Next change to be habitat typology assessment for down-trading and loss – e.g. not just high for high but woodland for woodland and pond for pond in high distinctiveness, and ideally grassland for grassland in medium distinctiveness. |
| V17.7 08/01/2014            | • Change quarry to Quarry (active) distinctiveness none, and Quarry (disused) distinctiveness low.  
                             | • Changed ‘user’ to ‘assessor’.  
                             | • Changed ‘restored’ to ‘enhanced’.  
                             | • Change linear features to meters not km |
| V17.6 14/10/2013            | • Existing site section of down-trading tables not reading properly – fixed. – no known development calculations were affected. |
| V17.5 09/10/2013            | • Error in medium habitat down-trading calculation, resulting in occasional positive not negative value – fixed |
| V17.3 13/08/2013            | • Linear features added  
                             | • Now only available in .xls for ease in dissemination |
| 17.1&2 09/08/2013           | • Draft version |
| V16.2 09/08/2013            | • Error messages added |
| V16.1 24/07/2013            | • Improved and more automated down-trading correction tables added (error in medium down-trading formula) |
| V15.1 04/07/2013            | • Attempt at down-trading accounting added  
                             | • Accompanying guidance produced |
| V14 18/06/2013              | • New user-friendly layout  
                             | • Technical group approved automated distinctiveness and difficulty classification  
                             | • Summary improved |
| V13 29/05/2013              | • Restoration formula corrected to original |
| V12.2 04/05/2013            | • Improved appearance for external use.  
                             | • Made available in .xls and .xlsx – compatible with Excel 2003, 2007, 2010 |
| V12.1 03/05/2013            | • Summary table added |
| V12 04/05/2013              | • Updated table to improve user interface, with dropdown and lookup formula  
                             | • (incorrect restoration formula) |
| V11 04/01/2013              | • Indirect impacts added  
                             | • Restoration formula changed on strong advice of ecological consultant |
| V10 26/10/2012              | • Improved appearance for external use |
| V9 13/08/2012 04/10/2012    | • Difficulty factor added |
| V8 17/08/2012 06/07/2012    | • Habitat restoration added (correct formula) |
| V1 – v7 01/04/2012 - 16/08/2014 | • Habitat restoration not included  
                                           | • Early versions have no risk factors, temporal factor later included. |
Box 2: Hedgerow metric

The CSWAPO hosts decided that Defra’s hedgerow assessment needed to be improved as condition was only assessed on height, width and ‘gappiness’ with no consideration of species richness or ground flora. The metric also stated that hedges could not be restored and should only be created at a replacement level of 3:1, 2:1 or 1:1 depending on the condition of the existing hedgerow. The pilot hosts felt that these numbers were not evidence based.

The CSWAPO hosts developed a calculator for linear features, such as hedgerows, which mirrored the habitat metric: the existing habitat type, distinctiveness and condition is measured, but habitat types are separated out, e.g. defunct hedges\(^{10}\), intact hedge, species rich-hedges and hedges with trees are assessed with appropriate distinctiveness levels. The length of hedgerow to be lost could then be recorded and the value calculated, measuring the units of linear biodiversity loss which will require compensation either on site or offsite through offsetting, rather than compensation being calculated through length alone as Defra had proposed.

If, as part of an application, a hedgerow was to be retained the enhancement of this hedgerow could also be recorded. For example, a hedgerow in poor condition could be brought into a better management regime and a defunct hedgerow could be planted up with a diverse mix of native hedge species, brought into a better management regime and restored to a species rich hedgerow.

To assess on-site compensation (or offset gain), the proposed new hedgerows and hedges to be restored are then assessed with regard to target habitat type, distinctiveness and condition, together with multipliers reflecting the difficulty of creation and time until the hedge will reach its target condition.

This methodology enables an assessment that is comparable with the habitat hectare methodology, which the host felt was appropriate. This linear features assessment has not been trialled as thoroughly as the habitat metric across the sub-region, but where it has been used the pilot hosts were satisfied it was useful.

Within the pilot, there was some discussion as to whether the lengths of required offset using this methodology were appropriate. It was felt that a larger trial of this methodology would be required to inform a decision regarding its appropriateness. However, some metric users commented that an offset requirement of 3:1 using the original model was unreasonable. The hosts are considering including a connectivity factor within the assessment, as this is an important factor in hedge biodiversity value, potentially to be assessed by the number of hedge nodes. This was not developed during the pilot programme.

2.4.3 Links with other natural environment initiatives

The pilot, via existing networks, had contact with the local LNP and LEP. During the pilot programme the impact of any interactions was largely limited to discussions around the GI Strategy and some high level support for biodiversity offsetting.

Review of the biodiversity offsetting strategy

Table 3 reviews, against the evaluation criteria, the biodiversity offsetting strategy that was consulted upon.

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\(^{10}\) A hedgerow with gaps large enough for stock to pass through.
Table 3: Review of CSWAPO strategy with respect to the Defra biodiversity offsetting criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Extent to which the criteria is, or is not, included in the strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Has offsetting ensured no change to existing levels of protection for biodiversity?</td>
<td>The strategy cites the NPPF and indicates that “a net gain approach” is being adopted and promoted in all sub-regional local development documents. The strategy “describes the sub-regional approach to achieve these [objectives] and NPPF’s principles for plan-making.” Aim of no net loss is noted (p.18) and the way offsets are to be ‘triggered’ means that any potential loss should be compensated through on-site compensation or offsetting.</td>
</tr>
<tr>
<td>2. Has offsetting delivered real benefits for biodiversity through:</td>
<td></td>
</tr>
<tr>
<td>2a. Seeking to improve the effectiveness of managing compensation for biodiversity loss;</td>
<td>Though not stated, the hosts refer to this as the main aim of the strategy.</td>
</tr>
<tr>
<td>2b. Expanding and restoring habitats, not merely protecting the extent and condition of what is already there;</td>
<td>The strategy notes that national policy (NEWP) is aiming for net gain - and that developments that do not achieve this will be looked upon “unfavourably”. The prioritisation of any offsets also indicates the need to either “create... new habitat or by restoring existing, degraded habitat”. In addition, the classification of a strategic area is such to encourage enhancement or creation of habitats in locations which will contribute to landscape connectivity.</td>
</tr>
<tr>
<td>2c. Contributing to enhancing England’s ecological network by creating more, bigger, better and joined areas for biodiversity (as discussed in Making Space for Nature);</td>
<td>Strategy identifies strategic areas for offsetting - linked to the GI plan: “strategic areas within the sub-region, which are of particular benefit to biodiversity due to expanding or linking up existing high value biodiversity areas, in accordance with John Lawton’s ‘More, Bigger, Better and Connected’ aim”</td>
</tr>
<tr>
<td>2d. Providing additionality; not being used to deliver something that would have happened anyway;</td>
<td>The strategy does not explicitly define or refer to this principle. Within the pilot, additionality checks are undertaken when offset sites are being identified.</td>
</tr>
<tr>
<td>2e. Creating habitat which lasts in perpetuity (with a clear and agreed understanding of what is meant by perpetuity);</td>
<td>Perpetuity is defined to be a minimum of 30 years. The strategy does note, however, that “Offsets need to last at least as long as the project’s impacts, and preferably in perpetuity”.</td>
</tr>
<tr>
<td>2f. Being at the bottom of the mitigation hierarchy, and requiring avoidance and mitigation of impacts to take place first?</td>
<td>The strategy includes the mitigation hierarchy and states that “Developers in pilot areas required to provide compensation for biodiversity loss under planning policy can choose to do so through biodiversity offsetting, once the mitigation hierarchy has been applied and compensation is seen as the only option available”</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Criteria</th>
<th>Extent to which the criteria is, or is not, included in the strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. To what extent has offsetting been managed as much as possible at the local level and:</td>
<td>The strategy is sub-regional, but makes it clear that the relevant local authority needs to be heavily involved in the process. Discussions with the hosts suggest that offsets will be expected within the same authority as the application. Although the strategy mentions strategic areas, which will score favourably, it is not clear from the strategy if locally managed offsetting is otherwise encouraged. The final decision as to the acceptable of the type and location of the offset sits with the LPA.</td>
</tr>
<tr>
<td>3a. Within national priorities for managing England’s biodiversity and ecosystem services;</td>
<td>The strategy makes clear reference to and is based on principles in NEWP, Making Space for Nature and NPPF.</td>
</tr>
<tr>
<td>3b. Within a standard framework, which provides a level of consistency for all involved;</td>
<td>The metric and related guidance are clearly set out and structured.</td>
</tr>
<tr>
<td>3c. Through partnerships at a level that makes sense spatially, such as county level, catchment or natural area;</td>
<td>CSWAPO and the pilot, including the strategy, are based on a wide partnership.</td>
</tr>
<tr>
<td>3d. With the right level of national support and guidance to build capacity where it is needed;</td>
<td>As above - reference to national (e.g. Defra) information sources. The GI Strategy and supporting biodiversity offsetting strategy is also structured in such a way as it can be amended as necessary when appropriate guidance documents become available.</td>
</tr>
<tr>
<td>3e. Involving local communities?</td>
<td>The strategy was formally consulted on providing input opportunities for local communities / organisations etc. Workshops and other community events were also held.</td>
</tr>
<tr>
<td>4. Has offsetting been as simple and straightforward as possible, for developers, local authorities and others?</td>
<td>The strategy is clearly written and provides a staged / step-wise approach.</td>
</tr>
<tr>
<td>5. Has offsetting been transparent, giving clarity on how the offset calculations are derived and allowing people to see how offset resources are being used?</td>
<td>The strategy clearly describes the metrics to be used, and proposes a transparent process.</td>
</tr>
<tr>
<td>6. Has offsetting been good value for money?</td>
<td>n/a</td>
</tr>
</tbody>
</table>

2.5 Legal and development planning

2.5.1 The biodiversity offsetting strategy

The GI Strategy (of which the biodiversity strategy is an annex) is intended to become a development framework document, either as an evidence base document or a SPD. The intention is that it will be used in all development and planning decision making and at all levels (e.g. from neighbourhood planning areas upwards). Its main role is as a planning tool, by being linked to all core strategies and local plans and implemented essentially through providing an evidence base and wording for policies in Local Development Documents.

The approach in the strategy is in two parts: firstly, the use of the metric as a form of ‘impact
assessment’ to assess the scale of biodiversity impacts arising from proposed development; and secondly, the calculation of offsetting requirements where the first stage identifies a residual net-loss. The approach is intended to ensure the strategy and approach it proposes can be applied at all scales, from individual sites to the sub-regional level.

2.5.2 Interpretation of national planning policy

The CSWAPO pilot developed a semi-mandatory approach to biodiversity offsetting during the pilot. This was based on the use of the metric to quantify the biodiversity impact, to assist with determining what is termed ‘significant’ in accordance with the NPPF. Where ‘significant’ loss has been identified, the pilot and LPA ecologists require no net loss and ideally net gain to be secured. This is to be achieved through biodiversity offsetting with the requirement to purchase conservation credits sufficient and appropriate to compensate for this measured impact. The required amount and type of conservation credits are quantified using the metric via discussions with the pilot hosts.

2.5.3 Integration of biodiversity offsetting into other policies

The GI Strategy and biodiversity offsetting strategy were developed with their relationship with local strategy / policy in mind. The GI Strategy is intended to form an evidence base for Core Strategies (LPA level), and offsetting is proposed to be included in local planning documents and development decision making. A number of the LPAs within the pilot area have sought to integrate biodiversity offsetting into their planning policy (Table 4).

### Table 4: CSWAPO references to biodiversity offsetting and key concepts within local planning policy

<table>
<thead>
<tr>
<th>LPA</th>
<th>Plan</th>
<th>Status</th>
<th>Year</th>
<th>Reference to:</th>
<th>Offsetting in policy</th>
<th>Offsetting in text</th>
<th>No-net-loss / net-gain</th>
<th>Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coventry</td>
<td>Core Strategy</td>
<td>Submission</td>
<td>2012</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Warwickshire</td>
<td>Core Strategy</td>
<td>Submission</td>
<td>2012</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Nuneaton and Bedworth</td>
<td>Borough Plan</td>
<td>Preferred Options</td>
<td>2013</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rugby</td>
<td>Local Plan (Saved)</td>
<td>Adopted</td>
<td>2013</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Solihull</td>
<td>Local Plan</td>
<td>Adopted</td>
<td>2013</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Stratford upon Avon</td>
<td>Core Strategy</td>
<td>Draft</td>
<td>2012</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local Plan</td>
<td>Adopted</td>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Warwick</td>
<td>Local Plan</td>
<td>Publication</td>
<td>2014</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>WCC Waste Plan</td>
<td>Core Strategy</td>
<td>Adopted</td>
<td>2013</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

2.6 Costs

### 2.6.1 Costs of setting up the pilot group and the biodiversity offsetting strategy

Setting up the pilot required “a substantial amount of effort”. A broad estimate of Warwickshire CC officer time up until February 2013 was approximately £10,000. This included creating the draft version of the biodiversity offsetting strategy annex to the GI Strategy. The
The pilot host estimated that the CSWAPO subgroup had spent around £3,500 of their time during the same process.

The pilot lead indicated a rough estimate of an additional £3,000 of officer time in setting up and running the consultation on the Strategy. The CSWAPO subgroup time input was estimated at around £3,500 again over the same period. It should be noted that these cost estimates also include time input to the development of the GI Strategy.

The pilot lead indicated that time input of councillors and elected members had been limited to input at consultation events rather than any specific time to strategy development.

The EBL officer was working full time on the pilot from April 2013. This was in addition to the work of the other pilot host and the various LPA ecologists. The LPA ecologists had subsumed the time and costs of biodiversity offsetting into their roles, so any time spent could not be evaluated separately. The time spent by LPA ecologists was not recorded separately from their time spent on planning delivery.

A substantial amount of time and effort had been expended on getting the pilot up and running and, during the second year, implementing the approach. The pilot hosts were of the opinion that this time had been well spent and that they were seeing results.

### 2.6.2 Natural England’s time

The Natural England adviser noted that, since taking over the role in December 2012, they had been inputting about two days per week on average. However, there have been periods when they have used fewer days, and others when they have used considerably more. The adviser also noted that their predecessor was providing a lot of direct support to the pilot and almost certainly input at least 2.5 days a week and often much more. This time included internal Natural England discussion and support of the CSWAPO GI Strategy and does not necessarily equate to time spent in direct support of the biodiversity offsetting pilot.

### 2.6.3 Cost issues emerging from specific applications

#### Market immaturity

The pilot and various stakeholders acknowledged that the systems for identifying, developing and accrediting offset sites were immature and that this had presented some challenges. A number of provider sites were identified as the pilot progressed, but none of these had developed management plans. This meant there were no off-the-shelf offset schemes that could be matched with a development.

The pilot considered the reasons for this were to be related to: an uncertainty about biodiversity offsetting policy; lack of evidence for offset costs; and how biodiversity offsetting related to other funding options. There were also more practical issues, such as the need for providers to provide upfront costs to develop a management plan and the potentially long delay between a development receiving permission and works starting (at which point monies would become available for the provider).

The pilot, via EBL, spent a substantial amount of time searching for and developing potential offset receptor sites. The Natural England adviser and numerous ecological consultants also noted that considerable time was required for identifying offset receptors. Towards the end of the pilot, the pilot hosts felt that they were developing a substantial database of potential receptor sites and that more providers were creating management plans in response to the demand for these within the CSWAPO pilot area. This was reducing the amount of time required to find potential offset providers.

#### Determining offset costs

When securing a biodiversity offsetting scheme within CSWAPO the number of biodiversity units are detailed within the s.106 agreement with an option to find and fund an appropriate biodiversity offsetting scheme (to be approved by the LPA) or to pay the financial sum to the LPA.
Appendix 5 to Volume 1 includes the generic data which the pilot used to estimate the potential precautionary cost of offsets for any residual loss. This was drawn from work undertaken by the LBAP partnership in 2010, which was in turn informed by costs collated from Higher Level Stewardship (HLS) schemes and Biodiversity Implementation Plan data.

These generic management costs per hectare are combined with other anticipated offset scheme costs, including site survey, management plans, legal fees, insurance contribution and administration to inform the financial payment option within the s.106. The management costs were not always considered appropriate and were considered by the pilot’s hosts to be likely underestimates of the actual management costs involved. The precautionary nature of the calculation was intended to mitigate this until a better evidence base could be gathered. It was acknowledged that securing individual offset schemes would likely to be less costly than paying the commuted sums.

One of the drivers for including this financial option was to reduce delays to development due to the general lack of offset receptor supply. The pilot hosts hoped that as generic offset costs become more widely acknowledged and more costed management plans became readily available, financial compensation costs would phase out and developers would find and fund individual offsets.

Within the pilot programme financial contributions were the most commonly used mechanism within CSWAPO. The LPA ecologists calculated a precautionary offset requirement in hectares and, using the best available generic data, would estimate the likely management cost of this precautionary offset. This was to be included within the s.106. These costs were used to form the basis of a commuted sum payment option which could be paid to the LPA with no delays and would then be used to secure an appropriate offset scheme.

A number of developer representatives, LPA ecologists and planning officers referred to instances where the precautionary financial payment option entered into the s.106 was higher than expected. It seems that in most instances these higher than expected costs were due to the application of the metric which accounted for the biodiversity impacts of specific developments more effectively that the counterfactual situation of current practice. The pilot hosts and LPA ecologists noted that the increased cost was largely a reflection of the failure of current compensation practice to address biodiversity lost via development and the fact that the metric provided a more comprehensive understanding of biodiversity impact.

One of the impacts of these higher than expected costs was that other aspects of developer contributions (such as affordable housing, SUDS\(^\text{11}\) and infrastructure) had to be reduced in some instances. In effect, there was seen to be a fixed pot of money available for planning gain, to maintain financial viability of the development; the allocation of this pot was flexible based on the decisions of the planning case officer, with priorities informed by other officers including the LPA ecologist. If the amount of money for biodiversity increased, then other aspects had to decrease.

One of the impacts of this precautionary approach was that if the viability assessment and planning contributions were assessed using a precautionary biodiversity offsetting sum, and a specific scheme was then secured for a lower price (rather than paying this financial option to the LPA), the difference in cost was not reallocated back into the developer contribution ‘pot’ for other planning gain. The LPA therefore risked losing out on total developer contributions using this approach.

One developer representative within the pilot believed that the increased costs for

\(^{11}\text{Sustainable Urban Drainage schemes}\)
biodiversity were potentially very significant and that the current process of introducing these costs during the planning process impacted upon the viability of the development. It was suggested that increased biodiversity costs should be included within any viability considerations and potentially within the Community Infrastructure Levy (CIL) – the benefit of this being that these processes occur upfront and can be more readily accounted for within the business plan for a specific development. From discussion with the pilot hosts, it became apparent that biodiversity offsetting could not be delivered through CIL as monies would not be ring-fenced to compensate for the biodiversity that was to be lost.

The pilot hosts noted that they expect these challenges to reduce and that there are three possible mechanisms for this:

1. Improvements to the evidence for offset costs.
2. Requiring the use of the metric (Biodiversity Impact Assessment) prior to submission, so that the potential offset costs are calculated and known in advance and can be factored into the development planning.
3. Biodiversity offsetting calculations could be considered in strategic planning documents, such as site allocation considerations - the pilot is currently exploring this within one LPA area.

Costs for offset providers

Discussions with potential offset providers within CSWAPO indicated that there was significant potential for demand for funding of biodiversity enhancements to be secured via biodiversity offsetting. Although demand and interest was present, there were a number of obstacles related to generating a viable land supply. In particular, uncertainty of timescales until the funding for the offset scheme is secured once a site has been registered, and the need to ideally develop management plans in advance of receipt of funding.

2.7 Ecological implementation and monitoring

Although no offsets were implemented during the pilot programme, six applications received permission which included a requirement to deliver an identified amount of conservation credits, and a number of others were investigating biodiversity offset receptor options prior to the application being determined. It was felt by the pilot hosts that these biodiversity outcomes were an improvement on current processes and meant that, in addition to the observed on-site improvements, there were potentially substantial biodiversity benefits emerging from the pilot. This view was supported by most of the stakeholders who were interviewed.

The only exception was a stakeholder who felt that the habitat based metric oversimplified the ecological system and that it was therefore not an accurate representation of no-net-loss.

2.7.1 Monitoring no-net-loss

The metric can also be used to quantify and monitor biodiversity impacts across an authority. As previously noted, CSWAPO have applied the metric to a large number of applications (there were calculations available on 63 developments by the end of the pilot programme). As part of this process they have been recording the impact scores on each of these applications. These data provide a summary of biodiversity impact during the period of the CSWAPO pilot. Table 5 summarises the results of this monitoring process and shows that if the 63 applications that were submitted during the pilot programme were approved they would result in a cumulative loss of 847 biodiversity units across 731.3 ha. This is equivalent to the loss of 70.5 ha of broad-leaved semi-natural woodland in moderate condition or 105.8 Ha of species rich semi-improved neutral grassland in moderate condition.

The figures also suggest that across all developments (including major and minor developments) the average application will result in the loss of approximately 8.32 biodiversity units; this is equivalent to 1.04 ha of semi-improved neutral grassland in moderate
condition. The data also show that over 91% of all applications will result in the loss of some biodiversity and that 53% of this loss will be over 5 biodiversity units.

Not all these applications will necessarily be permitted and these figures do not include the compensatory effects of off-site compensation. However, the value of the figures presented below (see Table 5) is that they provide a consistent and relatively simple quantification of the pattern of biodiversity loss across an authority, something which is generally not currently available.

There are no comparable data to assess how representative this impact is across England. However, the CSWAPO LPAs are atypical nationally in that they have very high quality ecological data and have retained a large team of ecologists. This means that this predicted loss is more likely to be at the lower end of any national comparison.

### Table 5: Summary of biodiversity impact of proposed planning permissions within CSWAPO

(Source: CSWAPO)

<table>
<thead>
<tr>
<th>All developments</th>
<th>Total area of developments (ha)</th>
<th>Number of biodiversity units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total = 63 sites</td>
<td>731</td>
<td>-847</td>
</tr>
<tr>
<td>Range</td>
<td>0.02 to 307</td>
<td>+8.58 to -331</td>
</tr>
<tr>
<td>Average</td>
<td>6.8</td>
<td>-8.3</td>
</tr>
</tbody>
</table>

Note: Average impact excludes one outlier with a very large impact (Source: CSWAPO)

The CSWAPO data also provide some comparison of different scales of development and suggest that the larger the application the larger the total impact; however impact per hectare is on average higher for smaller applications (see Table 6).

### Table 6: Comparison of average impact per hectare based on development type within CSWAPO

(Source: CSWAPO)

<table>
<thead>
<tr>
<th></th>
<th>Major large scale</th>
<th>Major small scale</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average impact</td>
<td>-16</td>
<td>-5</td>
<td>-2.1</td>
</tr>
<tr>
<td>(biodiversity units)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average impact per hectare</td>
<td>-1.4</td>
<td>-2.1</td>
<td>-5.8</td>
</tr>
</tbody>
</table>

Note: Average impact for all major applications excludes one outlier (Source: CSWAPO)

#### 2.8 Lessons

The following lessons emerged from the CSWAPO pilot:

- The metric is an effective form of biodiversity impact assessment.
- The metric results in greater biodiversity compensation requirements than current compensation practice.
- A strong local interpretation of NPPF can incentivise the use of biodiversity offsetting within a significant number of applications.
- The provision of training for ecological consultants is valuable and supports the use of the metric and biodiversity offsetting.
- There remain challenges to the development of a mature offset market and this increases the complexity of agreeing offsite compensation packages.
- There is potential demand from offset providers if it can be shown be economic for them.

#### 2.9 Status of the pilot after the pilot programme

It was agreed by CSWAPO that the implementation of biodiversity offsetting throughout the sub-region will continue. The only possible major change identified will be the formalisation of the biodiversity offsetting strategy should national policy support the use of mandatory
biodiversity offsetting.

## 2.10 Case studies

The following are summaries of live planning applications within the pilot that tested aspects of biodiversity offsetting. They have been anonymised due to the sensitive nature of the cost and planning information.

It should be noted that all of the calculations presented here are based on the metric that was being used at the time. As the pilot progressed and the metric was improved the calculations changed.

This means that the case studies that applied the metric within the earlier stages of the pilot do not include down-trading aspects and sometimes do not fully account for risk factors.

### Case Reference: CSWAPO1

<table>
<thead>
<tr>
<th>Project summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of development:</strong> Major small scale development - Residential</td>
</tr>
<tr>
<td><strong>Area of development:</strong> 5.1ha</td>
</tr>
<tr>
<td><strong>Date of original application:</strong> January 2012</td>
</tr>
<tr>
<td><strong>Date approval granted:</strong> December 2013</td>
</tr>
<tr>
<td><strong>Biodiversity units to be lost:</strong> Approximately 3.4</td>
</tr>
<tr>
<td><strong>Details of any offset:</strong> Approximately £23,000 secured.</td>
</tr>
</tbody>
</table>

### Summary of development

Outline planning application for up to approximately 80 dwellings including with associated access, roads and infrastructure.

### Reason for using the biodiversity offsetting approach

Required due to the identification of significant harm by LPA ecologists. There were a number of objections to this development for non-biodiversity issues. The applicant was said to be keen to resolve issues related to biodiversity.

### Summary of biodiversity impacts, including offsite compensation

The development would impact on a Local Wildlife Site (LWS) and the LPA ecologists recommended refusal due to its designation as a county important LWS. The site was allocated within the local planning policy, so it was felt likely that permission was always going to be granted.

The LPA ecologist, consultant ecologist and developer undertook discussion on how to reduce impact from the development and a revised scheme came forward. The revised scheme retained more of the LWS, and enhanced and recreated a larger proportion of the biodiversity value of the site. The redesign reduced the total loss to approximately 2 hectares of LWS.

The LPA ecologists recommended biodiversity offsetting to compensate for the residual loss if the planning officer was minded to approve and that this should be undertaken through a s.106 agreement. This had been approved and a financial offset proposed, including appropriate wording within the s.106 agreement.

Permission was not granted until December 2013. The biodiversity offsetting requirement was resolved in September 2012. At this time, the pilots had yet to develop their database of potential offset receptors, or a process for searching for sites. Therefore, a decision was made to secure a financial payment for the offset. WCC are to secure the offset using these funds.

### Evaluation of the biodiversity offsetting approach

Some stakeholders noted concerns that biodiversity offsetting had supported the application by providing a viable option for compensation. Discussions with LPA ecologists indicated that although they recognised this as a potential issue, they had always recommended refusal. It was considered that due to the prior allocation of the site in planning policy, it was always likely that the permission would be approved. However, they were comfortable that the offset was a last resort.

This application was dealt with relatively early into the pilot programme and it is apparent that all those involved were finding their feet somewhat. Changes to the metric were also felt to be significant as it meant the ‘impact’ changed a number of times. This meant that the stakeholders interviewed were of the opinion that, in this instance, the metric actually lengthened the amount of negotiation that was
required.
The planning officer noted that the metric was a useful tool for understanding impacts, but that in terms of what should be done it was less useful as this required ecological knowledge. The pilot hosts acknowledged that some of the challenges within this case were due to it being one of the first uses of the metric in the area. The planning officers have now been made more aware of the metric and related processes.

The most significant issue was the lack of clarity around the costs of the final offset. The lack of good evidence or a ready offset site meant that estimates were required and these changed over time. The worst-case scenario also put pressure on the viability of the application and led to pressure on other aspects of planning gain.

A potential offset was identified at an early stage, although this has not yet been finalised. The pilot hosts hope that prior to the commencement of development a more appropriate offset scheme, closer to the development site will become available.

Notes
The issue with this application seems to be the misallocation of this site within local planning policy. The use of the metric at the stage of plan development might have addressed this.

The use of the metric resulted in a reduced impact helping to produce an improved layout.

---

**Case Reference: CWSWAP02**

**Type of development:** Major large scale development - Mixed use

**Area of development:** approx. 5.3ha

**Date of original application:** March 2011

**Date approval granted:** August 2013

**Biodiversity units to be lost:** Approximately 20.4

**Details of any offset:** s.106 payment of approximately £18,000

**Summary of development**

Outline application for a mixed use development comprising of approximately 2ha retained habitat, 2ha development area and 1ha recreated habitat.

**Reason for using the biodiversity offsetting approach**

Recommended by LPA ecologists after the application was submitted.

**Summary of biodiversity impacts, including offsite compensation**

The development site was part LWS (notified after the application was submitted). The metric was used to inform discussion on appropriate and achievable on-site compensation measures, which were then agreed to include habitat creation involving grassland including translocation, wetland, trees, in addition to some habitat retention and restoration. It was agreed that the residual biodiversity loss would be offset using biodiversity offsetting, and as per CSWAPO1 a financial payment was to be secured within the s.106 agreement. This was agreed as a fee for approximately £18,000 to be paid to be WCC in March 2012, which would then be used to secure a biodiversity offsetting scheme.

**Evaluation of the biodiversity offsetting approach**

Interviews suggested that biodiversity offsetting was easy to apply in this case as the developer was willing to make a contribution to on-site measures, partly as there were other issues affecting the application and biodiversity offsetting was viewed as a simple way to address biodiversity issues, together with on-site and near site enhancements.

The use of the metric, and offsetting, is likely to have helped enable the application and ultimately for the development to proceed (not yet commenced) – the notification of the site as a Local Wildlife Site after the application was submitted was instrumental and could have prevented the development.

From the available evidence, it appears that the development will deliver net gain in biodiversity once a biodiversity offsetting scheme has been secured, and more than would have been achieved (in terms of amount and guarantee of management) than if the metric was not used. The identification of a receptor site for the offset payment was opportunistic as is a site owned by the County Council.
Notes
The application was called in and the subject of an inquiry. The use of biodiversity offsetting was approved by the Inspector.

Case Reference: CSWAPO3

Project summary

<table>
<thead>
<tr>
<th>Type of development:</th>
<th>Major large scale development – Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of development:</td>
<td>11ha</td>
</tr>
<tr>
<td>Date of original application:</td>
<td>June 2013</td>
</tr>
<tr>
<td>Date approval granted:</td>
<td>November 2013</td>
</tr>
<tr>
<td>Biodiversity units to be lost:</td>
<td>Approximately 5.2</td>
</tr>
<tr>
<td>Details of any offset:</td>
<td>Biodiversity offsetting secured by s.106 agreement with an option to find a scheme or pay approximately £80,000 to the LPA to secure a scheme.</td>
</tr>
</tbody>
</table>

Summary of development

Outline planning application for an urban extension comprising approximately 250 new homes with public open space, landscaping, new access and highways and associated ancillary development.

Reason for using the biodiversity offsetting approach

At the pre-application discussion it was clear that biodiversity offsetting would be necessary. The LPA ecologist required the use of the metric.

Summary of biodiversity impacts, including offsite compensation

The metric was used from pre-application stage. As the site was mostly arable land, there was a feeling that there is not going to be that much of an impact - but using the metric identified a higher than expected potential impact.

There were discussions between LPA ecologists and consultant ecologists around the sort of habitats that were to be created on-site and how long it would take them to be in good condition. The issue of whether gardens and amenity grassland should be accounted for was also raised. It was agreed that both were low distinctiveness and that it was not possible to ensure they would reach good condition, so they were recorded as poor. These negotiations took a fair amount of time, but were ultimately resolved and set the standards for habitats assessment within the metric that were used across the pilot area.

To compensate for the residual biodiversity loss, biodiversity offsetting has been secured within the s.106 agreement with an option to either find a bespoke biodiversity offsetting schemes or pay the precautionary LPA fee of £80,000 as part of the s.106. No offset had been identified before the end of the pilot programme as the development still requires reserved matters approval from the LPA, but this work is understood to be ongoing and a solution likely to be forthcoming.

Evaluation of the biodiversity offsetting approach

The LPA ecologist felt that the use of the metric provided a framework to discuss ecological concerns that led to improved biodiversity outcomes.

Notes
n/a

Case Reference: CSWAPO4

Project summary

<table>
<thead>
<tr>
<th>Type of development:</th>
<th>Minor development - Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of development:</td>
<td>approximately 0.5ha</td>
</tr>
<tr>
<td>Date of original application:</td>
<td>September 2013</td>
</tr>
<tr>
<td>Date approval granted:</td>
<td>Not granted during pilot programme</td>
</tr>
<tr>
<td>Biodiversity units to be lost:</td>
<td>Approximately 1.2</td>
</tr>
<tr>
<td>Details of any offset:</td>
<td>Biodiversity offsetting recommended to be secured within a S.106</td>
</tr>
</tbody>
</table>

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26
### Summary of development
Small non-linear infrastructure development.

### Reason for using the biodiversity offsetting approach
Required by LPA ecologist in line with biodiversity offsetting procedures – biodiversity impact assessment (BIA) calculations to be undertaken on all applications which require ecological habitats surveys.

### Summary of biodiversity impacts, including offsite compensation
Small area of biodiversity loss, but this loss was a large percentage of the value of the site. LPA ecologists initially recommended consideration be given to increased on-site enhancements, but this was not felt to be possible due to the nature of the development which required on-site vegetation to be cleared.

Due to the high percentage of biodiversity loss and the lack of scope for any on-site enhancements, the LPA ecologists recommended a biodiversity offsetting scheme be secured, especially considering later discussion that 100% of the site may need to be cleared. On enquiring at the potential costs, the applicant was informed it could be in the region of £30,000 to compensate for the loss of the units through restoration of 1ha of grassland and management for 30 years, a number generated through experience of other biodiversity offsetting schemes. The applicant limited their offer to £10,000 citing the voluntary nature of the pilot programme, the lack of evidence for the £30,000 figure and the impact on the viability of their development. The applicant was also keen to see support for biodiversity offsetting in planning terms, which was provided.

Although a potential low-cost offset site was identified, the applicant was still reluctant to pay for management of a site and so compensate for the permanent impact of the development. A final offset requirement was not agreed before the end of the pilot programme.

### Evaluation of the biodiversity offsetting approach
Discussions with the applicant and consultant indicated significant frustration with the requirement to use biodiversity offsetting and the increased costs that were emerging as a result.

### Notes
n/a

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<table>
<thead>
<tr>
<th>Case Reference: CSWAPO5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
</tr>
<tr>
<td><strong>Type of development:</strong> Major large scale development - Business and light industry</td>
</tr>
<tr>
<td><strong>Biodiversity units:</strong> 32</td>
</tr>
<tr>
<td><strong>Date of original application:</strong> August 2012</td>
</tr>
<tr>
<td><strong>Date approval granted:</strong> Not granted during pilot programme</td>
</tr>
<tr>
<td><strong>Details of any offset:</strong> Requirement to secure an appropriate biodiversity offsetting scheme to be secured via s.106</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Summary of development</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Large scale business and light industrial development.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Reason for using the biodiversity offsetting approach</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Required by LPA ecologist due to significant impact on a range of habitats.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Summary of biodiversity impacts, including offsite compensation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Due to the significant nature of the development, a number of stakeholders had been involved in pre-application discussions. As the pilot developed these discussions included the use of the metric. The use of the metric resulted in the site scheme being revised to increase on-site compensation and reduce the offset requirement. These discussions were around the nature and extent of the landscaping and in particular which habitats should be retained on-site and which would need to be compensated for off-site. These discussions, which included a variety of species issues that were considered separately to the metric habitat assessment, were resolved after a significant amount of time. This was partly due to the scale of the impact and size and complexity of the development, and partly due to the emerging restrictions on-site which meant that some habitat types were not</td>
</tr>
</tbody>
</table>
appropriate. The pilot hosts wished it to be noted that without the metric the LPA ecologists would still have required a revision to the on-site compensation package, but that the use of the metric provided a framework for these discussions.

The offset is to be secured via a s.106 agreement, although the exact offset is to be confirmed after the application has been accepted as the current proposal was at outline stage at the end of the pilot programme.

**Evaluation of the biodiversity offsetting approach**

It appears that the use of the metric was beneficial and led to improvements on-site as well as, potentially, off-site compensation. The stakeholders interviewed were generally of the view that, despite the large impact of the development, the consideration of biodiversity had been quite good and that this was partly to do with the use of the metric.

One of the stakeholders felt that the habitat based metric underestimated the complexity of the ecological systems and that the metric may have underestimated the extent of biodiversity loss. Although, it was recognised that the total impact had been reduced by the use of the metric.

The pilot hosts noted that since this development the metric has been revised to account for potential down-trading of habitats and that if the impact of this development was calculated with an up-to-date calculator it would be significantly higher. Another stakeholder thought that the mosaic and connectivity function of the habitats affected by the application were not accounted for within the metric.

**Notes**

There were a variety of species issues that were considered separately to the metric habitat assessment. However, these species issues informed the onsite habitat compensation leading to a more informed off-site compensation requirement that was not species compensation focused.

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**Case Reference: CSWAPO6**

**Project summary**

<table>
<thead>
<tr>
<th>Type of development:</th>
<th>Major small scale development - Medical facility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biodiversity credits to be lost:</strong></td>
<td>Approximately 0.6</td>
</tr>
<tr>
<td><strong>Details of any offset:</strong></td>
<td>No offset required – impact deemed insignificant</td>
</tr>
</tbody>
</table>

**Summary of development**

The application was for the erection of a medical facility, including supported living units, car parking, landscaping and additional recreational/amenity space on the site of a former school.

The majority of the site consisted of hard-standing which had become dominated by buddleia, and rough grassland encroached by bramble. There were no biodiversity designations or records of protected species on the application site.

**Reason for using the biodiversity offsetting approach**

The biodiversity offsetting approach was applied to all development applications in the CSWAPO pilot area.

**Summary of biodiversity impacts, including offsite compensation**

A small loss of approximately 0.6 biodiversity units of low distinctiveness habitat was calculated using the metric. This was considered to be an insignificant impact due to the small unit loss, the low value habitat and the small percentage of site value. Some amendments were recommended to the landscape scheme, such as replacing ornamental varieties with native species. A management plan for the site was requested by condition.

**Evaluation of the biodiversity offsetting approach**

The use of the metric allowed quick assessment of the level of impact from the development to inform an appropriate planning decision.

**Notes**

The pilot hosts noted that creation of ‘bank’ sites in the area, or the inclusion of ‘over the counter’
credits in a national scheme, would have allowed this development to compensate for their impact more quickly.

<table>
<thead>
<tr>
<th>Case Reference: CSWAPO7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
</tr>
<tr>
<td><strong>Type of development:</strong> Major large scale development - Residential</td>
</tr>
<tr>
<td><strong>Date of original application:</strong> November 2013</td>
</tr>
<tr>
<td><strong>Date refusal:</strong> January 2014 (Green Belt)</td>
</tr>
<tr>
<td><strong>Biodiversity credits gain:</strong> Approximately 1.1</td>
</tr>
<tr>
<td><strong>Details of any offset:</strong> No offset required – all on-site compensation.</td>
</tr>
<tr>
<td><strong>Summary of development</strong></td>
</tr>
<tr>
<td>The application was for approximately 190 dwellings with associated infrastructure, including means of access, SUDs and open space.</td>
</tr>
<tr>
<td><strong>Reason for using the biodiversity offsetting approach</strong></td>
</tr>
<tr>
<td>The biodiversity offsetting approach was applied to all development applications in the CSWAPO pilot area.</td>
</tr>
<tr>
<td><strong>Summary of biodiversity impacts, including offsite compensation</strong></td>
</tr>
<tr>
<td>The majority of the site consisted of arable and improved grassland with woodland and marshy grassland to be restored or enhanced. Gain was generated by this enhancement plus the creation of a SUDs scheme incorporating species rich grassland. There was no residual loss and all compensation was secured through conditions and formation of enforceable site management plans.</td>
</tr>
<tr>
<td><strong>Evaluation of the biodiversity offsetting approach</strong></td>
</tr>
<tr>
<td>The use of the metric and negotiation led to improvements on site and the reduction of total loss; ensuring no net loss to biodiversity without the need for off-site compensation.</td>
</tr>
<tr>
<td><strong>Notes</strong></td>
</tr>
<tr>
<td>n/a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case Reference: CSWAPO8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
</tr>
<tr>
<td><strong>Type of development:</strong> Major large scale development – Mixed use</td>
</tr>
<tr>
<td><strong>Area of development:</strong> approximately 13ha</td>
</tr>
<tr>
<td><strong>Date of original application:</strong> April 2013</td>
</tr>
<tr>
<td><strong>Date of approval:</strong> not yet determined</td>
</tr>
<tr>
<td><strong>Biodiversity credits:</strong> Approximately 32 (gain)</td>
</tr>
<tr>
<td><strong>Details of any offset:</strong> Offset receptor site currently being identified.</td>
</tr>
<tr>
<td><strong>Summary of development</strong></td>
</tr>
<tr>
<td>Hybrid Planning Application (part full, part outline) for mixed use development comprising sports pitches and facilities, new sports club building and approximately 250 residential properties, public open space, landscaping and associated engineering works, and commercial uses on approximately 1.65ha of land.</td>
</tr>
<tr>
<td><strong>Reason for using the biodiversity offsetting approach</strong></td>
</tr>
<tr>
<td>The biodiversity offsetting approach was applied to all development applications in the CSWAPO pilot area.</td>
</tr>
<tr>
<td><strong>Summary of biodiversity impacts, including offsite compensation</strong></td>
</tr>
<tr>
<td>The development potentially would have an impact on predominately low distinctiveness habitats, consisting of improved grassland and amenity land; impact to existing waterbodies is to be compensated for on-site. The LPA ecologist discussed the potential to increase the level of on-site enhancement, this was not considered viable with the required level of open space and replacement</td>
</tr>
</tbody>
</table>
spots facilities. Therefore, despite the low value of habitats present, due to the scale of the impact a biodiversity offsetting scheme was requested to be secured as part of the s.106 agreement.

To inform the viability assessment and to allow commencement of development to proceed smoothly once permission had been granted, the applicant requested that EBL source a suitable biodiversity offsetting receptor site, complete with management plan and costs, prior to the determination of the planning application. This had not happened before the end of the pilot programme.

**Evaluation of the biodiversity offsetting approach**

The metric showed that impacts to low distinctiveness habitats can still result in a large impact to biodiversity. The lack of readily available offsets sites took some time, though this was not thought to be significant as it allowed time for other issues to be resolved.

**Notes**

n/a
3. Devon

3.1 Context

3.1.1 Pilot name
Devon Biodiversity Offsetting Pilot.

3.1.2 Pilot hosts
The three pilot areas (Figure 5) which made up the Devon Pilot were each hosted by the following organisations and coordinated, with a light touch, from Devon County Council:

- North Devon UNESCO Biosphere Reserve
- Teignbridge District Council for South Devon Pilot
- East Devon District Council for Exeter & East Devon Growth Point Pilot

![Figure 5: Locations of the three Devon pilot areas](source: Devon Pilot Area Expression of Interest (EoI))

3.1.3 Pilot partners
Partners in each of the Devon pilot areas are listed in Table 7.

### Table 7: Partners in each of the Devon pilot areas

<table>
<thead>
<tr>
<th>North Devon UNESCO Biosphere Reserve (North Devon Pilot)</th>
<th>South Devon Pilot</th>
<th>Exeter and East Devon Growth Point (East Devon Pilot)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partners were:</td>
<td>Partners forming the Pilot group were:</td>
<td>Partners on the Green Infrastructure Delivery Group were:</td>
</tr>
<tr>
<td>• Devon County Council</td>
<td>• Devon County Council</td>
<td>• Devon County Council</td>
</tr>
<tr>
<td>• Mid Devon District Council</td>
<td>• Teignbridge District Council</td>
<td>• East Devon District Council</td>
</tr>
<tr>
<td>• North Devon District Council</td>
<td>• Natural England</td>
<td></td>
</tr>
<tr>
<td>• Torridge District Council</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Governance arrangements of the pilot

Governance arrangements for all three Devon pilots were based on existing partnerships (Table 8).

**Table 8: Governance arrangements of the Devon pilot**

<table>
<thead>
<tr>
<th>Devon Pilot area</th>
<th>Governance arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Devon pilot programme</td>
<td>Technical stakeholder group</td>
</tr>
<tr>
<td>North Devon UNESCO Biosphere Reserve (North Devon)</td>
<td>Working Group</td>
</tr>
<tr>
<td>South Devon</td>
<td>Based on South Hams Special Area of Conservation (SAC)</td>
</tr>
<tr>
<td>South Devon</td>
<td>Steering Group with additional expert representation</td>
</tr>
<tr>
<td>East Devon</td>
<td>Exeter and East Devon Growth Point Partnership</td>
</tr>
</tbody>
</table>

### Ecological context of the pilot

The ecological context of the pilot areas and the differences between them are briefly described in Table 9. The distribution of habitat types across is shown in Figure 6.

**Table 9: Ecological context of the Devon pilot areas**

<table>
<thead>
<tr>
<th>Devon Pilot area</th>
<th>Ecological context</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Devon UNESCO Biosphere Reserve (North Devon)</td>
<td>The pilot area (also the Biosphere Reserve area) covered 2200 sq Km of land and 1300 sq Km of marine area including Lundy Island. The area was based on the catchments of the Rivers Taw and Torridge and was defined by the land of Devon that drains to the north coast. Habitats included: marine, estuarine and coastal (including rocky foreshores, mud and sand flats, saltmarshes, grazing marsh, dune systems and coastal heath), ancient and semi natural woodland, Culm grassland and the uplands of Exmoor and Dartmoor. The area intersected with 4 district areas and 2 National Parks.</td>
</tr>
<tr>
<td>South Devon</td>
<td>The geographic spread of the South Devon pilot was broadly based on the South Hams Special Area of Conservation (SAC), designated for the largest colony of greater horseshoe bat (GHB) in England. The area comprised several separate but linked component Sites of Special Scientific Interest (SSSIs) containing significant GHB maternity roosts. The bats were dependent on a landscape-scale area around the roosts, for feeding and commuting. Strategic flyways and key foraging / sustenance zones had been identified. While the roost sites were protected through the SAC designation, the supporting habitat in the landscape required protection through the Habitats Regulations and the planning process. The project area was also of significant importance for cirl buntings, a scarce and localised breeding bird in the UK, confined almost entirely to South Devon.</td>
</tr>
<tr>
<td>Exeter and East Devon Growth Point (East Devon)</td>
<td>The Exeter and East Devon Growth Point had a commitment to sustainable growth. Major habitat and landscape features within the area were the Exe Estuary Special Area of Conservation (SPA) and Ramsar site and the Pebblebed Heaths SAC / SPA. The area was also characterised by traditional rolling agricultural landscapes with meadows, woods and hedgerows. Growth Point partners were committed to a Green Infrastructure framework for an accessible network of green spaces.</td>
</tr>
</tbody>
</table>
3.1.6 Planning and development context of the pilot

Spatial planning documents relevant to the Devon pilot

Spatial plans at the county level and for the three pilot areas are listed in Table 10.

Table 10: Devon county wide plans

<table>
<thead>
<tr>
<th>County Plan</th>
<th>Relevance to biodiversity offsetting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devon Minerals Plan 2011-2031</td>
<td>The Devon Minerals Plan 2011 – 2031 (in preparation) will contain the Council’s vision and objectives for minerals planning and provide the policy framework and site proposals to maintain the supply of minerals and limit the impacts of their working.</td>
</tr>
<tr>
<td>Devon County Minerals Local Plan (adopted 2004)</td>
<td>The Plan seeks to strike a balance between meeting society’s needs and demands for minerals and the need to minimise the impact upon the environment of mineral extraction and processing. The plan was due to lapse on 27 September 2007, but the Secretary of State directed that all but two of the Plan’s policies be saved until such time as they are superseded by new policies within the County Council’s emerging Minerals and Waste Development Framework.</td>
</tr>
<tr>
<td>Devon Waste Plan pre-submission consultation (2013)</td>
<td>Once adopted the Plan will replace the current Waste Local Plan and will cover the period up to 2031. Biodiversity offsetting is included in the text and in Policy W11 on Biodiversity and Geodiversity.</td>
</tr>
<tr>
<td>Devon County Waste Local Plan, June 2006</td>
<td>The Waste Local Plan (adopted June 2006) was due to lapse on 30th June 2009, but the Secretary of State directed that all of its policies be saved for an extended period.</td>
</tr>
</tbody>
</table>
Table 11: North Devon pilot area spatial planning documents

<table>
<thead>
<tr>
<th>LPA</th>
<th>Plan</th>
<th>Relevance to biodiversity offsetting</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Devon Council and Torridge District Council</td>
<td>North Devon and Torridge Local Plan 2011-2031 (draft)</td>
<td>This joint plan covering northern Devon refers to biodiversity offsetting in the supporting text to Policy ST11 on Enhancing Environmental Assets and to Policy DM07 on Safeguarding Open Space.</td>
</tr>
<tr>
<td>North Devon District Council</td>
<td>North Devon Local Plan 1995-2011 (adopted)</td>
<td>To be replaced by the North Devon and Torridge Local Plan 2011-2031.</td>
</tr>
<tr>
<td>Mid Devon District Council</td>
<td>Mid Devon LDF Core Strategy (Part 1) 2026 (adopted)</td>
<td>Identifies the need for 340 dwellings per year, amounting to 6800 dwellings over a 20 year period between 2006 and 2026.</td>
</tr>
<tr>
<td></td>
<td>Mid Devon Local Plan Part 3 Development Management Policies (adopted 2013)</td>
<td>While the need for regard to biodiversity is mentioned in relation to several policies, there is no reference to biodiversity offsetting.</td>
</tr>
<tr>
<td>West Devon Borough Council</td>
<td>West Devon Borough Council LDF Core Strategy Development Plan Document 2006-2026 (adopted 2011)</td>
<td>Sets out the need for 4400 dwellings. The Employment Land Review identified the need for 38.2 ha of land for warehousing, manufacturing and offices during the plan period. No reference to biodiversity offsetting.</td>
</tr>
<tr>
<td></td>
<td>West Devon Borough Council Local Plan Review, March 2005: As amended by the Core Strategy April 2011 (adopted)</td>
<td>This document and the Core Strategy form the Development Plan for West Devon.</td>
</tr>
<tr>
<td></td>
<td>Dartmoor National Park Authority Development Management and Delivery DPD (adopted 2013)</td>
<td>Part 2, covering development management policies, makes reference to the mitigation hierarchy and biodiversity offsetting in the supporting text.</td>
</tr>
<tr>
<td></td>
<td>Exmoor National Park Draft Local Plan November 2013</td>
<td>Reference made to biodiversity offsetting in policy CE-S2 on Biodiversity.</td>
</tr>
</tbody>
</table>

Table 12: South Devon pilot area spatial planning documents

<table>
<thead>
<tr>
<th>LPA</th>
<th>Plan</th>
<th>Relevance to biodiversity offsetting</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Hams District Council</td>
<td>South Hams LDF Core Strategy (adopted 2006)</td>
<td>Plan to be superseded. No reference to biodiversity offsetting, however policies cover protection for biodiversity.</td>
</tr>
<tr>
<td></td>
<td>South Hams LDF Development Policies DPD (adopted 2010)</td>
<td>Policy DP5 on Biodiversity and Geological Conservation provides for on-site mitigation and off-site compensation for loss of habitats or species in relation to development.</td>
</tr>
<tr>
<td>Teignbridge District Council</td>
<td>Teignbridge Local Plan 2013 (adopted 6 May 2014)</td>
<td>Biodiversity offsetting is covered in the supporting text to policy EN8 on Biodiversity Protection and Enhancement, in Policy EN11 on Legally Protected and Priority Species and in the supporting text to a site specific policy. Policies EN9 on important habitats and features and EN10 on the South Hams SAC also require protection for biodiversity.</td>
</tr>
<tr>
<td>Torbay Council</td>
<td>A Landscape for Success: The strategy provides for the creation of 5,000-</td>
<td></td>
</tr>
</tbody>
</table>
Table 13: Planning guidance for South Hams SAC of relevance to the South Devon pilot area

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Document</th>
<th>Relevance to biodiversity offsetting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural England</td>
<td>South Hams SAC Greater horseshoe bat consultation zone planning guidance, Natural England, 2010</td>
<td>Provides advice to ensure that the relevant planning authorities are in a position to meet statutory obligations with regard to the greater horseshoe bat.</td>
</tr>
</tbody>
</table>

Table 14: East Devon pilot area spatial planning documents

<table>
<thead>
<tr>
<th>LPA</th>
<th>Plan</th>
<th>Relevance to biodiversity offsetting</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Devon District Council</td>
<td>The New East Devon Local Plan 2006-26 Proposed Submission (Publication), November 2012</td>
<td>Biodiversity offsetting is included within the text, as well as in Strategy 47 on Nature Conservation and Geology and Strategy 50 on Infrastructure Delivery.</td>
</tr>
<tr>
<td>Exeter City Council</td>
<td>Exeter City Council Core Strategy (adopted 2012)</td>
<td>Plan period covers 2006-2026 and provides for around 60 ha of employment land, at least 12,000 dwellings and retail floor space. No reference to biodiversity offsetting but Policy CP16 sets out the mitigation hierarchy and refers to biodiversity enhancement areas equivalent to offset target sites.</td>
</tr>
<tr>
<td>Teignbridge District Council</td>
<td>Teignbridge Local Plan 2013-2033 Proposed submission, November 2012</td>
<td>Plan is due to be adopted in 2014. Biodiversity offsetting is covered in the supporting text to policy EN8 on Biodiversity Protection and Enhancement, in Policy EN11 on Legally Protected and Priority Species and in the supporting text to a site specific policy.</td>
</tr>
</tbody>
</table>

Table 15: Planning guidance of relevance to the East Devon pilot area

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Document</th>
<th>Relevance to biodiversity offsetting</th>
</tr>
</thead>
</table>
3.1.7 Biodiversity offsetting basic information

The biodiversity offsetting approach and use of the metric were promoted to planners in the LPA and to developers in all three pilot areas. The metric was trialled with 10 development proposals (four in North Devon, four in South Devon and two in East Devon). Two of these applications were refused planning permission (for non-biodiversity reasons). A further four cases were granted permission, one with an offset (case study Devon1) although this was not delivered during the pilot programme. Another case included on-site compensatory habitat (case study Devon2). The other four cases were ongoing; one of these included landscaping and green infrastructure that equated to biodiversity losses (case study Devon3) and in another the developers chose not to proceed with using the metric (case study Devon4).

Several additional developments were identified for possible application of biodiversity offsetting and the use of the metric. At the end of the pilot programme no biodiversity offsetting schemes had come to fruition, although one was planned (case study Devon2) and another involved financial contributions for off-site habitat enhancements (case study Devon5). Potential offset providers had been identified in all three pilot areas although none had developed sufficiently to require accreditation.

3.2 Information sources and data collection

A total of 28 interviews was undertaken during the course of the pilot with a range of stakeholders (Table 16).

Table 16: Devon summary of interviews undertaken

<table>
<thead>
<tr>
<th>Interview points</th>
<th>Interviewees in each stakeholder group</th>
</tr>
</thead>
<tbody>
<tr>
<td>The setting up of the pilot group (Stage 1)</td>
<td>Three area pilot hosts</td>
</tr>
<tr>
<td>The development of the biodiversity offsetting</td>
<td>County pilot host and three area pilot hosts</td>
</tr>
<tr>
<td>strategy (Stage 2)</td>
<td>Three Natural England advisers</td>
</tr>
<tr>
<td>Pilot update (August 2013)</td>
<td>South Devon pilot host</td>
</tr>
<tr>
<td>Pilot updates (November 2013)</td>
<td>Three area pilot hosts</td>
</tr>
<tr>
<td>Use of the metric (Stage 3)</td>
<td>Three area pilot hosts</td>
</tr>
<tr>
<td></td>
<td>Three other metric users (NGOs, developers and consultants)</td>
</tr>
<tr>
<td>Application of biodiversity offsetting within a</td>
<td>One developer</td>
</tr>
<tr>
<td>project (Stage 3)</td>
<td></td>
</tr>
<tr>
<td>Final reflective interview at the end of the pilot</td>
<td>County pilot host and three area pilot hosts</td>
</tr>
<tr>
<td>(Stage 3)</td>
<td>Three Natural England advisers</td>
</tr>
</tbody>
</table>

3.3 Governance

Each of the three separate areas, which collectively formed the Devon pilot, had their own pilot host:

- The Biosphere Reserve Coordinator for the North Devon pilot area.
- The Green Infrastructure Officer, Teignbridge District Council for the South Devon pilot.
- East Devon (Exeter and East Devon Growth Point) pilot area had a change of staff. Initially the Principal Landscape Architect for East Devon District Council was the pilot host, but a Green Infrastructure Project Manager was appointed in the last six months of the pilot programme, who then assumed this role.
- In addition the Devon County Council (DCC) County Ecologist coordinated the overall Devon pilot.

In all cases hosting the biodiversity offsetting pilot was incorporated into existing roles.

The three areas that formed the Devon pilot were based on existing initiatives, each with established partnerships. Each partnership had reasons for wishing to pursue biodiversity offsetting. In North Devon, the UNESCO Biosphere Reserve acted as the driver for biodiversity planning policy, including biodiversity offsetting. In South Devon it was recognised that the current planning system was not effective in taking account of biodiversity and that
biodiversity offsetting provided an opportunity to deliver green infrastructure and Biodiversity Action Plan (BAP) goals. Due to the scale of planned growth in the Exeter and East Devon Growth Point, biodiversity offsetting was seen as an opportunity to achieve biodiversity benefits through green infrastructure provision while also facilitating economic development.

A Devon-wide biodiversity offsetting project pilot group met on a few occasions to assess progress and share ideas. The group tended to focus on issues within individual pilots rather than taking a strategic approach. The pilot hosts found it useful to explore ideas and to gain a collective view across the three pilot areas.

3.3.1 Nature and structure of the partnerships

Each partnership in the pilot areas took on the governance of the biodiversity offsetting pilot. While all partnerships were formal groups, none were legally constituted. In the South Devon pilot area this was covered by a specific working group based on the South Hams SAC Steering Group and invited specialists. Similarly, in the North Devon pilot area a working group was established to oversee the pilot. A delivery group (previously known as the advisory group) covered biodiversity offsetting in East Devon.

All three Devon pilot areas had the relevant Local Planning Authorities (LPAs) including the National Park Authorities involved on the steering (or working) group. Each pilot area also had a Natural England adviser. Other partners included the Environment Agency and Non-Governmental Organisations (NGOs). In most cases the partners were already involved in biodiversity or planning initiatives in the respective areas. Within the pilot groups the ecological expertise was provided by the pilot hosts, Natural England advisers and NGOs.

3.3.2 Relationship between the pilots and Natural England

Natural England took the role of providing advice, supporting development of the strategies and checking metric calculations. The need to verify offset providers did not arise in any of the Devon pilot areas.

Pilot hosts found local Natural England advisers to be very helpful in providing support, particularly with development of the strategies and commenting on text, and in accessing internal Natural England advice.

3.3.3 Relationship with Local Planning Authorities

LPA planning departments were involved in all pilots and other departments within the local authority were involved as appropriate according to circumstances. As many or most of the authorities did not have ecological staff, biodiversity input was provided through the pilot hosts.

Working across multiple authorities was found to be challenging for the South Devon pilot particularly as some authorities did not want any development while others were identified areas for growth.

All pilots were involved in influencing Local Plans. Presentations were made and meetings held to influence the planning process. In East Devon, for example, the Delivery Group gave presentations on the approach to biodiversity offsetting within the Growth Point to the Green Infrastructure Board and planners.

3.3.4 Relationship with Non-Governmental Organisations

Different NGOs were involved with each of the pilot areas. As well as contributing to the biodiversity offsetting strategies, their role included acting as potential providers of land for offsets (although the role of providers had not been developed very far by the end of the pilot programme). In South Devon, the Bat Conservation Trust (BCT) was particularly interested to see how the metric worked and how biodiversity offsetting could be implemented for the benefit of bat species.
3.4 Process and management

3.4.1 Nature of the Devon biodiversity offsetting strategies

Biodiversity offsetting strategies were produced for the three Devon pilot areas, each with a different style and emphasis reflecting the circumstances of the areas.

The North Devon pilot produced a high level strategy, which included biodiversity opportunity maps (based on the Devon Nature Map\(^2\)) showing target areas for biodiversity offsetting. It also included a mechanism for offsetting ecosystem services. The text of the strategy was finalised in August 2013 and Rebuilding Nature in the Biosphere Reserve: North Devon UNESCO World Biosphere Reserve Offsett\(^{ing} Strategy 2013-2018\) was published on the Biosphere Reserve website together with the maps in March 2014\(^{13}\).

The strategy for the South Devon pilot took the form of step-by-step guidance through the biodiversity offsetting process with a focus on priority habitats, greater horseshoe bat and cirl bunting. The pilot group agreed that there should be a simple and easy-to-use document with all relevant information in one place. This was considered important as planners would not have time to obtain and assimilate the relevant Defra documents and a spatial strategy on its own would not give guidance on the process of using the metric.

The spatial guidance in the South Devon strategy was based on the greater horseshoe bat consultation zone planning guidance, which encompassed the greater horseshoe bat flyways and sustenance zones. Similarly the initiative developed by RSPB for addressing the needs of cirl buntings within the planning system was incorporated in the South Devon pilot (it should be noted that this followed lengthy, complex discussions with the RSPB which had not been fully resolved by the end of the pilot programme). The draft South Devon Biodiversity Offsetting Pilot Guidance was produced in October 2013.

The East Devon pilot area strategy was delayed until the Green Infrastructure Project Manager was in post. Until that time, the Exeter and East Devon Growth Point Green Infrastructure Strategy provided the context for biodiversity offsetting. A first draft of the East Devon strategy, Biodiversity Offsetting Strategy for the Exeter and East Devon Growth Point, was produced in January 2014. The strategy provided the framework for using biodiversity offsetting to deliver green infrastructure. This short document was produced to enable different stakeholders to understand the benefits of biodiversity offsetting.

3.4.2 Approach to strategy preparation

The three pilot hosts developed the strategy documents with support from DCC and Natural England; pilot group members were involved in reviewing draft versions. Natural England provided a steer and commented on the strategies in terms of content and style, ensuring that biodiversity offsetting didn’t apply to statutorily designated sites and that the mitigation hierarchy was followed.

Due to the complexities of integrating species issues into the development of the South Devon strategy, a sub-group consisting of the pilot lead, DCC and Natural England took on responsibility for drafting the strategy and discussing the detail.

Development of the North Devon strategy included consultation with wildlife NGOs, community groups and a major developer. The South Devon strategy was also consulted on

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\(^{12}\) DCC’s website provides background to the Devon Nature Map: http://www.devon.gov.uk/index/environmentplanning/natural_environment/biodiversity/regionalnaturemap.htm

\(^{13}\) Version 5 is available from here
with BCT and RSPB. In North and South Devon consultation included NGOs that were also potential offset providers.

In the South Devon pilot there were differences of opinion between pilot group members as to whether the strategy should be high level, identifying opportunities for locating offsets, or a guidance document for implementing biodiversity offsetting. Other questions related to: how biodiversity offsetting linked with statutory processes for dealing with Natura 2000 sites, SSSIs and protected species; and the practicalities of addressing in perpetuity requirements. Ultimately they developed a guidance document including offset opportunities.

National policy, in the form of the National Planning Policy Framework (NPPF) and the Natural Environment White Paper (NEWP), were used to inform strategy development. These documents were used to demonstrate the policy basis for achieving no-net-loss of habitat and ideally net-gain through development. The South Devon strategy deviated from national guidance by using Phase 1 habitat types (rather than the Integrated Habitat System (IHS) classification), as this system was favoured by pilot partners in South Devon. Modifications were also made to the Farming Environmental Plan (FEP) condition assessment methodology in that condition assessments were specified for habitat types for which FEP condition assessments were not required and for habitat types not covered by the FEP guidance.

Various information and data sources were used to inform strategy development and to identify locations for targeting biodiversity offsetting. These included: Strategic Nature Areas shown on the Devon Nature Map (which identified opportunities for creation and restoration of habitats at the landscape scale); local BAPS; Devon Biodiversity Records Centre data; and Green Infrastructure strategies. In South Devon, the Natural England greater horseshoe bat planning guidance and the approaches to management of cirl bunting by RSPB were instrumental in guiding strategy development.

Sharing documents, ideas and approaches amongst the three Devon pilot areas was considered by pilot hosts to be an effective way of making progress with limited capacity. Sharing information with other pilots via Huddle also proved useful. The approach taken by Doncaster was used as a basis for the South Devon strategy and the East Devon pilot received considerable support from the Environment Bank and the Coventry, Solihull and Warwickshire pilot. Pilot hosts said that the events organised by Defra and Natural England during the first year of the pilot programme provided a useful means of sharing learning amongst the pilots.

### 3.4.3 Defra biodiversity offsetting principles

The Defra biodiversity offsetting principles informed strategy development and were reflected in the strategies (Table 17). Pilot hosts expressed concerns about the practicalities of some of the principles.

- The principle of ensuring no change to existing levels of protection for biodiversity was applied; however, pilot hosts were concerned about how the use of the metric dovetailed with the application of the Habitats Regulations.

  Natural England advisers were clear on how this should work, but they recognised the difficulties faced by those not regularly involved in the requirements of the Habitats Regulations. Experience in the North and South Devon pilot areas suggested that statutory requirements should be dealt with first and separately to the metric. Pilot hosts were aware that this sometimes limited the opportunity to incorporate biodiversity offsetting requirements into the planning proposals (as shown in case study Devon4). The South Devon pilot host suggested that there might be opportunities to use the metric alongside the Habitats Regulations, but this matter was subject to debate with Natural England and had not been resolved by the end of the pilot programme.

- Pilot hosts discussed the need to ‘prove’ additionality and how this might be achieved.
• The pilot hosts considered ‘in perpetuity’ to be a difficult principle to apply in practice. A 100 year time span was proposed in an early draft of the South Devon strategy; however it was considered that this would not be accepted by planners and developers. From previous experience, 10 years was the longest term achieved for compensatory habitat creation in Devon prior to the biodiversity offsetting pilots. Each of the Devon strategies indicated that the offset should ideally last for in perpetuity or be managed for the long term; the North Devon strategy specified that offsets should last for a minimum of 25 years.

• Apart from North Devon, local communities were not involved in developing the strategies or in guiding the locations for potential offsets. In South and East Devon the pilot hosts felt that they did not have time to consult with local communities.

### 3.4.4 Use of the metric

Pilot hosts encouraged the use of the metric in planning applications with LPA planning officers, biodiversity officers, developers and ecological consultants. In some instances it was the ecological consultants who developed the approach, particularly as they could see the business potential in using it.

In North Devon, the pilot host found that more developers were willing to use the metric as the pilot programme progressed. Some developers felt that it was a good tool and that it helped them to look at the management of biodiversity within planning proposals. Other developers considered the metric to be too onerous and so chose not to use it.

To encourage the use of the metric the pilot hosts promoted biodiversity offsetting with developers as early as possible (preferably at the pre-application stage). Pilot hosts found the metric fairly easy to apply except where appropriate information was not presented in ecological assessments. The hosts highlighted the issue of competence of some ecological consultants, who might be experienced, but did not necessarily understand how mitigation or compensation should be applied. In one case, although the ecological consultant had considered biodiversity offsetting, they had not used the metric. In another case applicants had undertaken site surveys, but not condition assessments; these had to be carried out afterwards.

Case study Devon2 showed how the metric could be used to achieve no-net-loss or net-gain of biodiversity. The pilot hosts felt that the enhancements would not have been identified without the metric. In another example (case study Devon1) the metric showed that there was a shortfall in replacement habitat units, which was then addressed by finding additional land for habitat restoration.

Use of the metric with more complicated development proposals highlighted that indirect impacts on habitats, including the functionality of habitat remaining within the development area, were not taken into account. Another issue was the need to agree on the distinctiveness and condition of habitats affected by a development. For one case in North Devon the pilot working group went on site to undertake the condition assessment, check consistency of the approach between individuals and to compare with the ecological consultant report.

In one planning case, prior to the use of the metric, the Natural England adviser encouraged the LPA to consider whether the significance of the loss of priority habitat¹⁴ resulting from a

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¹⁴ Priority habitat on the 541 England Biodiversity List of habitats considered to be of principal importance. The purpose of the list is to guide decision-makers in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England when carrying out their normal functions.
The proposed development was acceptable to the LPA in implementing its duty to conserve biodiversity. If the response had been that the loss was acceptable to the LPA then Natural England would have recommended like-for-like replacement of the priority habitat (to ensure no-net-loss). However, while the loss of the priority habitat was unavoidable within the proposed development, in the end the application was refused permission, so this matter was not fully tested.

One of the intentions of the South Devon pilot was to test the metric with species requirements (specifically the greater horseshoe bat and cirl bunting) by encouraging the design of new habitat within offset sites to meet the needs of species; this might have meant that more (but never less) habitat was required than originally proposed through the metric. This species-led approach was considered by the pilot host to ensure the viability of species populations as an integral component of biodiversity offsetting. In practice, this approach was not fully tested during the pilot programme as the greater horseshoe bat was covered by requirements under the Habitats Regulations and the RSPB had measures in place for addressing impacts on cirl bunting.

Metric users reported the metric to be logical and easy to use, and raised the following points:

- It was helpful to deal with quantitative data rather than a subjective interpretation of biodiversity losses.
- It was difficult to specify on-site habitat provision at the outline application stage where this level of detail about the development was unknown.
- Risk factors built into the metric for biodiversity offset provision worked well.
- In a case involving the Habitats Regulations, one metric user suggested that there should be one set of metrics that covered both statutory requirements and residual biodiversity issues.

Use of the metric was considered by pilot hosts and Natural England advisers to provide a more transparent approach for dealing with biodiversity issues compared to current practice. In planning cases where the metric was used the visibility of the calculations enabled a basis for discussion between planners and developers. One ecological consultant’s point of view was that while the process was fairly clear, a non-ecologist would not understand what was meant by a biodiversity unit and planners would not have the time to understand the metric.

### 3.4.5 Relationship with other initiatives

All three pilot areas were involved in the Devon Local Nature Partnership (LNP). The LNP supported the development of a more effective and consistent way of delivering compensatory habitat across Devon and was keen to play an active role in biodiversity offsetting, for example, by acting as an umbrella group providing standardisation across the three pilot areas.

The Devon LNP was in the initial stages of developing a relationship with the Heart of the South West Local Enterprise Partnership (LEP). The LEP, which was supportive of green infrastructure, had identified potential funding sources for habitat banking which could then be used to bring forward biodiversity offsets. The LEP pointed out a need to highlight potential revenue income streams from biodiversity offsets and identify how biodiversity offsetting could help boost the economy.

In North Devon, the Biosphere Reserve also delivered the Nature Improvement Area (NIA) and the Catchment Restoration Fund project. These initiatives linked well with the biodiversity offsetting pilot as landowners that engaged in these initiatives were also potential offset providers.
3.4.6 Review of the biodiversity offsetting strategy

Table 17: Review of Devon strategies with respect to the Defra biodiversity offsetting criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Extent to which the criteria is, or is not, included in the strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Has biodiversity offsetting ensured no change to existing levels of protection for biodiversity?</strong></td>
<td></td>
</tr>
<tr>
<td>North Devon</td>
<td>This is stated in the introduction.</td>
</tr>
<tr>
<td>South Devon</td>
<td>This is stated in the introduction. The document also states that statutory protection of habitats and species remains in place.</td>
</tr>
<tr>
<td>East Devon</td>
<td>The strategy states that legal requirements for conservation of biodiversity take precedence over biodiversity offsetting. It also states that offsets will not be allowed where development would destroy designated sites, UK priority habitats or irreplaceable habitats.</td>
</tr>
<tr>
<td><strong>2. Has biodiversity offsetting delivered real benefits for biodiversity through:</strong></td>
<td></td>
</tr>
<tr>
<td>2a. Seeking to improve the effectiveness of managing compensation for biodiversity loss;</td>
<td>Requirements of developers are clearly stated, as well as the benefits of biodiversity offsetting.</td>
</tr>
<tr>
<td>Seeks net biodiversity gain as an aspiration and no-net-loss as a target. Identifies strategic areas for biodiversity gain to guide location of offsets.</td>
<td>Covers the need for tradable units to be equal or greater than the units to be replaced.</td>
</tr>
<tr>
<td>2b. Expanding and restoring habitats, not merely protecting the extent and condition of what is already there;</td>
<td>The concepts of ‘bigger, better, more and joined’ are applied by the strategy.</td>
</tr>
<tr>
<td>2c. Contributing to enhancing England’s ecological network by creating more, bigger, better and joined areas for biodiversity (as discussed in Making Space for Nature);</td>
<td>No direct reference to additionality although the principles for applying biodiversity offsetting within biodiversity opportunity areas refer to new sites for creating habitat.</td>
</tr>
<tr>
<td>2d. Providing additionality; not being used to deliver something that would have happened anyway;</td>
<td>Offset providers are required to guarantee biodiversity gain for the perpetuity. The strategy also states that agreements with</td>
</tr>
<tr>
<td>2e. Creating habitat which lasts in perpetuity (with a clear and agreed understanding of what is meant by perpetuity);</td>
<td></td>
</tr>
<tr>
<td>Criteria</td>
<td>Extent to which the criteria is, or is not, included in the strategy</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>North Devon</td>
</tr>
<tr>
<td></td>
<td>landowners should be for a minimum of 25 years.</td>
</tr>
<tr>
<td>2f. Being at the bottom of the mitigation hierarchy, and requiring avoidance and mitigation of impacts to take place first?</td>
<td>The mitigation hierarchy is clearly described with compensation for residual biodiversity loss as the final step.</td>
</tr>
<tr>
<td>3. To what extent has biodiversity offsetting been managed as much as possible at the local level and:</td>
<td>The principle of providing a biodiversity offset at a site close to that of the biodiversity loss is covered. Preference for offsets within the spatial strategy is also mentioned.</td>
</tr>
<tr>
<td>3a. Within national priorities for managing England’s biodiversity and ecosystem services;</td>
<td>Reference made to NPPF and NEWP.</td>
</tr>
<tr>
<td>3b. Within a standard framework, which provides a level of consistency for all involved;</td>
<td>A flow chart for applying biodiversity offsetting is included in the strategy. Reference is made to the Defra biodiversity offsetting metric and guidance.</td>
</tr>
<tr>
<td>3c. Through partnerships at a level that makes sense spatially, such as county level, catchment or natural area;</td>
<td>Covers the involvement of a range of partners in determining and guiding the biodiversity offsetting strategy.</td>
</tr>
<tr>
<td>3d. With the right level of national support and guidance to build capacity where it is needed;</td>
<td>Reference is made to national policy (NPPF &amp; NEWP), the Defra guidance on the pilot programme, and to the offset metric tool.</td>
</tr>
<tr>
<td>3e. Involving local communities?</td>
<td>Local communities are mentioned from the point of view of benefiting from biodiversity offsetting.</td>
</tr>
<tr>
<td>Criteria</td>
<td>North Devon</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4. Has biodiversity offsetting been as simple and straightforward as possible, for developers, local authorities and others?</td>
<td>No mention of involving local communities in decision making.</td>
</tr>
<tr>
<td>5. Has biodiversity offsetting been transparent, giving clarity on how the offset calculations are derived and allowing people to see how offset resources are being used?</td>
<td>The benefit of biodiversity offsetting as a transparent approach and the need to be accountable in a transparent way for all aspects of the process is covered.</td>
</tr>
</tbody>
</table>

### 3.5 Legal and development planning

#### 3.5.1 Use of planning policy within strategies

All three Devon pilot strategies made reference to national policy in the form of the NPPF and the NEWP. The pilot hosts recognised that while the requirement for no-net-loss and ideally net-gain of biodiversity was covered in national policy, in practice they felt that this was rarely achieved.

#### 3.5.2 Planning status of strategies

The strategies were developed to incentivise developers to engage with biodiversity offsetting. As biodiversity offsetting was voluntary, none of the pilots thought it necessary for the strategies to be signed off by Local Authorities at committee level.

#### 3.5.3 Influencing planning policy

Pilots were influential in getting biodiversity offsetting included within the policies or text of local plans. Although some planners were reluctant to adopt strategies that included biodiversity offsetting until there was greater clarity on the future of biodiversity offsetting policy, a number of plans did include biodiversity offsetting. Table 18 presents a summary of their progress by the end of the pilot programme. Pilot hosts felt that it was too early to say whether local plan policies on biodiversity offsetting were influencing development and decision making. Pilot hosts considered including biodiversity offsetting into Local Plans to be critical as this gave them sufficient basis to use the metric and provide offsets as required.
Table 18: Devon references to biodiversity offsetting and key concepts within local planning policy

<table>
<thead>
<tr>
<th>LPA</th>
<th>Plan</th>
<th>Status</th>
<th>Year</th>
<th>Reference to:</th>
<th>Offsetting in policy</th>
<th>Offsetting in text</th>
<th>No loss/gain</th>
<th>net</th>
<th>Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dartmoor National Park</td>
<td>Development Management Policies</td>
<td>Adopted</td>
<td>2013</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>East Devon</td>
<td>Local Plan</td>
<td>Submission</td>
<td>2012</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Exeter</td>
<td>Draft Development Delivery DPD</td>
<td>Draft</td>
<td>2013</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Exmoor NP</td>
<td>Draft Local Plan</td>
<td>Draft</td>
<td>2013</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Mid Devon</td>
<td>Local Plan Part 3</td>
<td>Adopted</td>
<td>2013</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>North Devon &amp; Torridge</td>
<td>Local Plan</td>
<td>Draft</td>
<td>2013</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>South Hams</td>
<td>Development Policies</td>
<td>Adopted</td>
<td>2010</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Teignbridge</td>
<td>Local Plan</td>
<td>Adopted</td>
<td>1996</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Core Strategy</td>
<td>Submission</td>
<td>2014</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Torbay</td>
<td>Local Plan</td>
<td>Submission</td>
<td>2014</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Devon CC</td>
<td>Waste Plan</td>
<td>Submission</td>
<td>2013</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

3.6 Costs

3.6.1 Pilot costs

The costs involved in setting up the pilots mainly related to the time input of pilot hosts, DCC, Natural England and other partners involved in the pilots. No direct finances were available for setting up the pilots; however the respective hosting authorities funded posts with additional contributions from other organisations.

The South Devon Green Infrastructure post was funded by Teignbridge District Council with financial support during 2012-2013 from Torbay Council and an £8,000 contribution from DCC. DCC contributed £10,000 to the East Devon Green Infrastructure Project Manager post in 2013-2014, which was also funded by Exeter City Council, East Devon District Council and Natural England. As DCC contributed funds to the general running of the North Devon UNESCO Biosphere Reserve, by default it contributed to the biodiversity offsetting pilot.

Pilot hosts estimated that they spent at least 10 to 20% of their time on the pilot over the pilot programme, although there were overlaps between their roles on the pilot and other responsibilities.

Natural England advisers estimated that they had spent under 0.5 days per week. Time input to the pilots varied for Natural England advisers over the two year pilot programme with more time being spent early on, in particular commenting on the strategies. In the later stages much less time than anticipated was required as few projects came forward with calculations to be checked and no offset providers were accredited.

Time savings had not been demonstrated in the planning applications where the metric was trialled. Natural England advisers said that the process seemed to be more complicated with there being a substantial amount of information generated. However, both Natural England advisers and pilot hosts felt that this situation should change were the process to be fully embedded within the planning system.
### 3.6.2 Biodiversity offsetting costs

No offset schemes came forward during the pilot programme. However, a financial contribution of around £90,000 was being considered for habitat restoration works in a nearby community park as compensation for loss of seven biodiversity units of habitat within a residential development site (case study Devon5).

One developer found that their viability assessment showed biodiversity elements to be an ‘enormous’ cost. The developer was concerned that the costs of delivering biodiversity offsetting might impact on the ability to deliver affordable homes. This demonstrated the potential need for biodiversity costs to be considered at the site selection stage.

### 3.7 Ecological implementation and monitoring

#### 3.7.1 Identifying biodiversity offset projects

For county level applications a process was already in place for identifying which proposals required compensatory habitat. DCC’s trigger list is used at pre-application stage, which ensures that all developers know when they need to produce a wildlife report. The associated guidance asks for a balance sheet to set out biodiversity losses and gains; in this way it is made clear to developers and consultants that there should be no-net-loss, and ideally net-gain, of biodiversity.

Few opportunities for offset projects arose and none were delivered during the pilot programme. In part this was due to the long timeframe of suitable planning applications.

The pilot hosts considered the main barriers to achieving offsets to be the slowness of building the offsets market and the reticence of the development sector to agree to deliver offsets through a voluntary approach.

Targeted enquiries by the LPAs in relation to specific planning applications had shown some landowner interest in providing offsets. However in one instance developer and consultant ecologist enquiries had not been able to secure suitable land at a viable cost. In another example, an appropriate offset site could not be secured in time for the outline planning permission. In this case the developer was not prepared to include a biodiversity unit value requirement in the s.106 agreement since the effect on viability was unclear and was considered to represent an unknown risk to prospective developers. Instead a financial contribution was calculated based on approximate costs of delivering the required units, with flexibility to respond to changes to biodiversity unit value requirements resulting from the full application.

#### 3.7.2 Offset providers

No offset providers were accredited during the pilot programme. Discussions within the East Devon pilot resulted in agreement that offset providers would be local nature conservation NGOs; however in the North and South Devon pilots private landowners were also considered.

#### 3.7.3 Offsetting ecosystem services

One of the aims of the North Devon pilot was to apply biodiversity offsetting in the wider context of losses of ecosystem services. By the end of the pilot programme a process had been considered, but remained un-tested. Using land cover maps, the pilot was in the process of assigning ecosystem services to different habitat types (informed by the National Ecosystem Assessment). The pilot anticipated that any losses of ecosystem services resulting from development would be replaced on a like-for-like basis (e.g. for carbon sequestration or flood attenuation).
3.8 Lessons

The following lessons emerged from the Devon pilot:

- The strategies provided a means of documenting procedures, for example, in applying the mitigation hierarchy.
- Identifying locations to target offsets was considered by pilot hosts to be more useful than the approach with Biodiversity Action Plans, which simply stated the need to create or restore a number of hectares of habitat.
- Testing the effectiveness of the metric in a range of planning situations required longer than the two years of the pilot programme, due to the long timeframe of some planning applications and the voluntary nature of the pilot programme.
- The metric calculations provided a more transparent approach for discussions on biodiversity issues between LPAs and developers.
- Some developers, or their consultants, required training in the use of the metric and application of the mitigation hierarchy, as evidenced by the difficulty in extracting the necessary data for the metric from some Environmental Statements.
- Developers needed to take account of potential biodiversity offsetting requirements in site purchase for viability assessments and similarly for LPAs in assessments for Strategic Housing Land Availability (SHLA).

3.8.1 The voluntary approach to biodiversity offsetting

Strengths of a voluntary biodiversity offsetting system

The view of the pilot hosts was that there were no strengths to a voluntary system of biodiversity offsetting. Similarly, Natural England advisers saw little strength with the voluntary approach, other than it not being perceived as red tape.

Weaknesses of a voluntary biodiversity offsetting system

The optional approach to biodiversity offsetting resulted in more work for the pilot hosts as there was no consistent approach across all planning applications.

Experience from the pilots showed that there was little leverage in encouraging developers to adopt the biodiversity offsetting approach. As no-net-loss had not previously been achieved through the planning system several developers saw biodiversity offsetting as an added burden and chose to opt out. The argument that developments should be ‘sustainable’ and should not result in habitat loss was insufficient to persuade many developers.

The fact that the approach was voluntary and was considered to cost developers money meant that developers were unwilling to consider biodiversity offsetting. This was particularly true where several residential developers in close proximity said that they would not undertake biodiversity offsetting on their own. The situation was addressed by encouraging one developer to adopt the biodiversity offsetting approach so that the others followed; the developers were then encouraged to work together to look at the collective impact with the incentive of minimising their overall administrative costs.

Furthermore, the pilot hosts felt that there wasn’t enough certainty in the offsets market to meet the needs of the developers. Conversely, there was no guarantee to the offset provider that schemes would be coming through.

3.9 Status of the pilot after the pilot programme

The three Devon pilots planned to continue with biodiversity offsetting following the end of the pilot programme. Pilot hosts considered that biodiversity offsetting was still in the testing phase and there was ongoing learning, for example regarding: the approach with offset providers and NGO procurement processes; use of s.106; issues of land values; and how to apply biodiversity offsetting to the marine environment. Pilot hosts were also committed to
seeking a less ad hoc approach to no-net-loss of biodiversity within the planning system.

The South Devon pilot host hoped that the strategy would be adopted (following minor changes to the latest version) by some of the LPAs. In East Devon, biodiversity offsetting formed a major part of the Green Infrastructure Project Manager’s role and was seen as a mechanism to deliver biodiversity gains within the growth area, and so that area of work would continue.

### 3.10 Case studies

The following are summaries of live planning applications within the pilot that tested aspects of biodiversity offsetting. They have been anonymised due to the sensitive nature of the cost and planning information.

<table>
<thead>
<tr>
<th>Case Reference: Devon1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
</tr>
<tr>
<td><strong>Type of development:</strong> Traveller site</td>
</tr>
<tr>
<td><strong>Date of original application:</strong> January 2012</td>
</tr>
<tr>
<td><strong>Date approval granted:</strong> November 2012</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Summary of development</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The project proposal involved erection of 15 new permanent traveller’s pitches including amenity buildings and community facilities on 0.8 ha of lowland heath in poor condition. The new traveller’s site was proposed to replace a nearby unauthorised traveller’s encampment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Reason for using the biodiversity offsetting approach</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The proposed development provided a simple example for trialling the metric.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Summary of biodiversity impacts, including off-site compensation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The application site was situated within an area of woodland, consisting predominantly of pine plantation. Hedgerows and trees around the perimeter were to be retained as well as many trees within the site in order to retain the woodland nature of the site. Planting new species of trees was proposed to encourage biodiversity.</td>
</tr>
<tr>
<td>The ecological value of the vacated site was its potential to be restored to lowland heath.</td>
</tr>
<tr>
<td>The metric was used to identify the amount of heathland on the application site lost to the development of a purpose built traveller site (4.8 units) and the units gained from restoration to heathland of the vacated illegal traveller site (4.29 units). Thus the metric showed a shortfall of 0.51 units. An additional 0.2 ha of heathland in poor condition was required for enhancement to balance the calculation and ensure the full offset.</td>
</tr>
<tr>
<td>Planning permission was granted on condition of a scheme for the provision of off-site replacement heathland habitat. This was tied into the S106 agreement which required the developer to prepare and implement a remediation scheme for the vacated site.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Evaluation of the biodiversity offsetting approach</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>This case was straightforward in terms of reviewing losses and gains in biodiversity. Use of the metric highlighted the need for additional areas of heathland habitat for restoration to offset losses, which could be accommodated within the remediation scheme. Thus use of the metric was successful in securing no-net-loss of biodiversity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Notes</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case Reference: Devon2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
</tr>
<tr>
<td><strong>Type of development:</strong> Anaerobic digester</td>
</tr>
</tbody>
</table>
Date of original application: August 2013  
Date approval granted: April 2014  
Details of any offset: All works on-site, therefore no offset

Summary of development
Proposal for an anaerobic digester on an area of agricultural land.

Reason for using the biodiversity offsetting approach
This was a simple development on which to test metric and the developers were willing to engage.

Summary of biodiversity impacts, including off-site compensation
The 1 ha site consisted of cattle grazed improved grassland bounded by hedgerows with trees. There were no statutory designations or evidence of protected species on-site. However, the hedgerows varied from native species-rich to species-poor.

Construction of the anaerobic digester was calculated to result in removal of 0.15 ha of improved grassland. Potential ecological impacts of the development were disturbance to breeding birds using the surrounding hedgerows and possible disturbance to bats, dormice and reptiles. Mitigation was proposed to minimise disturbance during construction. Proposals were made for increasing biodiversity on-site by planting native trees, enhancing species-poor hedgerows and encouraging development of species-rich grassland within the site.

Use of the metric identified a small loss of 0.2 biodiversity units. To address this, new woodland planting was proposed which would result in biodiversity gain of 0.7 biodiversity units. All proposed enhancement works could be undertaken on-site and so no off-site offset was required.

Evaluation of the biodiversity offsetting approach
Use of the metric identified that there would be a small biodiversity loss. This led to discussions on options that could be taken to address this. Thus, by using the metric, the application resulted in biodiversity gain which might not have otherwise been achieved.

Notes
N/A

Case Reference: Devon3

Project summary
Type of development: Residential  
Date of original application: December 2012  
Date approval granted: Undecided

Biodiversity credits to be lost: Net-gain of habitat units, but loss of 3000 linear hedgerow units  
Details of any offset: No offset identified through use of the metric, but green infrastructure provision and off-site biodiversity enhancements agreed

Summary of development
The proposed development was for 350 residential units plus public open space and landscaping within a 24 ha site (10.5 residential development and 13.5 ha of greenspace including green infrastructure).

Reason for using the biodiversity offsetting approach
The case was used to test the metric.

Summary of biodiversity impacts, including off-site compensation
The site for the proposed development was on agricultural land (mainly arable and improved grassland). Boundary features of the fields included hedgerows and woodland edge habitat. Part of the site included mature parkland trees.

On-site mitigation included creation of woodland, ponds and grassland habitat (including large areas of amenity grassland). Figures used in the metric were estimated from available information. However, the metric identified that overall there would be a gain of 3 habitat units, but a loss of nearly 3000 linear units.

A S106 agreement was to cover: a Green Infrastructure Management Plan including planting of new woodland areas and establishment of species rich grassland; restoration of nearby historic parkland
including grassland and boundary enhancements; and a contribution of £122,500 for habitat mitigation works in relation to a nearby designated site.

**Evaluation of the biodiversity offsetting approach**

While the metric enabled assessment of overall biodiversity gains and losses of the proposed development, it was not used to influence negotiations on mitigation and compensation. Instead, this was informed by the Green Infrastructure Strategy and local policy. The metric identified that negotiations were required to ensure no overall loss of linear habitat.

**Notes**

N/A

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**Case Reference: Devon4**

<table>
<thead>
<tr>
<th>Project summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of development:</strong> Mixed residential and employment</td>
</tr>
<tr>
<td><strong>Date of original application:</strong> April 2013</td>
</tr>
<tr>
<td><strong>Date approval granted:</strong> Undecided</td>
</tr>
<tr>
<td><strong>Biodiversity credits to be lost:</strong> 16 units of habitat and 600 metres of hedgerow</td>
</tr>
<tr>
<td><strong>Details of any offset:</strong> None agreed</td>
</tr>
</tbody>
</table>

**Summary of development**

The proposal was for 200 residential units with associated green infrastructure on 12 ha of agricultural land.

**Reason for using the biodiversity offsetting approach**

Use of biodiversity offsetting was proposed by the LPA. The developer was willing to test the metric as they had an interest in the environment.

**Summary of biodiversity impacts, including off-site compensation**

The main habitats that would be lost to development consisted of arable and improved grassland (16 units) and hedgerows (600 metres).

The application included approximately 4 ha of on-site green infrastructure, a large proportion of which could benefit biodiversity. This green infrastructure provision included protection of the higher value habitats on-site (such as mature trees and boundary hedges) and the creation of new high value habitats, including replacement for loss of hedgerows and creation of wetland habitats (as Sustainable Drainage Systems).

The location of the development site was close to a Special Area of Conservation (SAC) and so the Habitats Regulations applied. As well as protecting commuting corridors for bats within the on-site green infrastructure areas, a further 6 ha parcel of land was required to be managed as foraging habitat in perpetuity. Since the majority of the biodiversity unit uplift from proposed on- and off-site measures was a by-product of the requirements under the Habitats Regulations, additional measures would have been necessary to compensate for other (non-SAC related) habitat losses under biodiversity offsetting. The developer therefore decided not to go forward with offsetting.

**Evaluation of the biodiversity offsetting approach**

The process gave greater clarity of what was required to meet biodiversity planning policy and the metric provided a useful tool for informing negotiations.

While the metric was used for a preliminary assessment of the overall losses and gains of habitat and linear features, the calculations were inconclusive as they were dependent on the outcomes from the Habitats Regulations Assessment.

**Notes**

N/A

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**Case Reference: Devon5**
### Project summary

**Type of development:** Residential  
**Date of original application:** September 2012  
**Date approval granted:** March 2014  

**Biodiversity credits to be lost:** 7 units of habitat and 350 metres of hedgerow  
**Details of any offset:** Financial contribution towards habitat restoration within a proposed community park

### Summary of development

The development was for 90 residential units, vehicular and pedestrian access and associated works, including a habitat corridor.

### Reason for using the biodiversity offsetting approach

The metric was used as an assessment tool to quantify habitat gains and losses.

### Summary of biodiversity impacts, including off-site compensation

The development site consisted of improved grassland surrounded by both species-rich and species-poor hedgerows with trees. There were no statutory designations on the site, however, the whole area was located within a County Wildlife Site designated for diverse farmland habitat and associated species. The location of the site was adjacent to foraging areas critical to bats and a high diversity of bat species was recorded within the site itself.

The creation of a wildlife corridor, consisting of native shrubs and woodland ground flora, was proposed along the boundary adjacent to the bat foraging area. All hedgerows were to be retained with measures for their long-term protection.

Constraints within the development site meant that there was little opportunity for on-site biodiversity enhancements. Loss of 7 units of improved grassland habitat was to be offset by restoration of semi-improved grassland in an adjacent community park, in the ownership of the Local Authority. The proposed offset scheme was calculated to result in an overall gain of 0.5 biodiversity units.

The development was granted permission and a S106 agreement was to be drawn up. Based on the metric, a £90K contribution towards the cost of a restoration management regime for the semi-improved grassland in the community park was calculated. Further costs were required to cover off-site hedgerow enhancements.

### Evaluation of the biodiversity offsetting approach

The metric calculations provided a basis for securing a financial contribution for off-site biodiversity restoration works.

### Notes

N/A
4. Doncaster

4.1 Context

4.1.1 Pilot name
Doncaster Biodiversity Offsetting Project.

4.1.2 Pilot hosts
Doncaster Metropolitan Borough Council (DMBC).

4.1.3 Pilot partners
Yorkshire Wildlife Trust was initially closely associated with the pilot as a potential offset provider, although subsequently were less involved as the pilot progressed.

4.1.4 Governance arrangements of the pilot
The pilot was hosted by DMBC with no pilot group or other governance structures in place.

4.1.5 Ecological context of the pilot
Doncaster Borough covers an area of 220 square miles and is made up of a great variety of habitats.

Within Doncaster Borough both Thorne and Hatfield Moors are designated as Special Areas of Conservation (SAC) due to their existing and regenerating lowland raised mire habitat. Thorne and Hatfield Moors are designated jointly as a Special Protection Area (SPA), as they support a significant proportion of the UK nightjar population. The Humberhead Peatlands area is designated as a National Nature Reserve.

In Doncaster Borough there are 15 Sites of Special Scientific Interest (SSSI), 11 of which are biological, and five Local Nature Reserves - Hatchell Wood, Northcliffe Quarry, Sandall Beat Wood, Old Denaby Wetlands and Buntlings Wood.

Non-Statutory Nature Conservation Sites, known as Local Wildlife Sites (LWS) are regionally and locally important nature conservation sites designated through the planning process. Doncaster borough has 288 designated sites (excluding Local Geological Sites), which cover approximately 10,840 acres or 4387 ha and present important opportunities for interaction with the natural environment.

The Doncaster Local Biodiversity Action Plan (2007) identifies a number of key areas that are described here.

Magnesian Limestone Areas

The west of the Borough lies over part of a narrow band of Magnesian Limestone, upon which are a number of species-rich limestone woodlands and limestone grasslands. The north-western area of the borough also includes a large number of estates, which have associated woodland shelterbelts, parkland, wood pasture and veteran trees.

The Sandy silts and clays (part of the Humberhead Levels)

To the east of the Magnesian Limestone the soils are a mixture of sands, silts and clays with occasional pockets of fen peat. To the north of Doncaster, the landscape is dominated by arable agriculture with scattered species-rich woodlands. There are wetlands including man-made lakes that have resulted from the extraction of brick clay. The River Went forms the northern boundary of the borough and has several areas of associated permanent grasslands on the alluvial soils. Further east the New Junction Canal cuts across a flat landscape of mixed agriculture with scattered remaining areas of species-rich permanent pasture, divided by diverse hedgerows. To the south of the town are flat, low-lying pastures of Doncaster Carr and the Potteric Carr nature reserve. Semi-natural peaty-fen and woodland...
habitats exist on these damper soils.

The River Don Flood Plain (part of the Humberhead Levels)
The alluvial flood plain of the River Don opens out into the expanse of Sprotbrough Ings. From the town centre the alluvial flood plain covers a large area of land to the northeast characterised by low-lying pastures and diverse hedgerows. Designated washlands on the northern side of the river include many small ponds and borrow-pits. The river, washlands, wet-grassland, canal and ponds along the river corridor are notable for their diverse aquatic and wet-grassland species and have great significance as sites for many bird and dragonfly species. This area is also notable for the water vole, a species in long term decline.

The Sherwood Sandstone (of the Humberhead Levels)
Between the town centre and the south-eastern boundary of the borough, the soils are generally dry sands and gravels over sandstone. Further east is the heathland of Doncaster Warren Golf Course and associated woodlands to either side of the M18 Motorway, and parts of Park Wood, Rossington, which have elements of the heathland species. The mineral resources of this area are being actively worked and there are many old sand and gravel workings, some of which have flooded, and others that have re-colonised with naturally occurring heathland plants.

Humberhead Level Peatlands
In the north eastern corner of the borough are two areas of lowland raised mire, Thorne and Hatfield Moors SSSIs. Much of Hatfield Moors is either under arable agriculture or is being extracted for peat, although some areas still have a cover of semi-natural vegetation. Between the two moors and to the east and south of Hatfield Moor is the low-lying Hatfield Chase an area of rich arable farmland cut by a complex network of drainage ditches.

4.1.6 Planning and development context of the pilot
The planning context provides an indication of the level of development that was anticipated in the area, and the planning policies against which applications for development are considered including those concerning biodiversity conservation and enhancement.

The Local Development Framework comprises of the Core Strategy, the Sites and Policies DPD, and the Barnsley, Doncaster and Rotherham Joint Waste Plan; when adopted these together will replace the Doncaster Unitary Development Plan.

Core Strategy 2011-2028, Adopted May 2012
Policy CS5 Employment Strategy provides for sufficient employment land to be allocated to take into account the identified potential for the creation of 36,000 jobs.

Policy CS10 Housing Requirement, Land Supply and Phasing provides for sufficient land to be provided to deliver a net addition of 1230 new homes each year 2011-2028 (20,910 in total), with allocated sites sufficient to deliver 15 years’ supply (18,450 in total). New allocations will be distributed according to the Growth and Regeneration Strategy (Policy CS2). Within each town, allocation priority will be afforded to well-located brownfield urban sites followed by other well located urban sites followed by sustainable urban extension sites.

Policy CS17 Providing Green Infrastructure supports proposals which make an overall contribution to the green infrastructure network by including measures, either on or off site, that are of an appropriate size, shape, scale and type and that have regard to the nature of the proposal and its potential impact; contribute to the delivery of identified opportunities and priorities; provide for appropriate long term maintenance and management; and avoid damage to or loss of green infrastructure assets or, where loss is unavoidable and the benefits of the development outweigh the loss, allow for appropriate compensation measures.
The plan will cover the period up to 2028. It will allocate land in the borough for up to 18,450 houses. Growth will be distributed in the following key areas: Doncaster main area (including Bentley, Bessacarr, Balby and more), Thorne, Mexborough, Conisbrough, Adwick and Woodlands, Armthorpe, Askern, Rossington, Staintforth and Hatfield as well as more in Denaby, Edlington, Carcroft and Skellow and Moorends. It will allocate land in the borough for 290 hectares of distribution warehousing, 190 hectares of light industry and manufacturing and space for 140,000 square metres of new office use. It will identify key areas of land such as Green Belt, Countryside Protection Areas, Green Wedges, heritage and land for Gypsies and Travellers.

The plan will identify sites for minerals extraction to make provision for an additional 6.2 million tonnes of sand and gravel, and 8 million tonnes of Limestone (dolomite).

Policy SP34 Maintaining and Enhancing the Ecological Network states that the greatest improvements to the ecological network are likely to arise from habitat creation and restoration in the two Nature Improvement Areas (NIA) and ten Biodiversity Opportunity Areas (BOA) have been identified in Doncaster (Figure 7). Proposals will be supported that aim to deliver a net gain in biodiversity, maintain and enhance the ecological network, and meet principles including: directing ecological compensation and enhancement work towards the restoration, expansion, connection and creation of the priority habitats; and securing the long term management of ecological mitigation, compensation and enhancement areas, including those that are important in the ecological network. The supporting text makes explicit reference to biodiversity offsetting as a potential mechanism for delivering compensation, identifying that the biodiversity offsetting approach can be beneficial by being able to strategically position compensation in areas of the ecological network where it can deliver the greatest gains.

Figure 7: Biodiversity Opportunity Areas (BOA) in Doncaster
(Source: Biodiversity Offsetting in Doncaster – Guidance on the Process)

Barnsley, Doncaster and Rotherham Joint Waste Plan, Adopted March 2012

The plan provides for additional waste management capacity of 517,000 tonnes of recycling, treatment and recovery capacity for municipal, commercial and industrial waste. This could be met through the provision of three large sites (100 - 400,000 tonnes/year) or a number of
smaller sites. Existing strategic waste management sites are safeguarded and Policy WCS3 identifies three additional strategic sites including at Sandall and Stainforth in Doncaster.

**Adopted Supplementary Planning Documents (SPDs)**

The Planning for Nature SPD provides guidance on ecological surveys and the mitigation hierarchy, with the Biodiversity Mitigation and Compensation SPD (also adopted in 2008) providing more detailed guidance on the mitigation hierarchy and expectations of how compensatory measures may be achieved. While not making explicit reference to ‘offsetting’ (they pre-date the adoption of the concept and the pilots in England) they provide the context in which offsetting may be considered.

**Doncaster Biodiversity Action Plan (2007)**

The Biodiversity Action Plan (BAP) identifies priority species and habitats based on various criteria (including local importance and distinctiveness), and sets out action plans for their conservation.

**4.1.7 Biodiversity offsetting basic information**

During the pilot programme the metric was applied to five planning applications. Of these five, two resulted in s.106 planning obligations being agreed to fund off-site habitat creation, enhancement and management on Council-owned land. A third was expected to be agreed but was not finalised before the end of the pilot programme. This application involved land being transferred from the developer to the Yorkshire Wildlife Trust (YWT). The Wildlife Trust was accredited as a biodiversity offset provider, but no individual sites had been formally accredited as offsets.

**4.2 Information Sources and Data Collection**

As summarised in Table 19 interviews were undertaken with the pilot hosts and Natural England during Stages 1 and 2. During Stage 1 an interview was also undertaken with a LPA that had chosen not to participate in the pilot (Rotherham MBC). During Stage 3 interviews regarding their experiences of using the offsetting metric were held with the pilot host and consultants that had worked on behalf of developers on projects in which the metric had been used.

**Table 19: Doncaster summary of interviews undertaken**

<table>
<thead>
<tr>
<th>Interview points</th>
<th>Interviewees in each stakeholder group</th>
</tr>
</thead>
</table>
| **The setting up of the pilot group (Stage 1)**       | • Pilot host  
• Non-participating Local Authority  
• Wildlife Trust (stakeholder and potential offset provider) |
| **The development of the biodiversity offsetting strategy (Stage 2)** | • Pilot host  
• Natural England Advisor |
| **Use of the Offsetting Metric (Stage 3)**            | • Pilot host  
• Metric users x2 (ecological consultants)                                                        |
| **Final reflective interview at the end of the pilot** | • Pilot host  
• Natural England Advisor |

Key documents were also reviewed, including the ‘Biodiversity Offsetting in Doncaster - Guidance on the Process’, and development plans. With regard to the use of the offsetting metric, documents associated with specific planning applications and decisions were also reviewed.
4.3 Governance

The pilot was hosted by Doncaster Metropolitan Borough Council. There was no wider pilot group involving stakeholders, although YWT was closely involved.

The initial Expression of Interest (EoI) to be a pilot was developed from within the Council’s specialist Natural Environment/Planning Team and supported by senior officers and elected members. The pilot was intended to build on previous experience in working with the YWT in delivering off-site biodiversity compensation associated with development.

4.3.1 Relationship with Natural England

Support, from Natural England included assistance in preparation of the guidance document (particularly simplifying guidance on the metric). The pilot hosts reported that financial support would have been helpful, for example to enable officers to attend Natural England and Defra meetings in London, and that financial support to LPAs and potentially NGO offset providers would be essential if biodiversity offsetting is to be taken forward successfully.

Natural England’s role was largely advisory e.g. providing clarification on Defra’s guidance, sharing knowledge from other pilots, and mentoring to facilitate the development of the pilot. This was largely on request and at the beginning of the pilot, Natural England also accredited the YWT as an offset provider. No other parties came forward with proposed offset projects and so Natural England’s involvement remained limited.

4.4 Process and management

The guiding document for the Doncaster pilot is the ‘Biodiversity Offsetting in Doncaster - Guidance on the Process’.

The pilot hosts noted that the document was produced and used as guidance rather than a formal ‘strategy’ (with vision, objectives/principles and policies). The document does not explicitly state its aims and objectives but the pilot hosts expressed that the document exists to assist and provide guidance to developers and offset providers on the process for biodiversity offsetting and it is intended that it will be used to steer offset projects to the most appropriate/beneficial areas using the BOA map. It was recognised by the pilot hosts that during the pilot programme this was largely theoretical as there were no ‘live’ offset proposals.

4.4.1 Consultation

There was no formal public or stakeholder engagement on the Biodiversity Offsetting in Doncaster - Guidance on the Process document. YWT, Natural England, the Royal Society for the Protection of Birds (RSPB), the local NIA and neighbouring authorities were approached for comment and their responses used to update the document. None of these organisations formally endorsed the document. The document was approved by the appropriate elected members.

4.4.2 Strategy approval

The guidance was not officially ‘adopted’ although it has been checked by the LPA’s Legal department and was presented to the Planning Committee at an early stage in 2012 to inform members and get their approval for its use. The pilot hosts felt that undertaking a formal adoption process would have taken much longer and the guidance needed to be produced quickly in order to be used in the pilot.

Relation to national support documents

The guidance set Distinctiveness and Condition Assessment parameters for each Phase 1 habitat, which simplified the Defra approach (set out in Appendix A of the guidance). The
Doncaster pilot adopted the use of the Farm Environment Plan (FEP) guidance, but highlighted that there are some short comings in applying the FEP. The pilot hosts felt that FEP was not ‘fit for purpose’ as it is too complicated and some habitats don’t fit within the FEP definitions. Natural England acknowledged that FEP was not ideal, but was the best approach available at the time.

**Over-Arching Principles**

Offset projects within BOAs have been prioritised through the application of the spatial multiplier. Table 7 of the guidance identifies which priority habitats are relevant and for which opportunities exist within each area. The BOAs, the metric and the multipliers (spatial and temporal risk) provide the basis for the approach set out in the guidance.

**Policies guiding the Strategy**

The Defra principles and metric, and the Natural Environment White Paper (NEWP) and Lawton principles were drawn on in developing the guidance, together with the local BAP, and latterly the NPPF in terms of the aspiration to achieve a net gain in biodiversity.

### 4.4.3 Delivering the biodiversity offsetting strategy

The Guidance was used to inform negotiations with developers and potential offset providers including how to apply the metric, undertake management planning (for providers) and the assessment of projects including applying spatial and temporal (risk) multipliers.

Biodiversity offsetting was integrated into the role of the ecologist planner through their planning consultation role and their work with developers in addressing impacts on biodiversity arising from development. The approach was also included into the role of the biodiversity officer, through seeking to deliver habitat restoration and/or creation (through offset projects) on Doncaster Council landholdings.

The metric was applied during and concurrently with the determination period for applications (after planning applications have been submitted). At this time mitigation and compensation options were discussed and worked up with applicants prior to the application going to Committee for determination. This enabled consideration of costs and viability prior to determination. The metric and the biodiversity offsetting approach were normally discussed at the pre-application stage, but applications rarely included a fully completed biodiversity offsetting assessment, including the metric calculations. The pilot hosts reported that pre-application discussions only occur for approximately 30% of applications and so not all applications for which biodiversity offsetting may be appropriate were subject to pre-application advice.

### 4.4.4 Relationship with other initiatives

The BOAs map in the guidance document reflects the parts of the two NIAs (Humberhead Levels NIA and Dearne Valley Green Heart NIA) that fall within Doncaster Borough. BAP data and GIS mapping of habitats were used for the wider South Yorkshire area to identify/map BOA and identification of opportunities for priority habitats within these. The pilot hosts hoped that the BOAs would inform the siting of offset sites.

The South Yorkshire Local Nature Partnership (LNP) covers Barnsley, Sheffield, Doncaster, and Rotherham. Links with the South Yorkshire LNP and Local Enterprise Partnership (LEP) were being developed during the pilot, but the impact of these was limited during the pilot programme.

The pilot hosts reported that the two NIAs and the LNP covering the Doncaster Borough Boundary had taken an ‘arms-length’ interest in the development and progress of the pilot.

### 4.4.5 Review of the biodiversity offsetting strategy

Doncaster’s guidance differs from the Defra guidance in a number of ways. The main differences from the Defra guidance are the inclusion of a spatial multiplier based on the
location of the delivered offset in relation to DMBC’s BOAs, and some refinement of habitat distinctiveness scores based on knowledge of local habitats. Lowland raised mire was also included as a non-replaceable habitat, which could not be compensated through a biodiversity offsetting approach. Table 20 shows a review of the Doncaster strategy against the Defra Principles for biodiversity offsetting.

Table 20: Review of Doncaster strategy with respect to the Defra biodiversity offsetting criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Extent to which the criteria is, or is not, included in the strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Has offsetting ensured no change to existing levels of protection for biodiversity?</td>
<td>The document stresses that the mitigation hierarchy is to be followed – Step 1 of Guidance for Developers excludes cases where there may be impact on protected species, irreplaceable habitats and nationally and internationally protected sites</td>
</tr>
<tr>
<td>2. Has offsetting delivered real benefits for biodiversity through:</td>
<td></td>
</tr>
<tr>
<td>2a. Seeking to improve the effectiveness of managing compensation for biodiversity loss;</td>
<td>The document is simply presented, with worked examples of the metric, to developers and offset providers</td>
</tr>
<tr>
<td>2b. Expanding and restoring habitats, not merely protecting the extent and condition of what is already there;</td>
<td>The document identifies priorities for extending areas and landscape-scale benefits including identifying broad spatial locations</td>
</tr>
<tr>
<td>2c. Contributing to enhancing England’s ecological network by creating more, bigger, better and joined areas for biodiversity (as discussed in Making Space for Nature);</td>
<td>The document includes a spatial multiplier based on the location of the delivered offset in relation to DMBC’s Biodiversity Opportunity Areas, and some refinement of habitat distinctiveness scores based on knowledge of local habitats.</td>
</tr>
<tr>
<td>2d. Providing additionality; not being used to deliver something that would have happened anyway;</td>
<td>Not explicitly referred to but potential offset providers are directed to Defra’s Guidance for Offset Providers</td>
</tr>
<tr>
<td>2e. Creating habitat which lasts in perpetuity (with a clear and agreed understanding of what is meant by perpetuity);</td>
<td>Not explicitly referred to but reference to Biodiversity Offsetting Management Plans setting out how management in the long term will be delivered, and providers are directed to Defra’s Guidance for Offset Providers</td>
</tr>
<tr>
<td>2f. Being at the bottom of the mitigation hierarchy, and requiring avoidance and mitigation of impacts to take place first?</td>
<td>The document stresses that the mitigation hierarchy has to be followed</td>
</tr>
<tr>
<td>3. To what extent has offsetting been managed as much as possible at the local level and:</td>
<td>Projects are prioritised in Doncaster’s BOAs (mapped in the Guidance) and the parts of the Humberhead Levels and Dearne Valley Green Heart NIAS that fall within Doncaster. Within these areas projects that buffer or expand existing habitats or create links to join habitats up are prioritised. The type of habitat that is appropriate and required in each Biodiversity Target Area/Landscape Scale BOA is identified.</td>
</tr>
<tr>
<td>3a. Within national priorities for managing England’s biodiversity and ecosystem services;</td>
<td>Phase I habitat types are prioritised and fit with UK Broad Habitats, for which like-for-like compensation/or offset is required. No reference to ecosystem services.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Extent to which the criteria is, or is not, included in the strategy</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3b. Within a standard framework, which provides a level of consistency for all involved;</td>
<td>The Defra Metric (area, condition, distinctiveness) is broadly applied. Priority habitats and spatial priorities are clear. The main differences to the Defra guidance are the inclusion of a spatial multiplier based on the location of the delivered offset in relation to DMBC’s BOAs, and some refinement of habitat distinctiveness scores based on knowledge of local habitats.</td>
</tr>
<tr>
<td>3c. Through partnerships at a level that makes sense spatially, such as county level, catchment or natural area;</td>
<td>Doncaster is a metropolitan authority and so there are no other local authorities within its area. Cooperation with local authorities outside of its boundaries e.g. Barnsley, was acknowledged as making sense but practical constraints prevented this being developed.</td>
</tr>
<tr>
<td>3d. With the right level of national support and guidance to build capacity where it is needed;</td>
<td>Natural England provided advice on the guidance including simplifying the metric.</td>
</tr>
<tr>
<td>3e. Involving local communities?</td>
<td>The document was subject to limited stakeholder consultation and was approved by the appropriate elected members. No community engagement was undertaken.</td>
</tr>
<tr>
<td>4. Has offsetting been as simple and straightforward as possible, for developers, local authorities and others?</td>
<td>The document is simply presented with worked examples of the metric.</td>
</tr>
<tr>
<td>5. Has offsetting been transparent, giving clarity on how the offset calculations are derived and allowing people to see how offset resources are being used?</td>
<td>The document refers developers to the Defra Guidance for Developers and providers to the Defra Guidance for Offset Providers</td>
</tr>
<tr>
<td>6. Has offsetting been good value for money?</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Initially the pilot hosts anticipated that the YWT would be the likely offset provider, utilising their experience and relationships with both the Council and landowners. By the end of the pilot programme no sites had been brought forward. Towards the end of the pilot programme one compensation scheme was being developed on a site that was to be transferred to YWT ownership as part of a compensation package for development close by. The land is an arable field adjacent to a local nature reserve. Two further offset projects were developed on Council-owned land (equivalent to 10 units). Both offset sites were LWSs requiring habitat restoration and long-term management.

Use of the metric and adoption of the biodiversity offsetting approach has been promoted by the biodiversity officer and the planning ecologist through consultation on planning applications. However, biodiversity offsetting projects from third parties were not forthcoming. Possible reasons identified by the pilot hosts included:

- Incompatibility of biodiversity offsetting with receipt of agri-environment funding (and so failing to deliver additionality, and agri-environment payments offering greater security and certainty compared with offsetting payments).
- Uncertainty of if or when a development may be permitted and would proceed.
- The cost of and need for long-term commitments to delivering and maintaining the offset.

### 4.5 Legal and development planning

#### 4.5.1 Status of the guidance

The guidance does not replace planning policy; rather it seeks to implement it. The pilot hosts noted that this was a conscious decision as the approval process for any new planning policy was likely to be long. The pilots wanted a document in place that could be used to
guide the process through the pilot stage. It was, however, checked by the Council’s legal team and was presented to the Planning Committee (as it is relevant to determining planning applications).

4.5.2 Local plan

Biodiversity offsetting is not explicitly referred to in the Core Strategy policies, but is referred to in the supporting text to Policy SP34 *Maintaining and Enhancing the Ecological Network*, in the Sites and Policies DPD (Publication Draft submitted December 2013). This discusses strategic priorities in the context of BOAs and in paragraph 5.103 states that “The [biodiversity] offsetting approach can be beneficial by being able to strategically position compensation in areas of the ecological network where it can deliver the greatest gains.”

The pilot hosts felt that the explicit inclusion of biodiversity offsetting into planning policy was not appropriate as it was not certain that biodiversity offsetting will remain Defra policy and Local Plans have a 20 year time horizon. The pilot hosts also noted that within their pilot biodiversity offsetting was regarded as a way of providing compensation rather than necessarily representing a new policy. The Sites and Policies DPD includes the BOA map and Table 7 from the pilot’s guidance.

4.6 Costs

Detailed records were not kept making it difficult to accurately quantify costs to the pilot. It was estimated by the pilot hosts that by the end of the pilot the time spent by the Council was probably in the region of 4-500 hours. This time had been accommodated into the normal duties of the ecologist planner, biodiversity officer and the natural environment team manager.

The pilot hosts estimated that preparing the guidance document took approximately four weeks of officer time, with additional time spent preparing briefings and meetings with officers. The on-going commitment (i.e. after the pilot programme ends) will depend on demand from developers, but was expected to be approximately half a day per week for the Ecologist Planner with small additional input from team members, dependant on the number of applications submitted and pre-application discussions requested. Costs to the YWT were estimated at approximately six weeks of officer time over the pilot programme. This included contributing to the bid, the guidance document and working up offsets.

4.7 Ecological implementation and monitoring

The time spent preparing the guidance was seen as positive and well spent by the pilot hosts. The hosts felt that low value habitats are usually affected by development and that it is difficult to require or secure compensation or a net gain, so use of the metric and biodiversity offsetting offers great potential through enabling demonstration of the value of lower value (distinctiveness) habitats. Additionally, cumulative biodiversity loss resulting from smaller-scale developments is perceived to have a detrimental impact on local ecological networks and offsetting provides a mechanism to quantify and secure appropriate compensation to address this, both in delivering a net gain and in targeting the most valuable opportunities.

The pilot hosts reported that use of the metric and consideration of biodiversity offsetting is regarded as a new way of implementing existing planning policy rather than a substantive change in approach. In their view it was a mechanism to deliver off-site compensation and net gain through the use of the metric and delivery of compensation elsewhere (as long as suitable development and offset projects come forward). Previously compensation would be delivered through conditions or s.106 agreements, but this did not involve quantification of residual loss.

4.7.1 Benefits for biodiversity?

Overall the pilot was seen by Doncaster Council as being positive, with particular potential to
use the metric to demonstrate value of small sites and lower value/distinctiveness habitats. They identified one of the main benefits of a voluntary approach had been that the concept and approach were piloted and that the parties involved were genuinely interested in testing the feasibility of biodiversity offsetting as a viable option for compensating for residual impacts on biodiversity. They believed that the pilot enabled various practicalities and principles to be tested and that this should help refine the approach. This included addressing some of the resource issues on the offset supply side (as opposed to demand) as this was a limiting factor on the promotion and uptake of biodiversity offsetting under the voluntary pilot programme.

4.8 Lessons

4.8.1 Barriers and challenges

The pilot hosts noted that the lack of offset providers bringing forward sites with accredited management plans indicated financial, practical and legal constraints, and lack of incentive provided to landowners by the voluntary approach. The pilot hosts reported that financial support towards the preparation of offsets (sites and management plans) would have helped this process. They also reported that during the pilot, a lack of certainty over the cost and supply of offset projects stalled negotiations with developers interested in participating in the biodiversity offsetting approach.

The pilot hosts reported that a barrier to developers using biodiversity offsetting was the potential cost, which tended to be significantly more than that currently secured for biodiversity compensation during current practice (largely due to the inclusion of long-term management costs). Developers were sensitive to what they regard as a further and, in their view, unnecessary financial obligation. The pilot hosts reported that this reflects the failure of current practice and the historic loss of lower value habitats without compensation, rather than being a problem with the use of biodiversity offsetting. In addition, agreeing the legal arrangements for delivering an actual offset project were considered likely to be challenging, particularly around issues of timescale (perpetuity), size of development, and triggers and mechanisms for payment and use of funds. The pilot hosts reported that the FEP guidance had also been problematic for some habitat types.

As to whether biodiversity offsetting was more efficient, the pilot hosts reported that it depends on variables encountered on each site including:

- The developer’s willingness to participate in using the metric and consider biodiversity offsetting.
- The enthusiasm of their advisors such as landscape architects.
- The level of involvement from the developer’s ecologists.
- The nature of the site (habitat complexity/ size/ location).
- Pre-application expectations of the developers (such as long term established site allocations in local plans).

The pilot hosts and metric users felt that applying the metric could result in more time spent surveying sites (estimated at up to 20% more than for Phase 1 Habitat Surveys). However, the pilot hosts stressed that those ecologists advising developers were keen to participate and use the metric. This was supported by discussions with ecological consultants.

The pilot hosts reported that the metric was more transparent than current practice as it applies a standard methodology for calculating the loss and compensation, including offset credits required. They reported that the distinctiveness banding has provided clarity at the beginning of the calculation process and clear steps throughout the process makes for a clear assessment that interested parties with limited technical knowledge can understand.

The view from interviewees was that applying the metric had encouraged an informed dialogue with applicants, and had helped to quantify the impacts with potentially better outcomes for biodiversity. The pilot hosts considered that further work was required to produce the offset scheme costs so that developers had all the necessary information at the
earliest stages of negotiations. They also dismissed concerns about biodiversity offsetting resulting in the mitigation hierarchy and planning processes being bypassed, based on their own experience.

In summary key lessons that have emerged from the pilot include:

- Strategies or guidance should be simple. Doncaster simplified explanation of the metric to make it easier to understand and apply, including with clarification and simplification of how to assess condition and distinctiveness.
- Even with adopted planning policy and the SPD the policy context and its implementation is seen as rather weak for a voluntary system.
- Biodiversity offsetting was supposed to be market-led with private sector offset providers emerging. However, the reality is that in a voluntary system it is NGOs that are the most likely offset providers, but the lack of market is a deterrent to them investing in working-up schemes.
- The lack of worked-up offsets meant there was limited evidence available upon which to base developer contributions. If starting again, Doncaster MBC would have worked-up offsets (as a provider) on Council-owned land at an earlier stage.
- Further consideration is needed over how to undertake condition assessments (rather than relying on the FEP approach) which needs to be consistent with Phase 1 habitat types.
- Use of the metric proved to be relatively straightforward and provided the framework for an efficient and transparent system of quantifying and accounting for biodiversity loss resulting from development. While the assessed impact had not been queried by developers, few ultimately used the biodiversity offsetting approach (during this voluntary phase) due to the elevated costs (compared to current practice), which they consider to be an additional financial burden on their viability assessments.
- Due to its limited application, it is not clear whether using the metric has made the planning process more efficient in terms of time and cost to developers and the LPA.

4.9 Status of the Pilot following the Pilot Programme

The pilot hosts reported that at the end of the pilot the Council wishes to assess the benefits, lessons learnt and practical opportunities to develop and apply a local offsetting approach.

4.10 Case studies

The following is a summary of a live planning application within the pilot that tested aspects of biodiversity offsetting. It has been anonymised due to the sensitive nature of the cost and planning information.

**Case Reference: Doncaster1**

**Project summary**

**Type of development:** Housing  
**Date of original application:** 23/10/2013  
**Date approval granted:** 04/06/2014  
**Biodiversity credits to be lost:** Approximately 10 units  
**Details of any offset:** Offsite offset scheme to be developed.

**Summary of development**

Part of a wider area of former airfield land, left redundant as a development platform. The land was ‘made up’ as a development platform over 10 years ago, although the site now supports established vegetation. Adjacent land parcels include additional housing, tree-lined road infrastructure and a predominantly hard landscaped water sports marina. The proposed development footprint is 1.3ha including a small area of SUDS. The existing habitats amount to approximately 0.8ha of 6 distinct habitats which will be lost as a result of the development.

**Reason for using the biodiversity offsetting approach**
The developer was willing to explore various approaches to account for the residual biodiversity impact of these proposals. These including an exploration of whether additional credits could be delivered onsite as part of an enhanced SUDS scheme, as well as the offsite scheme offered. However, it was considered that the SUDS area on offer did not amount to a positively managed habitat that could be considered as on-site compensation. The overall scheme design and confined development area and viability considerations meant that an offsite approach was most pragmatic and offered the greatest biodiversity potential. There was no on-site compensation; hence all of the habitat loss was total loss.

<table>
<thead>
<tr>
<th>Summary of biodiversity impacts, including offsite compensation.</th>
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<tbody>
<tr>
<td>The biodiversity impact of the scheme was calculated as approximately ten units.</td>
</tr>
<tr>
<td>The offsite scheme offered to the developer is based on a proposal for habitat restoration works on Doncaster Common. This land is owned by DMBC and managed as a golf course by Doncaster Town Moor Golf Club (DTMGC). The areas of rough consist of remnant acid grassland and heathland with dense and scattered scrub, both as discreet habitat patches and succeeding through the grassland. This habitat is both a national and local conservation priority. The restoration works would consist of scrub removal and on-going maintenance to retain a predominantly open character with identified areas for tree and scrub retention. The existing habitat is 2.2 ha of ‘unimproved acid grassland’ of ‘moderate’ condition and based upon its character, the scheme would deliver the habitat into ‘good’ condition and offer 11 units/credits of compensation. This site lies in close proximity to the development site and is similar in character to that being developed although being relatively un-disturbed it has the potential to be of better condition. The Council along with DTMGC will manage the delivery of the compensation, including continued engagement with other interested parties.</td>
</tr>
<tr>
<td>Breakdown of costs (offset scheme):</td>
</tr>
<tr>
<td>- Restoration works (scrub removal, including necessary stump grinding and offsite disposal. Does not necessitate reseeding as existing seedbank has been found on other parts of the site to be a viable resource) - £10,000</td>
</tr>
<tr>
<td>- Aftercare / on-going management (removal of regenerating saplings, weed management) - £5,000 for 10 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaluation of the biodiversity offsetting approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>The benefits of this proposal are that the total impacts of the development were compensated on a like for like basis on a designated Local Wildlife Site in need of habitat restoration and long-term management. There was no net loss and current metric calculations indicate a net gain of 0.91 Biodiversity Units will be delivered. This was also achieved on a site that sits centrally within a key Green Infrastructure corridor for Doncaster, linking a number of other wildlife sites with varied habitats (heathland, woodland, grassland etc.), but all within the character of the area and Biodiversity Opportunity Target Area. This demonstrates how site specific conditions and potential losses can, through biodiversity offsetting, deliver landscape scale biodiversity enhancement that has long term management attached to it.</td>
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<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
</tr>
</tbody>
</table>
5. Essex

5.1 Context

5.1.1 Pilot name
Essex Biodiversity Offsetting Pilot (EBOP).

5.1.2 Pilot hosts
Essex County Council (ECC) with the Environment Bank Limited (EBL).

5.1.3 Pilot partners
The following were partners at the time of the EoI submission:
- Environment Agency.
- Mineral Products Association (MPA).
- Parklands South Essex.
- The Essex Biodiversity Project.
- Essex Wildlife Trust (EWT).
- Basildon District Council.
- Castle Point District Council.
- Uttlesford District Council.

After the submission of the EoI the following partners joined:
- Royals Society for the Protection of Birds (RSPB).
- Natural England.
- South Essex Greengrid Network.
- The Land Trust.
- University of Essex.
- Country Land & Business Association (CLA).
- Chelmsford City Council.
- Colchester Borough Council.
- Epping Forest District Council.
- Harlow District Council.
- Rochford District Council.
- Thurrock Council.

Figure 8 below provides a graphical summary of the participating Local Planning Authorities (LPAs) taken from the final biodiversity offsetting strategy.

5.1.4 Governance arrangements of the pilot
Governance arrangements for the Essex pilot included a grouping of new partnerships structured around the two hosts supported by the partners who formed a pilot group.
5.1.5 Ecological context of the pilot

- There are 10 international Ramsar wetland sites within Essex.
- The majority of Essex coastline has been designated as part of the Mid-Essex Coast Phase which is made up of five separate Special Protection Areas (SPAs) which in combination cover approximately 23,000ha.
- There are two Special Areas of Conservation (SAC) in the county – Epping Forrest and Essex Estuary.
- There are 81 Sites of Special Scientific Interest (SSSI) in Essex; in total these cover 36,322ha many of which include coastline areas. Essex is meeting Natural England’s target of 95% of their SSSI being in ‘favourable’ or ‘unfavourable’ recovering status as 95.26% of their SSSIs by area meet this target. 3.61% of the SSSIs are ‘unfavourably declining’ although none have been lost.
- There are seven National Nature Reserves (NNR) and 39 Local Nature Reserves (LNR) located in Essex.
- There are 1,440 Local Wildlife Sites covering around 13,000ha across Essex.
- 5.7% of Essex is wooded which is lower than the national average of 12%\textsuperscript{15}.

\textsuperscript{15} \url{http://www.woodlandtrust.org.uk/en/news-media/fact-file/Pages/uk-woodland-facts.aspx#.Ua8T7ZyE6KV}
5.1.6 Planning and development context of the pilot

More detail is available as part of the Strategic Environmental Assessment of the Draft Submission Minerals Plan for Essex Annex A. A summary of relevant planning policy is presented in Table 21.

Table 21: Essex County Wide Plans

<table>
<thead>
<tr>
<th>County Plan and Programme</th>
<th>Main aim and objectives</th>
</tr>
</thead>
</table>
| Essex Rural Strategy: 2020 Vision for Rural Essex 2010 | This Strategy seeks to create a vibrant future for rural Essex, based upon six strategic aims:  
- Active and caring communities  
- Improved access to services  
- Greater availability of affordable housing  
- A thriving economy  
- A rich and varied environment  
- A responsive planning and policy framework |
| Essex Local Transport Plan 2011 (LTP3) | This plan consists of two parts, the transport strategy and the implementation plan. There are five broad outcomes that the plan seeks to achieve. These are: -  
- Provide connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration  
- Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology  
- Improve safety on the transport network and enhance and promote a safe travelling environment  
- Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use  
- Provide sustainable access and travel choice for Essex residents to help create sustainable communities. |
| Essex Biodiversity Action Plan 2011 | The 2011 Plan replaces the first 1999 Biodiversity Action Plan for Essex setting out targets and actions at a district level, where appropriate. Groups are based on habitat types, which will include relevant species and sub-plans for more specific habitats. Habitat groups are:  
- Lowland Farmland  
- Lakes and Ponds  
- Rivers  
- Wetlands  
- Coastal  
- Marine  
- Urban and Brownfield  
- Woodland  

The Essex Biodiversity Action Plan (EBAP) is a result of co-operation between nature conservation organisations, local authorities, statutory agencies, voluntary interest groups, the private sector and individuals. The process began in 1997 when the Association of Essex Councils hosted an Essex Sustainability Conference. This highlighted the need for a co-ordinated approach to nature conservation within the County. |
| The Essex Strategy 2008 – 2018 | The Essex Strategy acts as an ‘umbrella’ document for the activities of all the key providers of public and community services in Essex. It is being compiled from the views of Essex people and shows a vision of the sustainable development of Essex into the medium term future. The Essex Strategy is the strategy of the Essex Local Strategic Partnership. The Essex Strategy is the overarching umbrella strategy for public services in Essex and as such, all plans and programmes developed by the Essex local authorities are in a sense a sub-set of it. The Essex Strategy is a high-level document that sets out an overall strategic direction and high-level objectives. Sustainable development is its core objective and it includes objectives covering climate change, environmental protection, energy generation and waste, all of which have implications for spatial planning. |
| Essex Replacement Minerals Local | The Minerals Local Plan sets out proposed policy for minerals development up to 2029 and includes vision relating to:  
- Sustainable development |
County Plan and Programme | Main aim and objectives
---|---
Plan Submission Version | • Primary mineral provision  
|  | • Coordinating Essex’s supply of minerals  
|  | • Protecting amenities and communities  
|  | • Climate change  
|  | • Reduce, re-use and recycling of materials  
|  | • Protecting minerals resources and facilities  
|  | • Restoration and after use  
|  | • Communities  
|  | • Economic and long term high quality environment and landscape

There are potentially very many plans and strategies relevant to the lower tier LPAs involved in the pilot. Therefore a summary only of the LPAs progress towards delivering a Local Plan and links to relevant websites is included in Table 22.

**Table 22: Relevant local plans in Essex**

<table>
<thead>
<tr>
<th>LPA Partners</th>
<th>Status of Local Plan</th>
<th>Planned levels of development</th>
<th>Relevant Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chelmsford City Council</td>
<td>Local Plan submitted</td>
<td>14,000 by 2021 (RSS target)</td>
<td><a href="http://www.chelmsford.gov.uk/main.cfm?Type=PLLD&amp;MenuId=422">http://www.chelmsford.gov.uk/main.cfm?Type=PLLD&amp;MenuId=422</a></td>
</tr>
<tr>
<td>Harlow District Council</td>
<td>Local Plan adopted</td>
<td>5,600 in Core Strategy</td>
<td><a href="http://www.harlow.gov.uk/arhlp">http://www.harlow.gov.uk/arhlp</a></td>
</tr>
<tr>
<td>Uttlesford</td>
<td>Draft Local</td>
<td>523 dwellings per year (between 2011 –</td>
<td><a href="http://www.uttlesford.gov.uk">http://www.uttlesford.gov.uk</a></td>
</tr>
</tbody>
</table>

16 According to PlanningResource: [http://www.planningresource.co.uk/go/localplan_maps](http://www.planningresource.co.uk/go/localplan_maps)
5.1.7 Biodiversity offsetting basic information

Within the pilot programme the metric was applied to seven applications. Of these four applications were considering offsets, although none were legally approved during the pilot programme.

5.2 Information sources and data collection

In total 11 interviews were undertaken during the course of the pilot as summarised in Table 23. There were also several catch up discussions across the pilot phase.

Table 23: Essex summary of interviews undertaken

<table>
<thead>
<tr>
<th>Interview points</th>
<th>Interviewees in each stakeholder group</th>
</tr>
</thead>
<tbody>
<tr>
<td>The setting up of the pilot group (Stage 1)</td>
<td>Pilot hosts</td>
</tr>
<tr>
<td>The development of the biodiversity offsetting strategy (Stage 2)</td>
<td>Pilot hosts, Natural England Adviser</td>
</tr>
<tr>
<td>Final reflective interview at the end of the pilot (Stage 3)</td>
<td>Pilot hosts, Natural England Adviser</td>
</tr>
<tr>
<td>LPAs who chose not to participate in the pilot phase</td>
<td>Local Planning Authority officers</td>
</tr>
<tr>
<td>Final reflective interview at the end of the pilot</td>
<td>Pilot lead, Natural England Advisers</td>
</tr>
<tr>
<td>Using the metric within a planning application</td>
<td>Metric user</td>
</tr>
<tr>
<td>Interviews around specific projects</td>
<td>LPA ecologist</td>
</tr>
</tbody>
</table>

5.3 Governance

The Essex pilot was hosted by ECC. At the Expression of Interest (EoI) stage ECC was offered and accepted a full time EBL Project Officer. This officer was based in the ECC offices. This relationship was described as a partnership, although this was largely informal as there was no formal agreement or memorandum of understanding. Neither party flagged this lack of formality as an issue.

Beyond the co-hosts there was a large number of ‘partners’ who engaged with the pilots via informal discussions and the pilot group. The hosts were keen to get a mix of different sectors and interests and the group was said to represent a “strong partnership of public, private and not-for-profit organisations”\(^\text{17}\). This list included nine Councils; three Council led multi-partner initiatives; two Non-Governmental Organisations (NGOs); two Government agencies; three business representatives; and one university.

The hosts felt that the pilot group had been a useful forum for discussion, but that it had not resulted in a significant number of changes to the actual Strategy or, as hoped, identified a substantial number of opportunities to test biodiversity offsetting. Most of the support was received through quarterly pilot group meetings and ongoing correspondence.

The Natural England advisers indicated they had provided various aspects of support including: commenting on emerging drafts of the strategy; providing technical support on specific elements; providing links with emerging and existing research; and, ensuring consistency with Defra’s Technical Guidance. In a small number of instances they had also commented on the appropriateness of biodiversity offsetting within specific applications.

The pilot hosts noted that certain members of the pilot group were more active than others, but generally there was a good level of engagement. The Natural England adviser reported that there had been a lot of communication, particularly around the development of the strategy and that this had improved the strategy.

The breadth of sectors covered with the pilot group meant that the hosts felt they had consulted with a sufficiency of stakeholders including developers and potential offset providers and that wider consultation was not necessary.

Within ECC the pilot had engaged with various planners and ecologists and although they had not sought Member involvement they had cleared the strategy with the Head of Planning. The Head of Planning had then shared the strategy and a covering letter with the lower tier LPAs. This was the main form of dissemination and the hosts felt this was appropriate for a pilot, when coupled with their awareness raising activities.

These activities were significant and by the end of the pilot programme the EBL officer had undertaken over 75 meetings and workshops with LPA officers, potential offset providers, consultants and developers.

### 5.4 Process and management

#### 5.4.1 The biodiversity offsetting strategy

The hosts developed a ‘biodiversity offsetting strategy’ that shaped the approach of the pilot and set out where offset receptor sites should be located. The hosts and Natural England advisers felt there was a need for a spatial strategy and that this had chimed with the interests of the other members of the pilot group.

Another aspect upon which the pilot group agreed was the need to not ‘reinvent the wheel’. Therefore the strategy focused on the Living Landscape (LL) and sole Nature Improvement Area (NIA)\(^{18}\) within the County and identified these as being the preferred choice for offset receptor sites. The hosts felt that these were the only choice as the evidence base for these designations already existed and developing novel evidence was not felt to be appropriate in a pilot programme. It was reported by the Natural England adviser that there had been some discussions between the Wildlife Trusts and RSPB about which of their approaches should be used (LL as opposed to Futurescapes), in the end they decided to go with LL as the pilot group felt that in Essex the evidence base was more robust. The final strategic offset receptor site areas are shown in Figure 9.

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\(^{18}\) Greater Thames Marshes NIA
The hosts were keen to ensure that the strategy was not too restrictive as they felt that they could arrange much of the detail of any projects on a case by case basis, guided by the framework of the strategy. Again this was felt to be appropriate within a pilot.

The hosts did not explicitly refer to the Defra Principles when developing the strategy, but they made frequent references to the Technical Guidance produced by Defra.

The hosts indicated that the NPPF, Defra’s Technical Guidance and the LL / NIAs were the primarily policy level inputs into the Strategy. The NPPF was referred to with reference to the mitigation hierarchy and net gain and LL and NIAs set the spatial prioritisation for offset receptor sites.

There were some overarching principles included within the strategy: in particular a preference for the receptor site to be in the same LPA area that the impact site is in. This was primarily a political decision emerging from the pilot’s LPA partners. The hosts recognised there might be some practical challenges to implementing this. Specifically, the hosts referred to a study that demonstrated significant asymmetry in the supply of possible receptor sites across the pilot area meaning that some LPAs had limited suitable sites for enhancement or restoration so that this principle might be difficult to deliver should any projects come forward.19

Interviews with officers of LPAs that had not joined the pilot cited the lack of potential offset sites within their authority as one of the reasons for not joining. They were concerned this would mean they would not reap the benefits of any biodiversity offsetting.

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Data issues

The hosts indicated that at a relatively early stage they had looked at including priority species and habitats as being preferred for restoration or enhancement within the strategy. However, due to an absence of suitably robust ecological data (there is no Record Centre in Essex) and some conflicts among the interests of members of the pilot group (different nature NGOs having different priority species and habitats) they dismissed this as unworkable.

The lack of data emerged as an issue in another instance when the EBL officer looked at the feasibility of using the metric to support emerging local planning policies. The absence of up-to-date, reliable and detailed habitat data meant this assessment was not possible.

The impact of the strategy

The hosts felt that the lack of offset projects during the pilot programme meant that the strategy had very limited impact. Where there were opportunities the spatial priorities set out in the strategy were being used.

Despite this lack of impact the hosts believed that there was value in developing the strategy as it had led to discussion and a significant amount of learning across the Pilot group.

5.4.2 The metric

In total 11 applications had applied the metric during the pilot phase. Of these only two had included their metric calculations within their final planning applications; the other nine chose not to pursue biodiversity offsetting.

Within the pilot there were four possible routes to use the metric:

1. Developers contacted EBL requesting a metric calculation at the pre-application stage.
2. Developer’s own consultants undertook and submitted a calculation.
3. Planning Authority contacted EBL to request a ‘high-level’ calculation based upon the ecological assessment submitted with a planning application. Calculation used by the authority to help determine application.
4. Following an initial objection by a planning authority - who recommended the use of the metric to deliver compensation - the developer completed their own calculation or requested one from EBL.

Having applied the metric, the interested parties would discuss the impact of the development and the options for on-site enhancements and, if necessary, any offsets. EBL’s role was primarily to undertake the metric calculations, and search for offset sites as required. The LPA officers were tasked with addressing the application via the planning system. At the end of the pilot programme three offsets were believed to be ‘in the pipeline’ (in addition to a ‘test-offset’), one having been approved and included as an obligation within a s.106 agreement.

The pilot hosts accepted that the process of using the metric was not ideal and meant that only a small number of applications were considered. ECC saw this as a pragmatic response within the resources available. The resource limitations were partly behind the decision by the pilots to use EBL for metric calculations as the ECC ecologists did not have the capacity to do this or to provide oversight of ecological consultants.

Process and impact of using the metric

The EBL officer responsible for undertaking the metric calculations within the pilot was generally supportive of the metric, seeing it as a relatively simple tool that could fit into existing processes, and able to deliver benefits for biodiversity where it was applied. E, through using the metric, were able to identify the biodiversity loss and then put in place options to reduce it. Expressing this loss in numbers was felt to be very significant (e.g. XX% loss) and something that was relatively new and welcomed by developers. This then allowed
the ecologists to quantify the need for any compensation.

Despite this general support there were some aspects of the metric that were felt to work less well, including:

- The lack of evidence or guidance on condition assessments for non BAP habitats.
- Lack of evidence or guidance on the temporal and technical difficulty of restoring or enhancing habitats.
- Other issues such as dealing with temporal losses (from minerals work), indirect impacts and dealing with linear features were also noted as on-going challenges.

### 5.4.3 Links with other natural environment initiatives

The pilot had strong links with the Greater Thames Marshes NIA, prioritising NIA sites where appropriate for offsets and receiving funding to complete the test-offset. A number of the NIA partners were also involved with the pilot and information was shared across both groups.

There is no Local Nature Partnership (LNP) in Essex and no links with the Local Enterprise Partnership (LEP).

### 5.4.4 Review of the biodiversity offsetting strategy

The following is a review of the extent to which the biodiversity offsetting strategy addresses the evaluation criteria, which are based on the Defra Principles for biodiversity offsetting.

#### Table 24: Review of Essex strategy with respect to the Defra biodiversity offsetting criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Extent to which the criteria is, or is not, included in the strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Has offsetting ensured no change to existing levels of protection for biodiversity?</td>
<td>Strategy includes basic description of existing policy and processes that relate to biodiversity protection - for instance red data lists, NERC list, UK BAP and the Essex Biodiversity Project who are responsible for delivering the BAP in Essex. Reference is also made to the Biodiversity Duty and the National Planning Policy Framework (NPPF). These materials set the framework for the strategy. The NPPF (Box 1 of the strategy) indicates how LPAs should consider applications and the relevance of this decision to biodiversity offsetting (i.e. that it does not affect this policy and that the mitigation hierarchy set out in the NPPF remains valid within the strategy). The strategy indicates that impacts on legally protected species and/or sites must be addressed with existing legislation.</td>
</tr>
<tr>
<td>2. Has offsetting delivered real benefits for biodiversity through:</td>
<td></td>
</tr>
<tr>
<td>2a. Seeking to improve the effectiveness of managing compensation for biodiversity loss;</td>
<td>The strategy does not make a case for biodiversity offsetting or describe the ways in which it seeks to improve the effectiveness of compensation. Page 6 does indicate that biodiversity offsetting is the preferred option for compensating for residual impacts.</td>
</tr>
<tr>
<td>2b. Expanding and restoring habitats, not merely protecting the extent and condition of what is already there;</td>
<td>The strategy does not describe the options of expanding and restoring habitats explicitly. Rather it refers to enhancement generally. However the document does indicate that enhancement is a core part of this approach and it sets out the areas that should be enhanced.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Extent to which the criteria is, or is not, included in the strategy</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>2c. Contributing to enhancing England’s ecological network by creating more, bigger, better and joined areas for biodiversity (as discussed in Making Space for Nature);</td>
<td>The fact that a NIA, a core recommendation of Lawton, is present within the pilot area helps to support the delivery of this criterion. The NIA is treated in the same way that LL areas are - i.e. as an area to prioritise biodiversity enhancement. The combination of these two initiatives within the strategy suggests consistency with this criterion.</td>
</tr>
<tr>
<td>2d. Providing additionality; not being used to deliver something that would have happened anyway;</td>
<td>The glossary includes reference to additionality, but this is not included within the actual text of the strategy. The strategy does not deal with the specifics of site management or determining the sources of funds so this can be considered appropriate.</td>
</tr>
<tr>
<td>2e. Creating habitat which lasts in perpetuity (with a clear and agreed understanding of what is meant by perpetuity);</td>
<td>The document makes no reference to this concept. It does link to documents that do.</td>
</tr>
<tr>
<td>2f. Being at the bottom of the mitigation hierarchy, and requiring avoidance and mitigation of impacts to take place first?</td>
<td>The NPPF mitigation hierarchy is a core part of the strategy and is referred to a number of times. Biodiversity offsetting is described as the preferred option for delivering compensation or enhancements.</td>
</tr>
<tr>
<td>3. To what extent has offsetting been managed as much as possible at the local level and:</td>
<td></td>
</tr>
<tr>
<td>3a. Within national priorities for managing England’s biodiversity and ecosystem services;</td>
<td>The use and prioritisation of Living Landscape and the NIA both indicates a consideration of national priorities. There is also reference to the Essex BAP which links to the UK equivalent.</td>
</tr>
<tr>
<td>3b. Within a standard framework, which provides a level of consistency for all involved;</td>
<td>There are regular references to the metric and supporting documentation providing a standard framework. The document is also self-consistent within its approach to biodiversity offsetting, any Principles it considers and its prioritisation of areas.</td>
</tr>
<tr>
<td>3c. Through partnerships at a level that makes sense spatially, such as county level, catchment or natural area;</td>
<td>The use of existing groups such as the Essex Wildlife Trust (EWT) and Essex Biodiversity Project can be taken to mean that the strategy has a spatial logic. The LL and NIA are also relevant to this area supporting this assertion. The absence of some LPAs (Figure 1B) suggests that there might be some artificial boundaries; these might be exacerbated by the search criterion 4 (p7) which looks to have offset sites in the same LPA as the impacts.</td>
</tr>
<tr>
<td>3d. With the right level of national support and guidance to build capacity where it is needed;</td>
<td>There are numerous references to the national guidance and support.</td>
</tr>
<tr>
<td>3e. Involving local communities?</td>
<td>Reference is made to working with the EWT...and their community partners (page 7). This is not expanded. The process of the Ecological Impact Assessment does not explicitly allow for community engagement.</td>
</tr>
</tbody>
</table>
### 4. Has offsetting been as simple and straightforward as possible, for developers, local authorities and others?

n/a

### 5. Has offsetting been transparent, giving clarity on how the offset calculations are derived and allowing people to see how offset resources are being used?

Within the scope of the strategy there are a number of references to the metric and the need to follow the processes set out there. It also makes it clear where risk of offset creation sites and where these sections are in the metric and supporting technical material. It also spells out issues around priority species / habitats and areas and the criteria for determining offset sites.

n/a

### 5.5 Legal and development planning

#### 5.5.1 The biodiversity offsetting strategy

The strategy has no formal status in planning and is primarily intended to support the pilot and provide information to those interested in using the biodiversity offsetting approach. The strategy was intended to be developed in this way and was felt to be proportionate for a voluntary pilot. The pilot hosts noted that the strategy would need to be more robust should biodiversity offsetting become mandatory.

#### 5.5.2 Interpretation of national planning policy

The pilot hosts felt that existing hooks in national planning policy were insufficient to require compensation for the loss of lower value habitats. Partly this was felt to relate to the overriding political support for development, particularly during the early stages of the pilot when the recession was most severe. Where offsets have been agreed, in principle, this has been because they are impacting on some form of local designation and have thus required the attention of the County Ecologist (the pilot host). The hosts noted that the small number of higher impact cases could be taken as a positive as developers know they should avoid bringing forward development on these habitats.

It was noted that the applications impacting on locally designated sites were all allocated within Local Plans.

#### 5.5.3 Integration of biodiversity offsetting into other policies

A number of the LPAs within the pilot area have integrated biodiversity offsetting or key concepts into their planning policy (Table 25). The hosts were also seeking to include the metric into their validation checklist for ‘major planning’ applications.
5.6 Costs

5.6.1 Costs related to setting up the pilot group and the strategy

The hosts estimated that finalising the strategy had used, over a couple of months, about five days of the ECC host’s time and six days of the EBL host’s. Others had used the time they had set aside for Pilot group meetings (around two days per quarter per partner).

The Natural England adviser indicated that they spent around two weeks of their time commenting on the strategy and discussing this with the pilots.

Away from the development of the strategy milestone, the Natural England adviser estimated they had spent around one day per week. The ECC host had integrated any consideration of biodiversity offsetting into their existing role and the EBL officer was full time.

5.6.2 Costs related to offsets

None of the potential offsets have been delivered although learning did emerge within the pilot programme, including:

- The use of the metric tended to result in increased costs for off-site compensation and developers were reluctant to pay for this. It was noted by the pilot hosts that this relative increase in costs was a function of the fact that the current practice has tended to significantly underestimate the costs required to reduce biodiversity impacts.
- The original definition of in perpetuity (as included within their strategy) was considered to mean that the wider farming landscape was out of scope. The reason being that private landowners were not interested in being involved in permanent contracts to manage their land for biodiversity, and total costs for management in perpetuity were too high for developers. The pilot hosts responded to this by developing 25 year management plans.
- Potential offset providers, particularly private land owners, were felt to need a substantial annual income for the offset to be considered worthwhile - £5,000 per annum was quoted as a minimum figure for private landowners. The pilot responded by considering opportunities for habitat banking which have the potential to provide combined offsets.
- Feedback from private landowners contacted as part of the NIA search for the test offset site, indicated that the sum of money available (circa £90,000 for 25 years) was not
sufficient to induce them to enter land into a long-term legal agreement (beyond 10 years). There was concern that there was not sufficient flexibility to allow them to secure other sources of income in the future; and that the income available from offsetting compared unfavourably to that achievable from arable cultivation or other forms of rural development such as solar farms. Assuming a 20 hectare offset scheme lasting 25 years then only £180 per ha/per annum was available from the project. This compares with £120 - £205 per ha/per annum from arable cultivation and £320 - £610 for solar arrays. Furthermore, in south Essex the perceived ‘hope-value’ of land is relatively high given the projected levels of development.

The test offset (Case Study Essex1) presented at the end of this pilot report section includes the only detailed offset cost data – although for a number of reasons it is considered atypical and is not a full offset as the funding provided will not result in no-net loss.

### 5.7 Ecological implementation and monitoring

There is limited evidence emerging from the pilot regarding the ecological impact of biodiversity offsetting.

On the applications that have applied the metric the host felt that they had seen better outcomes and that the use of the metric is positive as it accounts for the value of lower priority habitats - something that didn’t happen before.

In particular it was considered that a big positive for biodiversity was that arable and other low quality habitats were now included within decision making. This had presented some challenges for developers and some ecological consultants who have tended to not value these habitats.

The hosts also felt that there were some benefits to on-site biodiversity enhancements, but most of these on-site improvements related to green-spaces being enhanced, usually in terms of condition. The hosts noted concerns that the lack of enforcement for on-site measures may mean that these benefits might not be delivered. There was a feeling that it was possible to reduce the direct impacts to an extent, but that there was always a risk that the use of the site reduces the biodiversity value of the site. Within the pilot programme the metric didn’t account for indirect impacts or for severance impacts. Despite these limitations the hosts and Natural England advisers felt that the metric was better than current practice.

### Identification of offset sites

The EBL officer spent a substantial amount of time registering potential offset sites across the pilot area. This was done to create a ready land supply of potential offsets. In total 31 sites in Essex were registered on EBL’s Environment Markets Exchange\(^\text{20}\). Within the pilot programme all of these were ‘bronze’ categories meaning that limited site specific detail had been provided and that it had not been reviewed. These sites were also considered during targeted offset searches. In total five such searches were undertaken, i.e. five developers requested searches as they were interested in finding an offset site. During the pilot phase one application progressed sufficiently to move a registered site to a silver stage – the level of information required to develop site specific management plans.

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5.8 Lessons

A number of lessons emerged from the pilot including:

- There were a significant number of barriers to the use of voluntary biodiversity offsetting, including:
  - Biodiversity offsetting was not prioritised by planning officers partly due to competing priorities.
  - The fact that pilots had no formal status.
  - Lack of case studies to show biodiversity offsetting works and is viable.
  - Limited ecological expertise and capacity within lower-tier planning authorities.
  - No biological Records Centre and limited access to biodiversity data within Essex.
  - It was voluntary so developers could walk away whenever they wanted.
  - The uncertainty of the pilots’ status (i.e. would they carry on).
  - The uncertainty caused by the Green Paper coming out (some stakeholders were waiting for national policy before they did anything).
  - The fact that the Natural Environment Team of ECC were restructured shortly after the start of the pilot as a trading service where they had to recoup their time meant that less officer time was available to participate in the pilot.
  - Immaturity of the existing market and the lack of cost evidence for management plans.
- Negative perceptions from environmental stakeholders;
- A voluntary system resulting in inconsistent treatment of developers;
- The political imperative of delivering offsets within the same LPA presents practical challenges to implementation.

5.9 Status of the pilot after the pilot programme

The EBL officer left post at the end of the pilot programme. The ECC host asked the Pilot group if they wished to continue and they said yes – noting that there is no resource.

Although a full-time officer will no longer be available, EBL committed to providing continued support to LPAs within Essex when needed. The fact that some LPAs are adding biodiversity offsetting into their local plans means they will use it where appropriate. The use of the metric forms part of the validation requirements for major developments submitted to the minerals and waste planning authority.

5.10 Case studies

The following are summaries of live planning applications within the pilot that tested aspects of biodiversity offsetting. Other than the test offset (Essex1) they have been anonymised due to the sensitive nature of the cost and planning information.

<table>
<thead>
<tr>
<th>Case Reference Essex1 (Ferry Fields Test Offset)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project summary</strong></td>
</tr>
<tr>
<td><strong>Type of development</strong>: Historical port development</td>
</tr>
<tr>
<td><strong>Date of original application</strong>: 1995</td>
</tr>
<tr>
<td><strong>Date approval granted</strong>: 1995</td>
</tr>
<tr>
<td><strong>Biodiversity units to be lost</strong>:</td>
</tr>
<tr>
<td><strong>Details of any offset</strong>:</td>
</tr>
</tbody>
</table>

**Summary of development**

The Ferry Fields development in Thurrock was granted planning permission in 1995. This development was in a Local Wildlife Site (LWS) that consisted of 17 ha of grazing marsh, a nationally important key habitat listed in the UKBAP. The site also contained two UKBAP priority species; the shrill carder bee and the hornet robberfly.

As part of this development, a s.106 Agreement was arranged with the developer so that a payment of
£50,000 was paid to compensate for the loss of the site and associated biodiversity. This financial compensation, originally provided in 1995 was accessed in 2011 and match-funded by the Greater Thames Marshes NIA in 2012.

### Reason for using the biodiversity offsetting approach

The objectives of this exercise were twofold; firstly, to spend the contribution on biodiversity enhancements in the most effective way, and secondly to explore various aspects of biodiversity offsetting.

### Summary of biodiversity impacts, including offsite compensation

The project consisted of two activities. Retrospectively applying the Defra biodiversity offsetting metric to the original Ferry Fields development and finding a site to deliver an ‘offset’.

#### Retrospective application of the metric

The application of the Defra biodiversity offsetting metric showed that the Ferry Fields site was, prior to its development, of high biodiversity value and that development had resulted in the loss of 204 biodiversity units. In the absence of evidence of condition it was assumed to be in moderate condition. Applying the metric made it clear that the original financial compensation of £50,000 was much lower than the amount needed to replace the amount of biodiversity that had been lost.

The identification of an appropriate site

The two main criteria for identifying an appropriate ‘offset’ site were that it had to be appropriate for invertebrates (consistent with the habitat lost) and it needed to be within Thurrock.

In 2012 EBL identified the 26ha Buckingham Hill site. The site had a low baseline habitat status and so it offered an opportunity for significant biodiversity uplift with a target biodiversity gain of 185.7 conservation credits. However, as a result of detailed site investigation it became apparent that the Buckingham Hill project was not appropriate and the search for an alternative site began.

The 2.51 ha Anchor Field Local Wildlife Site consists of species-poor rough grassland and was identified as a suitable biodiversity replacement site in 2013. Its high baseline biodiversity value meant that biodiversity uplift had a target biodiversity gain of only 12.6 conservation credits; therefore it would not meet the requirements for a no net loss of biodiversity target for biodiversity lost at Ferry Fields. The site is not currently managed, and it was felt likely that the site would deteriorate over time. However, the current Defra biodiversity offsetting metric does not allow for offsetting credits to be gained for maintaining sites already in good condition; this rendered a number of potential sites ineligible for the project.

The ownership of Anchor field is complex with multiple partners involved including a separate management organisation. This required an appropriate legally binding contract. EBL developed conservation banking legal agreements and these were used to agree the final offset – at the end of the pilot phase the legal arrangements were proceeding.

Originally identifying an appropriate site was not expected to be a significant challenge, but by the time Anchor field was chosen almost £30,000 of stakeholder time had been spent undertaking various searches, investigating sites and developing management plans.

Overall, the original Ferry Fields site development resulted in a loss of 204 biodiversity units, which is far greater than the potential gain of 12.6 conservation credits through the proposed Anchor Field site biodiversity offset. Assuming the Anchor Field site is eventually delivered, there will have been an overall 93.8% biodiversity loss due to the Ferry Fields development that will not be fully compensated for – and this doesn’t take account of the temporal loss since 1995.

### Evaluation of the biodiversity offsetting approach

#### Lessons learnt:

- The use of the metric can illustrate shortfalls in historical compensation.
- Identifying, screening and developing appropriate offsets is not necessarily straightforward, particularly within relatively confined search parameters and in the absence of a mature market for offsets.
- Site investigations are essential to fully understand the potential of a site.
- As an offset develops it is important to have in place strong legal agreements as sites will often have complex management and ownership structures.

### Notes

n/a
**Case Reference: Essex2**

### Project summary

| Type of development: Residential | Biodiversity units to be lost: Approximately 18 |
| Date of original application: May 2013 | Details of any offset: Grassland restoration. |
| Date approval granted: Refused in August 2013; went to appeal in April 2014; appeal allowed in May 2014. |  |

### Summary of development

Approximately 50 residential units including landscaping.

### Reason for using the biodiversity offsetting approach

The development was identified as having a significant impact upon species-rich unimproved grassland (classed as ‘MG1’) which had potential to become better quality grassland (classed as ‘MG5’) with appropriate management and was of LWS quality.

Furthermore the site was already being used to mitigate the biodiversity impacts of an adjacent development. The metric was applied by EBL and this confirmed the significant loss of unimproved grassland.

### Summary of biodiversity impacts, including offsite compensation

The site included unimproved grassland and a number of rare and protected species. The unimproved grassland was undermanaged with encroaching scrub from boundary hedgerows and scattered scrub. Potential impacts included a high population of common lizards, loss of the majority of the unimproved grassland and some identified associated rare plants, as well as bats, invertebrates and birds.

The applicants intended to retain some of the habitats on site and to provide an offset to compensate for the residual loss. The original application contained no details of the offset.

In preparation for the appeal the appellants undertook additional species and botanical surveys. Also, EBL were employed by the appellants to undertake Defra Metric calculations to calculate the size of offset site that would be required. The applicant’s agents found an offset site within the District and their ecologists developed a management plan for the offset site, working with the landowner. This would provide MG5 grassland on the offset site. The common lizards would be translocated to a separate site as management would be incompatible with the MG5 grassland management.

### Evaluation of the biodiversity offsetting approach

As detailed in the planning documents the LPA ecologists felt that the application contained insufficient on-site measures including avoidance and mitigation. The fact that the site was already mitigating a previous development; the lack of on-site mitigation or compensation; the lack of sufficient survey information; and lack of detail about the offset led the LPA ecologists to recommend refusal on the grounds of significant impact to biodiversity. Biodiversity issues were the only reasons for refusal. The applicants appealed this decision.

At the appeal the Inspector felt that the LPA would not meet their five year housing supply and that therefore permission would be granted unless any adverse impacts could be demonstrated to significantly outweigh any benefits.

The appellants argued that the quality of the site was likely to deteriorate over time as it would not be managed beyond the five years required (to 2017) under the mitigation plan to meet the planning condition for the adjacent development site. It was also stated that the site was of lower quality as it had been briefly ploughed in the 1970s. The applicants contended that creating MG5 grassland on a receptor site with a longer term management plan would lead to biodiversity benefits.

This was accepted by the Inspector and, in addition to other conditions, meant that there were felt to be no significant adverse impacts. During discussions around the Statement Of Common Ground (Ecology) matters around the refusal fell away, due to further submitted details, clarification of issues and the further negotiation and progressing of the biodiversity offsetting sites. The LPA made the decision not to defend the appeal on the sole reason of ecology. The appeal was allowed.
The application retained few on-site features and made limited efforts to reduce the impact/mitigate on-site. It is arguable that there was an over-reliance on biodiversity offsetting to reduce the impact / achieve net gain.

**Notes**

n/a

### Case Reference: Essex 3

#### Project summary

<table>
<thead>
<tr>
<th><strong>Type of development:</strong></th>
<th>Major residential and related infrastructure.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date of original application:</strong></td>
<td>October 2011</td>
</tr>
<tr>
<td><strong>Date approval granted:</strong></td>
<td>July 2013 (outline)</td>
</tr>
<tr>
<td><strong>Biodiversity credits to be lost:</strong></td>
<td>Approximately 40 units</td>
</tr>
<tr>
<td><strong>Details of any offset:</strong></td>
<td>13 credits with the details to be determined</td>
</tr>
</tbody>
</table>

#### Summary of development

Large mainly residential development on approximately 20ha of arable land. Includes supporting infrastructure including education and access.

#### Reason for using the biodiversity offsetting approach

The responsible LPA, a partner in the pilot hosts, approached EBL at the beginning of 2012 regarding a housing development where avoidance and mitigation of environmental impacts had been in development for some time. Biodiversity offsetting was offered as a voluntary option at the last minute, and was considered by the LPA and the developer as an “additional” measure to ensure that the development delivered biodiversity gain in an auditable way. EBL responded with a credit requirement, using the Defra metric and information provided by the LPA.

#### Summary of biodiversity impacts, including offsite compensation

EBL considered the arable land to be of low biodiversity distinctiveness (x2) and in poor condition (x1), resulting in a multiplication factor of 2, and an overall loss of approximately 40 units. However, from the on-site management plans, the 8.6 ha of semi-natural habitat being created or restored was also taken into account (gain of approximately 29 credits) so that the net requirement of credits to offset the impact was (42 - 29 unit loss) approximately 13 credits.

EBL were asked to provide costs for these credits. Without an identified land owner and receptor site to provide a detailed and costed management plan it was difficult to provide a credit price. However, to encourage the voluntary involvement of this first developer in the scheme, EBL provided an estimate based on employing a cost-calculator to roughly estimate the price to deliver 13.5 credits.

The developer accepted the offset requirement and agreed to become the first developer to sign a s.106 agreement with offset obligations within the pilot programme. It was requested by the developer that the credit purchase only take place at the commencement of development, not at the point of planning decision.

EBL have identified two potential offset sites for the developer and LPA to choose from. One of these is a nature NGO’s site and another is on private land. Outline management plans have been prepared for both sites. At the end of the pilot phase EBL were running the calculations for both options and preparing a proposal for the LPA and developer. EBL were awaiting costs from the private landowner.

#### Evaluation of the biodiversity offsetting approach

It was felt by the EBL officer that this case was a good example of the voluntary system delivering a substantial offset to account for residual loss, after significant on-site measures had been put into place.

**Notes**

n/a
6. Greater Norwich

6.1 Context

6.1.1 Pilot name
Greater Norwich Biodiversity Offsetting Project

6.1.2 Pilot hosts
Norfolk County Council (NCC)

6.1.3 Pilot partners
The partners were based around the Greater Norwich Development Partnership (GNDP). GNDP members are: Norwich City Council; Broadland District Council; and, South Norfolk District Council. The Broads Authority had a watching brief (Figure 10).

Figure 10: GNDP Partners
(Source Joint Core Strategy)

6.1.4 Governance arrangements of the pilot
Governance arrangements were based around Norfolk County Council driving the pilot forward with support from a pilot group consisting of the GNDP partners and other
stakeholders.

6.1.5 Ecological context of the pilot

Biodiversity information for Greater Norwich is managed primarily through the Norfolk Biodiversity Information Service (NBIS), which is the county recording centre:

- There are 3,578ha of Sites of Special Scientific Interest (SSSI) in the pilot area. These sites are in better condition than the national average with only 44% of sites in ‘favourable’ or ‘unfavourable recovering’ condition in May 2007 compared to a national average of 72% in 2006.
- 23 habitats and 37 species are distinctive to Norfolk.
- The GNDP area has two international sites (SPA, SAC and RAMSAR), two National Nature Reserves and 14 Local Nature Reserves. There are 377 County Wildlife Sites as well.

Figure 11, taken from the Joint Core Strategy (JCS), provides a spatial summary of the biodiversity features within the area.

![Biodiversity enhancement areas](image_url)

Figure 11: Biodiversity enhancement areas

(Source: Joint Core Strategy)
6.1.6 Planning and development context of the pilot

The JCS is the primary planning policy in the area and brings together all related planning and development policy. The JCS sets out the ambition of having 33,000 new homes between 2006 and 2021.

Spatial planning documents relevant to each pilot area

The JCS provides the detailed information on other planning documents\(^{21}\).

6.1.7 Biodiversity offsetting basic information

The metric was not used in any projects and there were no accredited offset receptor sites.

6.2 Information sources and data collection

In addition to four update discussions, five interviews were conducted at three separate points; these are summarised in Table 26.

**Table 26: Greater Norwich summary of interviews undertaken**

<table>
<thead>
<tr>
<th>Interview points</th>
<th>Interviewees in each stakeholder group</th>
</tr>
</thead>
<tbody>
<tr>
<td>The setting up of the pilot group (Stage 1)</td>
<td>• Pilot hosts(^*)</td>
</tr>
</tbody>
</table>
| The development of the biodiversity offsetting strategy (Stage 2) | • Pilot hosts\(^*\)  
• Natural England Adviser |
| Final reflective interview at the end of the pilot (Stage 3) | • Pilot hosts  
• Natural England Adviser |

Note: interviews marked with an asterisk (\(^*\)) indicate the interview included both of the pilot hosts.

The Natural England advisers changed during the duration of the pilot with the first interview being conducted with one and the reflective interview with another.

Prior to the Stage 2 interview the final version of the documentation that formed the biodiversity offsetting strategy was reviewed and the assessment is contained within this pilot report (Table 27). The JCS and other planning documentation were reviewed as appropriate.

6.3 Governance

The pilot was hosted by staff from NCC; the hosts were supported by a pilot group specifically appointed for the pilot. This group consisted of representatives from the GNPD Local Planning Authorities (LPAs)\(^{22}\) and selected stakeholders including a number of nature NGOs and developer representatives.

The pilot decided to bid for pilot status as they were looking for innovative approaches to deliver the aims of the JCS and the GI policies. The pilot hosts felt that the work of the GNPD represented an innovative response to the spatial planning needs of the area and that they were keen to continue innovating in delivery of the JCS; biodiversity offsetting was viewed as consistent and complementary to this work. The pilot hosts were also looking at alternative funding sources for biodiversity as they were aware that they were going to lose some funding due to changes in the Norfolk Biodiversity Partnership.

\(^{21}\) Since no biodiversity offsetting projects were undertaken in this pilot, the planning context is not further elaborated here.

\(^{22}\) GNPD members are: Norwich City Council; Broadland District Council; and, South Norfolk District Council. The Broadlands Authority has a watching brief.
Using the GNDP as the basis for the pilot scheme made sense as the respective LPAs are heavily integrated and work together as a matter of course. NCC has a major role in the biodiversity aspects of the GNDP with none of the three LPAs that make up the GNDP have their own in-house ecological specialists; all use the NCC’s ecological advice through a number of service level agreements (SLAs).

The pilot hosts provided the momentum to the pilot primarily by providing individual LPAs with advice and training on biodiversity offsetting. For example seminars were provided as part of the normal ‘learning hour’ approach. Additional training was provided to smaller groups of the more interested planning officers and also to the spatial planning teams at Broadland District Council and South Norfolk Council.

The pilot group met regularly, and across the pilot programme they maintained a high level of attendance.

The pilot hosts had hoped that the pilot group would be pro-active, for example by identifying projects and possible offset receptor sites. This did not really happen and the pilot group’s main contribution was the provision of advice and commentary on the work of the hosts and reviewing documentation, notably that which formed the pilot’s biodiversity offsetting strategy.

The pilot hosts considered that the pilot groups more limited role was a result of a lack of capacity and a reluctance to work up speculative management plans for potential offsets (a process which has a cost implication) in the absence of any assurance that these plans would be delivered. The hosts also felt that the scepticism about biodiversity offsetting within the membership of the nature NGOs meant they had not engaged fully with the concept of biodiversity offsetting.

The pilot hosts felt that this lack of capacity, certainty and confidence in the biodiversity offsetting approach had a chilling effect on the pilot group members and meant that, in effect, the hosts alone developed the pilot.

At the same time the ability of the pilots to be proactive was reduced by the pilot lead changing post to a role that did not specifically include biodiversity offsetting. In the second year of the pilot programme this was addressed to an extent as biodiversity offsetting became part of their role. The pilot hosts felt that this disruption did reduce the amount of time available to be proactive and drive the pilot forward.

6.3.1 Relationship with Natural England

The pilot and Natural England advisers both recognised that despite some interactions they had not worked together as well as they might. Communication was limited to discussions during the setup of the pilot, attending pilot group meetings and providing comments on drafts of the strategy.

This limited engagement was felt to be due to a number of reasons, including:

- A restructuring of Natural England.
- Changing personnel at Natural England.
- A lack of capacity from both parties especially at the beginning of the process.
- The fact that the Natural England advisers were not based within Norfolk.

This relative lack of involvement was described by both as being a communication problem stemming from a lack of time, notably from the pilot hosts, rather than an explicit decision to exclude Natural England. The pilot hosts felt that if necessary Natural England would have responded to direct requests, but that they did not make any of these and that Natural England was not that proactive in getting involved. The absence of specific projects to discuss and engage with therefore meant that Natural England spent a small amount of time supporting the pilot.

Aside from the advisers the pilot noted that local Natural England staff where not always supportive of the work of the pilot and that it might have helped the pilot if Natural England’s
comments on planning applications included some wording that referred to the pilot and their work.

6.4 Process and management

6.4.1 Developing and finalising the biodiversity offsetting strategy

At an early stage of discussing the strategy the pilot hosts and pilot group decided that for a voluntary pilot it would be most appropriate to produce a ‘light touch’ strategy. This meant that it could be developed quickly and with limited resources and it would not require any formal sign off. This was possible in part as the majority of the technical detail was already available in the materials developed by Defra.

The pilot group, led by the pilot hosts, developed two separate documents, the first labelled ‘Guidelines for developers’ and offset providers and the second a six page summary setting out the main details of the pilot (the Norwich Biodiversity Offsetting Pilot – NBOP – summary document).

The pilot hosts developed drafts of the documents and these were then shared with the pilot group and selected others included some developers and NCC staff for comment and review. The level of comment was said to be quite limited with relatively few substantive comments – the reason given being that those involved had limited time. The substantive comments received from the pilot group included setting the priorities for offset receptor sites. The pilot group also clarified the inappropriateness of using biodiversity offsetting in SSSIs and designated sites. The other major comment was the need for the local provision of any offset sites.

The pilot hosts had existing relationships with a number of developers and they approached them to discuss the emerging documents. In these conversations the developers expressed concerns around biodiversity offsetting creating a new process and indicated that they saw value in on-site mitigation and they were keen to maintain this. The pilot hosts also approached the local Wildlife Trust who expressed an interest in being a potential receptor site provider if appropriate – this never developed beyond a general interest.

The biodiversity offsetting documents were produced with reference to the Defra Technical Guidance and, at the request of members of the pilot group, a number of the Defra Principles were explicitly included in the documentation. The pilot also developed a number of their own principles within the documentation:

- **Spatial principles:**
  - The importance of creating a buffer zone between the Broads and the proposed expansion of Norwich as set out in the JCS.
  - Seeking to connect the highly fragmented meadows and woodlands south of Norwich.
  - Receptor sites should be in the same LPA as where the development was occurring.

- **Non-spatial principles:**
  - A soft trigger point was set above which biodiversity offsetting would be promoted. This was set at 50 homes, whilst accounting for the likely scale of biodiversity impacts.

The pilot indicated that they would look at the opportunities presented by spatial multipliers to promote the delivery of the spatial principles set out above. This was intended to create a clearer incentive for the provision of sites within these areas, though this was never implemented due to the lack of projects.

No formal approval of the documents was necessary. The pilot hosts shared them with their Department head and the other GNDP planning officers who agreed they could be made public via the website. The whole process of developing the documents was felt to have been quite quick. The final version of this documentation was approved on the 13th of June.
2012.

6.4.2 Delivering the biodiversity offsetting strategy

The pilot hosts acknowledged that they had not pro-actively published the guidance. Rather they worked with planning and ecologist colleagues to raise the profile of biodiversity offsetting. Specifically, they relied on the ecological advice provided by NCC to identify biodiversity offsetting as an option to compensate for residual biodiversity loss. It was hoped that developers and case officers would then work with the ecologists to deliver biodiversity offset projects. The pilots felt that this was a proportionate approach for a voluntary pilot, albeit one that did not deliver any projects.

6.4.3 Relationship with other initiatives

There was no Nature Improvement Area (NIA) in the pilot area, but there is a Local Nature Partnership (LNP) named Wild Anglia. The pilot had a relationship with the LNP, with one of the pilot hosts sitting on the board. The hosts attempted to raise awareness of biodiversity offsetting within the LNP and the LNP set up a planning group with biodiversity offsetting likely to be on most of its agendas. The LNP also allowed the hosts to include them on the leaflet for the Connecting Nature Fund (about which more information is provided in Section 6.5). However, the pilot hosts suspected there was some reticence on behalf of the LNP in supporting biodiversity offsetting.

It was intended that the pilot would become involved with the Local Enterprise Partnership (LEP), but beyond some general support for biodiversity offsetting from the LEP no connections were made.

6.4.4 Review of the biodiversity offsetting strategy

Table 27 includes a high level assessment of the documentation developed during the pilot. The scope and nature of the guidelines and pilot summary mean that not all of the criteria used here are relevant.

Table 27: Review of the Greater Norwich offsetting strategy

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Extent to which the criteria is, or is not, included in the strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Has offsetting ensured no change to existing levels of protection for biodiversity?</td>
<td>The 'Guidelines for developers' and NBOP summary document are based on existing documentation - notably the Green Infrastructure Strategy, Green Infrastructure Delivery Plan and the Joint Core Strategy. As such there is no change to any policy including those relating to biodiversity protection. The NBOP document refers to this Principle.</td>
</tr>
<tr>
<td>2. Has offsetting delivered real benefits for biodiversity through:</td>
<td>The documents set out priority areas that will be the site of offset receptor sites if appropriate. These areas are consistent with those set out in the Norfolk Ecological Networks (based on the Living Landscapes work of the Wildlife Trusts) and the East of England Biodiversity Mapping Project) and as such can be considered to be ‘effective’ from a biodiversity point of view. The NBOP document refers to this Principle.</td>
</tr>
<tr>
<td>2a. Seeking to improve the effectiveness of managing compensation for biodiversity loss;</td>
<td></td>
</tr>
<tr>
<td>2b. Expanding and restoring habitats, not merely protecting the extent and condition of what is already there;</td>
<td>The NBOP document refers to this Principle.</td>
</tr>
</tbody>
</table>
### Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Extent to which the criteria is, or is not, included in the strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2c. Contributing to enhancing England’s ecological network by creating more, bigger, better and joined areas for biodiversity (as discussed in Making Space for Nature);</td>
<td>The priority areas indicated in the guidelines (areas A and B) are consistent with the concepts set out in Lawton. Area A is intended as a buffer to the Norfolk Broads and Area B as a way of connecting currently fragmented small woodlands and meadows.</td>
</tr>
<tr>
<td>2d. Providing additionality; not being used to deliver something that would have happened anyway;</td>
<td>The NBOP summary document does not consider this level of detail and this Principle is not referred to.</td>
</tr>
<tr>
<td>2e. Creating habitat which lasts in perpetuity (with a clear and agreed understanding of what is meant by perpetuity);</td>
<td>The NBOP summary document refers to this Principle but no other details are included.</td>
</tr>
<tr>
<td>2f. Being at the bottom of the mitigation hierarchy, and requiring avoidance and mitigation of impacts to take place first?</td>
<td>The NBOP summary document refers to the fact that “Developers will be given the option to compensate for unavoidable, residual damage to biodiversity using the offsetting approach” (p. 3).</td>
</tr>
<tr>
<td>3. To what extent has offsetting been managed as much as possible at the local level and:</td>
<td>The NBOP summary document refers to the Lawton report and to other relevant documentation which look at potential ecological networks within Greater Norwich and their relationship with areas beyond the pilot area.</td>
</tr>
<tr>
<td>3a. Within national priorities for managing England’s biodiversity and ecosystem services;</td>
<td>There is a lack of clarity in the governance of the offsetting pilot with both NBOP and the emerging Local Nature Partnership indicated as the preferred forum for managing offsetting within the pilot. The prioritisation of different areas is also not consistent with the NBOP document indicating that core biodiversity areas and ecological networks will be the preferred sites whilst the guidelines indicate two specific areas (A and B). Although there is overlap it is not clear how these two priorities area arranged and if there is any hierarchy.</td>
</tr>
<tr>
<td>3b. Within a standard framework, which provides a level of consistency for all involved;</td>
<td>There is a lack of clarity in the governance of the offsetting pilot with both NBOP and the emerging Local Nature Partnership indicated as the preferred forum for managing offsetting within the pilot. The prioritisation of different areas is also not consistent with the NBOP document indicating that core biodiversity areas and ecological networks will be the preferred sites whilst the guidelines indicate two specific areas (A and B). Although there is overlap it is not clear how these two priorities area arranged and if there is any hierarchy.</td>
</tr>
<tr>
<td>3c. Through partnerships at a level that makes sense spatially, such as county level, catchment or natural area;</td>
<td>Using the GNDP and existing documentation appears to be a sensible option for the pilot and has meant they can use existing work - such as the mapping of ecological enhancement areas.</td>
</tr>
<tr>
<td>3d. With the right level of national support and guidance to build capacity where it is needed;</td>
<td>Reference is made to the role of Natural England in approving offsetting schemes and offsetting providers.</td>
</tr>
<tr>
<td>3e. Involving local communities?</td>
<td>Reference is only made to communities or their involvement within the box that describes the Local Nature Partnership. However the existing GNDP documents (Green Infrastructure Strategy and Joint Core Strategy) have both been subject to public consultation.</td>
</tr>
<tr>
<td>4. Has offsetting been as simple and</td>
<td>The NBOP summary document refers to this principle and the ‘Guideline for developers’ is short and simple with references to appropriate contacts.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Extent to which the criteria is, or is not, included in the strategy</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>straightforward as possible, for developers, local authorities and others?</strong></td>
<td></td>
</tr>
<tr>
<td>5. Has offsetting been transparent, giving clarity on how the offset calculations are derived and allowing people to see how offset resources are being used?</td>
<td>The NBOP summary document links to the relevant pages on Defra’s website but there is no more information on how the ‘biodiversity units’ are calculated.</td>
</tr>
<tr>
<td>6. Has offsetting been good value for money?</td>
<td>n/a</td>
</tr>
</tbody>
</table>

### 6.5 Legal and development planning

The pilot hosts did not feel that the NPPF was strong enough on the subject of biodiversity offsetting or compensation generally to incentivise developers to use biodiversity offsetting. They identified this as one of the reasons for the lack of uptake. Some lower tier LPAs were looking at referring to biodiversity offsetting, as a form of compensation within their Local Plans, but only Norwich achieved this by the end of the pilot programme (Table 28).

**Table 28: Greater Norwich references to biodiversity offsetting and key concepts within local planning policy**

<table>
<thead>
<tr>
<th>LPA</th>
<th>Plan</th>
<th>Status</th>
<th>Year</th>
<th>Reference to:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Offsetting in policy</td>
</tr>
<tr>
<td>Norwich</td>
<td>Local Development Management Plan</td>
<td>Submission</td>
<td>2013</td>
<td>✅</td>
</tr>
<tr>
<td>Norfolk CC</td>
<td>Minerals and Waste Core Strategy and Development Management</td>
<td>Adopted</td>
<td>2011</td>
<td></td>
</tr>
</tbody>
</table>

The main planning inputs into the process were those that had been developed through the pre-pilot work of the GNDP notably the Joint Core Strategy (JCS) and the GI documents referred to previously. The JCS indicates those areas where development is anticipated, which was felt to be important as it indicated the need for the spatial priorities set within the pilot, especially the buffer around the Broads. The GI documentation also informs the spatial allocation of any offset receptor sites.

While the biodiversity offsetting documents refer to the GI and JCS documents, they have no formal planning status as they are only ‘guidelines’ (given the pilot nature). The pilot hosts and other LPAs used, and continue to use, the spatial priorities set in the documents, and originally developed in the GI Strategy, to target environmental enhancements via a Connecting Nature Fund. The intention was to pool funding sources in this way so that they could direct payments towards strategically significant environmental enhancements.

It is hoped that this work will eventually be used within the various Area Action Plans that are currently under development. The current resources in the fund come from a variety of sources but, by the end of the pilot programme, none were obtained through the use of biodiversity offsetting or the pilot.
6.6 Costs

The lack of projects means that the only relevant cost element available is the time of those involved. The pilot hosts indicated that they front loaded the pilot with most of the time spent occurring in the first year. The pilots reprioritised their time and started spending less time on the pilot when it became apparent that few if any projects were going to be volunteered.

As noted the pilot took a light touch approach to developing the strategy documentation and therefore total time spent was quite low. The hosts were not able to provide a clear indication of the time spent on the pilot as this time tended to be bundled up with normal working activities and it was almost impossible to identify specific amounts of time spent on developing the strategy documents. It was estimated that perhaps a ‘handful’ of days had been used by the hosts and less by other stakeholders. The Natural England adviser indicated that a few days had been spent providing inputs during that part of the pilot. In discussion the point was made that this small amount of time was contingent upon them having a robust information source to ‘piggy back’ upon, namely the GI and JCS documents. This made the process of setting spatial priorities much more straightforward.

Aside from supporting the development of the pilot documents total time spent by Natural England was estimated to be very small at less than an hour per week.

6.7 Implementation and monitoring

The lack of projects coming forward limits the extent to which the pilot hosts were able to reflect upon the potential implications on biodiversity and biodiversity policy.

About a third of the way through the pilot the hosts referred to the value of the metric and the fact it was proving to be a useful tool. This opinion had changed at the end of the pilot programme with the hosts identifying a number of shortfalls in the utility of the metric – particularly its inability to capture the loss of function and connectivity of a habitat and the fact that the metric does not account for species.

In the early stages of the pilot it was hoped that biodiversity offsetting would represent a new approach to delivering biodiversity policy through the planning system. Although the lack of active projects limited the impact of biodiversity offsetting the pilot hosts believed that biodiversity offsetting had changed their approach to some extent.

The main impact of the pilot was thought to be the time spent discussing the biodiversity priorities for the area as part of the development of the documentation. These discussions led the pilot hosts and pilot group to integrate ‘Lawtonian Principles’ into their work, something that is evidenced by the development of their Connecting Nature Fund which pools funding from various sources to deliver strategically sited projects. Although biodiversity offsetting has not delivered funding sources for this fund, as hoped, the thinking and discussion undertaken within the pilot led to its formation.

6.8 Lessons

6.8.1 Barriers and challenges

The pilot hosts described getting the pilot moving as ‘tough’ in part because, for most of those involved, the ideas and practicalities of biodiversity offsetting were new. This meant that a substantial amount of time was required getting everyone familiar with the concept and associated realities. This was a challenge considering the limited resources and time available, exacerbated by changes in funding available to LPAs, changing roles of individuals and various restructurings of the LPAs and other partners – notably Natural England.

The main barrier was that developers did not want to use biodiversity offsetting as they felt it was an additional process and one that was likely to cost them more money. The pilot hosts suggested that if developers saw value in doing it they would do it; the fact they aren’t doing
it suggests there is no value in them doing it.

Other barriers identified by the pilot hosts were planners and the fact they were not incentivising biodiversity offsetting within specific applications. The reasons for this were numerous; for instance it was accepted that planners have a lot of priorities to cover and a finite amount of money they can leverage and that biodiversity offsetting is not a priority for them. It was also noted that during the pilot programme there was not much money in the development system and that the focus on growth meant that developers were in a strong position in negotiations. Generally it was not clear how much support, beyond the pilot hosts, there was for biodiversity offsetting in the LPA.

Other barriers to planners prioritising biodiversity offsetting included the substantial changes to local authorities, including cuts which were forcing large amounts of organisational change. These changes in the planning system meant that planners were stretched and less open to new and additional requirements. At the local level there was also limited political support for the concept.

Apart from the planners the pilot hosts reflected that there was reluctance from other parties to develop management plans. This reluctance was partly due to the costs of doing so, but also scepticism about biodiversity offsetting from the memberships and boards of potential offset providers.

**6.8.2 Benefits for biodiversity?**

The pilot hosts had some concerns about the metric, feeling that using the results of the metric alone could result in an underestimation of the amount of biodiversity value that was being lost. In their view, the metric needed to account for the impacts of the habitat loss on the system by accounting for connectivity, function and species.

The hope that biodiversity offsetting would allow the pilots to deliver identified environmental enhancement projects, many of which have limited hope of funding otherwise, was the primary driver for the pilot. In the final interview it was reflected that this had not happened and that the pilots may have been somewhat naïve in expecting a voluntary initiative to drive significant amounts of new investment.

The pilot hosts believed that there could be benefits for biodiversity, but cautioned that in reality it would shift money from one area (such as social housing or schools) to biodiversity, as from experience there was generally a finite pot of money and it was difficult to see where new money would come from. The only option would be if you could demonstrate to the developer there was a very clear benefit to them in using the biodiversity offsetting approach and in that case they might release new funds.

**6.9 Status of the pilot after the pilot programme**

The pilot hosts were not intending to ‘drop the idea’ and this will likely mean continuing with the work they have developed across the pilot.
7. Nottinghamshire

7.1 Context

7.1.1 Pilot name
Piloting Biodiversity Offsetting in Nottinghamshire

7.1.2 Pilot hosts
Nottinghamshire County Council

7.1.3 Pilot partners
- Basselaw District Council.
- Gedling Borough Council.
- Newark and Sherwood District Council.
- Nottingham City Council.

Figure 12: Participating local authorities in the Nottinghamshire Biodiversity Offsetting Pilot
(Source: Biodiversity Offsetting: A Local Offsetting Strategy for Nottinghamshire. Appendix 1)

7.1.4 Governance arrangements in the pilot
There were no formal governance arrangements in the pilot. The pilot hosts developed the materials in consultation with partners, but there were no regular meetings or structures in place. Promoting and managing biodiversity offsetting was integrated into the day to day role of the pilot host.
7.1.5 Ecological context of the pilot

Nottinghamshire as a whole (including the participating and non-participating authority areas) covers 2,085 square kilometres. It is made up of three distinct areas comprising the suburbs around Nottingham; the north-west towns and villages which share a coal-mining and textile heritage; and more rural areas to the south and east which are characterised by market towns and villages along the Trent Valley. The county shares borders with Yorkshire, Rotherham and Doncaster to the north, Derbyshire to the west, Leicestershire to the south and North Lincolnshire and Lincolnshire to the east. It has a population of 1 million, around two-thirds of whom live within or around Nottingham city.

Nottinghamshire is a generally flat county with rolling farmlands to the south, a central belt of mixed woodland and commercial forestry with patches of heathland and oak-birch woodland to the north, open agricultural landscapes to the east and pasture and woodland on the coal measure and magnesian limestone to the west. Key landscape features are the wide, flat river valleys with extensive farmland.

Nottinghamshire has a wide range of important wildlife habitats and species. Large areas of semi-natural woodland have been lost along with traditional hedgerows and species-rich grasslands, plus 90% of the county’s lowland heathland had been lost by early in the last century. Cumulatively, this has seen a dramatic reduction in biodiversity across the county and Nottinghamshire’s Local Biodiversity Action Plan (LBAP) lists over 900 species and 25 habitats that are of conservation concern. However, these downward trends are now being halted or reversed through pro-active management schemes, including the high quality restoration of minerals sites to create new habitats. Examples include the wetlands at the Idle Valley Nature Reserve near Sutton and Lound, reedbed creation at Langford Lowfields, the creation of heathland habitats on former pit tips within Sherwood Forest and woodland planting across the Greenwood Community Forest.

Figure 13: Landscape-scale Conservation Target Areas in Nottinghamshire
(Source: Biodiversity Offsetting: A Local Offsetting Strategy for Nottinghamshire. Appendix 2)
There are also significant areas of heathland and acid grassland sites within Sherwood Forest which contains the only internationally important conservation site within the county - the Birklands and Bilhaugh Special Area of Conservation (SAC). However, part of the county is now being considered as a possible Special Protection Area (SPA) for birds on the basis of its significant populations of nightjar and woodlark. The county has one National Nature Reserve and 68 Sites of Special Scientific Interest (SSSIs) which account for only 1.6% of the county area, compared to 7.5% nationally.

There are 50 Local Nature Reserves (LNRs) and more than 1300 Local Wildlife Sites (LWSs), of which only around 20% are known to be in positive conservation management. In addition, there are areas of LBAP habitats that fall outside these designated sites, including species-rich grasslands, woodlands, wetlands and waterways, and other features that make up the wider network of green infrastructure across the county.

### 7.1.7 Planning and development context of the pilot

The planning context provides an indication of the level of development that may be anticipated in the area in the near future, and the planning policies against which applications for development will be considered including concerning biodiversity conservation and enhancement.

#### Nottinghamshire Waste Core Strategy (Adopted December 2013)

The plan provides for an additional recycling and composting capacity of 1.431 million tonnes per annum, 194,000 tonnes per annum of energy recovery capacity, plus an additional 3.6 million m³ of non-hazardous landfill and 3.2 million m³ of inert landfill.

#### Nottinghamshire Minerals Plan (adopted 2005)

The plan makes provision for an additional 24.2 million tonnes of sand and gravel, and 2.6 million tonnes of sandstone to 2021 (with a seven year landbank for sand and gravel at 2021).

#### Nottinghamshire Minerals Local Plan Preferred Option consultation (October 2013)

Policy SP2 of the plan addresses Biodiversity-Led Restoration and supports restoration schemes contributing to the delivery of habitat creation targets within the Nottinghamshire Local Biodiversity Action Plan and contributing to the delivery of the Trent Valley Biodiversity Opportunity Mapping Project.

Policy DM4 addresses Protection and Enhancement of Biodiversity and Geodiversity and provides for the protection for habitats or species requiring, where impacts cannot be avoided, adequate mitigation and/or compensation. It requires minerals development to retain, protect, restore and enhance features of biodiversity or geological interest, and provide for appropriate management of these features, and contribute to targets within the Nottinghamshire Local Biodiversity Action Plan. It states that where appropriate, the authority will consider the use of conditions and/or planning obligations to provide appropriate compensatory measures for unavoidable damage to Nottinghamshire’s biodiversity and geological resources.

#### Nottinghamshire Local Aggregates Assessment (July 2013)

While not a development plan the LAA will inform future provision of minerals. It identifies that the population of Nottinghamshire (the Geographic County, including Nottingham City) is expected to grow over the [new Mineral Local] plan period (to 2030) by almost 140,000 to about 1.23m; a rate of around 13%. Planned house-building for the County (including Nottinghamshire) is 86,500. This is an annual rate of 4,450 and major transport schemes (upgrading the A453 and the Nottingham Express Transit phase 2) are planned and likely to be completed by the time the Minerals Local Plan is adopted. The 10 year average of past sales of sand and gravel equates to 2.58 million tonnes per year, of sandstone is 0.46mtpa, and limestone is 0.08mtpa. It concludes this level of provision will be appropriate for the new Minerals Local Plan. A major issue identified is depletion of sand and gravel resources in the...
Idle Valley and implications for on-going supply to South Yorkshire.

**Broxtowe Borough, Gedling Borough and Nottingham City Aligned Core Strategies, Publication (June 2012) and Main Modifications (March 2014)**

Policy 2 – Spatial Strategy proposes to make provision for a minimum of 7,250 additional dwellings in Gedling Borough, 6,150 in Broxtowe, and 17,150 in Nottingham City between 2011 and 2028 plus infrastructure improvements including Nottingham Ring Road improvement scheme; and A453 Widening – from M1 to A52(T)Clifton. Policy 15: Transport Infrastructure Priorities identifies these and other projects.

Policy 4 Employment Provision and Economic Development provides for an additional 23,000 sq m of office space in Gedling and 253,000 sq m in Nottingham by 2028, and an additional 10 hectares of industrial space in Gedling and 12 hectares in Nottingham over the same period.

Policy 7 Regeneration identifies a number of sites for major regeneration. Policy 17 Biodiversity provides increasing biodiversity through protecting, restoring, expanding and enhancing existing areas of biodiversity interest, including areas and networks of habitats and species listed in the UK and Nottinghamshire Biodiversity Action Plans. It seeks to ensure new development provides new biodiversity features, and improves existing biodiversity features wherever appropriate and that where harm to biodiversity is unavoidable, and it has been demonstrated that no alternative sites or scheme designs are suitable, development should as a minimum firstly mitigate and if not possible compensate at a level equivalent to the biodiversity value of the habitat lost.

**Bassetlaw District Core Strategy and Development Management Policies DPD (Adopted December 2011)**

The plan provides for an additional 6,384 dwellings and 107 hectares of employment land between 2010 and 2028.

Policy DM9 expects opportunities to be taken to restore or enhance habitats and species’ populations and to demonstrate that they will not adversely affect or result in the loss of features of recognised importance, including protected trees and hedgerows, ancient woodlands, SSSIs, Local Wildlife Sites (Sites of Importance for Nature Conservation (SINCs)), Local and UK Biodiversity Action Plan Habitats (including Open Mosaic Habitats on Previously Developed Land); and Protected Species. Development that will result in the loss of such features may be supported where replacement provision is made that is considered to be of equal or greater value than that which will be lost and which is likely to result in a net gain in biodiversity.

**Newark and Sherwood Core Strategy (Adopted March 2011)**

Spatial Policy 2 provides for 14,800 additional dwellings between 2006 and 2026, 70% of which will be around Newark. It also provides for 220 hectares of employment land, three quarters of which is around Newark including up to 87 ha of new allocations.

Spatial Policy 5 allocates three Strategic Sites for housing and employment at Land South of Newark; Land East of Newark; and Land around Fernwood.

Core Policy 12 Biodiversity and Green Infrastructure seeks to conserve and enhance the biodiversity and geological diversity of the District by working with partners to implement the aims and proposals of the Nottinghamshire Local Biodiversity Action Plan, the Green Infrastructure Strategy and the Nature Conservation Strategy. It seeks to secure development that maximises the opportunities to conserve, enhance and restore biodiversity and geological diversity and to increase provision of, and access to, green infrastructure within the District.

**Nottinghamshire Local Biodiversity Action Plan (1998)**

The BAP sets out habitats and species action plans as well as identifying issues and threats and generic actions.
7.1.8 Biodiversity offsetting basic information

The metric was applied to a total of six planning applications informing on-site mitigation and compensation. There have been no off-site biodiversity offsetting projects developed or delivered.

7.2 Information sources and data collection

A total of nine interviews were undertaken, with the pilot host, participating and non-participating authorities, Natural England and ecological consultants working for developers.

The prime source of information specific to the pilot was the senior practitioner nature conservation, Nottinghamshire County Council. Interviews were undertaken with the Pilot Lead at each stage of the project.

In addition interviews were also undertaken with a participating district council (Newark and Sherwood DC) and a non-participating district council (Rushcliffe BC) during Stage 1.

The Natural England advisor to the pilot was also interviewed in Stage 2 and 3 of the project.

Interviews were also undertaken specifically regarding experiences of using the biodiversity offsetting metric with the pilot lead and consultants that had worked on behalf of developers on projects in which the metric had been used.

<table>
<thead>
<tr>
<th>Interview points</th>
<th>Interviewees in each stakeholder group</th>
</tr>
</thead>
</table>
| The setting up of the pilot group (Stage 1)           | • Pilot host  
• Participating Local Authority  
• Non-participating Local Authority |
| The development of the biodiversity offsetting strategy (Stage 2) | • Pilot host  
• Natural England Advisor |
| Use of the Offsetting Metric (Stage 3)                | • Pilot host  
• Metric users (ecological consultants) |
| Final reflective interview at the end of the pilot (Stage 3) | • Pilot hosts  
• Natural England Advisor |

Key documents were also reviewed, including the local biodiversity offsetting strategy and development plans, and with regard to the use of the offsetting metric, documents associated with planning applications and decisions.

7.3 Governance

The pilot was led by Nottinghamshire County Council (Nottinghamshire CC). The governance arrangements were informal and characterised by the pilot hosts as “light touch”. There was no pilot group or management committee. The pilot hosts undertook this approach as they initially felt that given the short timescale of the pilot it was important to move fast and to adopt the strategy quickly. In hindsight the pilot hosts reported that more formal arrangements may have provided and maintained a higher profile for the initiative, including buy-in from other LPAs.

All of the local district councils were invited to participate. Four chose to participate from the beginning - Bassetlaw DC, Gedling BC, Newark and Sherwood DC, Nottingham City Council, with Nottinghamshire CC overseeing and managing the pilot. Districts that chose not to participate were Ashfield District Council, Broxtowe Borough Council, Mansfield District Council and Rushcliffe Borough Council. The pilot hosts also assisted in the application of the biodiversity offsetting metric on a major application in non-participating Ashfield District.

Biodiversity offsetting was seen as a means of combining objectives for development and conservation. Implementation was anticipated to be through the participating district
councils identifying planning applications that may be suitable and then seeking the advice of the County Council. It was intended that pre-application communication would highlight to developers the use of biodiversity offsetting as an option to deliver compensation for residual loss.

7.3.1 Relationship with Natural England

The support provided by Natural England including inputting into the strategy was considered by the pilots to be helpful (particularly simplifying the guidance on the metric). On-going engagement between the hosts and Natural England was limited as there were few potential projects coming forward.

7.4 Process and management

The pilot did not have a formal pilot group guiding the project, and there was no formal ‘service level agreement’ between the County and districts. The participating districts received ‘free’ ecological advice from the County on planning applications and advice when biodiversity offsetting was identified as a potential option.

No new posts were created for the pilot with the development of the strategy and implementation of biodiversity offsetting the responsibility of the lead officer based in the Planning Department (the senior practitioner nature conservation). This involved commenting and advising on relevant planning applications, which tended to be reactive and responding to consultations by the district councils rather than being more proactive and searching weekly lists of applications and engaging in pre-application discussions. The pilot hosts reported that this reactive approach was due to time and resource constraints.

7.4.1 Consultation

The strategy, Biodiversity Offsetting: A Local Offsetting Strategy for Nottinghamshire was published in June 2012.

Organisations involved in conservation and planning - the Wildlife Trust (as a potential provider and consultee on planning), Royal Society for the Protection of Birds (RSPB), Natural England and the four participating district councils - were consulted on the draft strategy. This did not result in substantive changes to the draft, but their input was seen by the pilot hosts as particularly useful in agreeing the principles in Section 7 of the strategy ‘Delivery of Habitats through [biodiversity] Offsetting’.

7.4.2 Strategy approval

The strategy was developed by the lead officer at Nottinghamshire County Council (senior practitioner nature conservation) with no formal political sign-off or adoption.

The pilot hosts reported that the main challenge was devising and agreeing the principles as set out in section 7 of the strategy:

- Habitats to be delivered: LBAP Habitats – all with high distinctiveness;
- Broad Spatial Location of Offsets: meet Lawton principles and:
  - Contribution to landscape-scale conservation within Sherwood Forest (Regional Park area), Greenwood Community Forest (particularly for woodland creation), Trent Valley, and Humberhead Levels Nature Improvement Area (NIA);
  - Proximity to related development: order of priority – same parish, same local authority, participating local authority, and contribute to GI strategies;
- Right Habitats in the Right Place: LBAP habitats and occurrence within National Character Areas;
- Size and Fine Spatial Location: Minimum sizes for different habitats created as extensions or stand-alone patches.
7.4.3 Delivering the biodiversity offsetting strategy

The pilot hosts reported that no actual offset projects had been delivered in the pilot area, but that the metric was applied to six planning applications. They reported that application of the metric led to on-site measures (mitigation and compensation) being pursued more readily as developers were keen to avoid the need for payment for off-site measures. In this sense it had helped ensure the mitigation hierarchy was applied. The lack of projects was considered to be due to the recession and lack of planning applications, and the voluntary nature of the pilots meaning there was no obligation on developers to use biodiversity offsetting.

7.4.4 Relationship with other initiatives

National Character Areas (NCA) and Landscape-scale conservation target areas provided prioritisation (mapped) for habitat creation through offsets in the strategy. The strategy also set out locally derived principles on which habitats should be prioritised and identified which LBAP habitats were appropriate to re-create in each NCA.

The LBAP identifies priority habitats with high distinctiveness and so provided the framework for identifying habitats. The strategy makes it clear that biodiversity offsetting must contribute to one of the Lawton/NEWP principles. In addition the strategy encourages offsets to be consistent with delivery of local green infrastructure strategies.

Nottinghamshire County Council is currently working on a Biodiversity Opportunity Map, which is being developed for blocks/areas across county as funds become available, which could guide offsets in future.

The pilot hosts developed links with the Lowland Derbyshire and Nottinghamshire Local Nature Partnership (LNP) but not with the Local Economic Partnership (LEP). The Humberhead Levels NIA only covers part of Nottinghamshire and there is recognition that offsetting could have a role in delivery within the NIA and LNP.

7.4.5 Review of the biodiversity offsetting strategy

The aims and objectives of the strategy were not explicitly stated, but it reflects and references the Defra guidance and principles (Table 30). The approach was to keep it simple and avoid duplication/repetition.

Table 30: Review of Nottinghamshire strategy with respect to the Defra biodiversity offsetting criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Extent to which the criteria is, or is not, included in the strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Has offsetting ensured no change to existing levels of protection for biodiversity?</td>
<td>It stresses that the mitigation hierarchy has to be followed</td>
</tr>
<tr>
<td>2. Has offsetting delivered real benefits for biodiversity through:</td>
<td></td>
</tr>
<tr>
<td>2a. Seeking to improve the effectiveness of managing compensation for biodiversity loss;</td>
<td>The strategy and information notes provide guidance to LPAs, developers and ecological consultants on use of the metric and potential for offsetting</td>
</tr>
<tr>
<td>Criteria</td>
<td>Extent to which the criteria is, or is not, included in the strategy</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tbody>
</table>
| 2b. Expanding and restoring habitats, not merely protecting the extent and condition of what is already there; | If identifies that habitats to be created should be the habitats for which creation or restoration is appropriate, based on priorities identified in the Nottinghamshire LBAP – tabulated in the strategy. LBAP habitats have high distinctiveness. Where non-LBAP habitat is proposed the distinctiveness score must be increased. In determining whether an offset is appropriate the overriding factor will be the quality of the project that it will deliver. The suitability will be assessed on case by case considering the following factors:  
  - Contribution to landscape scale conservation particularly where offsets from multiple developments are pooled (within Target areas mapped in Appendix 2 of the Strategy - Sherwood Forest (Regional Park area), Greenwood Community Forest (particularly for woodland creation), Trent Valley, Humberhead Levels Nature Improvement Area (NIA)).  
  - Proximity to the development – step wise [sequential] approach based on (1) the same parish as the development; (2) the same LPA area; and if not possible (3) any LPA area participating in the pilot.  
  - Offsets should also be consistent with Green Infrastructure strategies                                                                 |
| 2c. Contributing to enhancing England’s ecological network by creating more, bigger, better and joined areas for biodiversity (as discussed in Making Space for Nature); | It identifies priorities for extending areas and landscape-scale benefits including identifying broad spatial locations. Spatially, all offsetting must contribute to [Lawson/NEWP] themes of more, bigger, better, joined. All offsets to be provided within Notts. |
| 2d. Providing additionality; not being used to deliver something that would have happened anyway; | It makes it clear that Biodiversity Offset Management Plans (BOMPs) must confirm they deliver additionality – that they will not fund works that would be completed anyway through use of public funds e.g. Stewardship. |
| 2e. Creating habitat which lasts in perpetuity (with a clear and agreed understanding of what is meant by perpetuity); | Offsets must be in perpetuity ‘or at least for the lifetime of the development to which it relates’ demonstrated through the BOMP |
| 2f. Being at the bottom of the mitigation hierarchy, and requiring avoidance and mitigation of impacts to take place first? | It stresses that the mitigation hierarchy is fundamental and offsetting is a last resort where it has been demonstrated that it has not been possible to firstly avoid impacts and secondly to provide sufficient mitigation. |
| 3. To what extent has offsetting been managed as much as possible at the local level and: | Proximity to the development is prioritised through a step wise [sequential] approach based on (1) the same parish as the development; (2) the same LPA area; and if not possible (3) any LPA area participating in the pilot. |
| 3a. Within national priorities for managing England’s biodiversity and ecosystem services; | LBAP habitats are prioritised – these fit with UK Broad Habitats. It identifies which LBAP habitats are appropriate in each Natural Character Area. |
### 7.5 Legal and development planning

There was no direct reference to biodiversity offsetting in any local plans as shown in Table 31. This was partly in reflection of the timing and timescale of plan preparation (being too long to influence over the period of the pilot) and, according to the pilot hosts, some reticence by policy officers and politicians to refer to biodiversity offsetting given its voluntary nature and lack of certainty over its future development. It was felt by the pilot lead that the policy requirements in the NPPF relating to delivery of the mitigation hierarchy and compensation provide sufficient basis to use biodiversity offsetting.

**Table 31: Nottinghamshire references to biodiversity offsetting and key concepts within local planning policy**

<table>
<thead>
<tr>
<th>LPA</th>
<th>Plan</th>
<th>Status</th>
<th>Year</th>
<th>Reference to:</th>
<th>Offsetting in policy</th>
<th>Offsetting in text</th>
<th>No-net-loss / net-gain</th>
<th>Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notts CC</td>
<td>Minerals Local Plan</td>
<td>Preferred</td>
<td>2013</td>
<td>Offset</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Approach</td>
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<tr>
<td>Newark and Sherwood</td>
<td>Core Strategy</td>
<td>Adopted</td>
<td>2011</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Broxtowe</td>
<td>Balanced</td>
<td>Publication</td>
<td>2014</td>
<td></td>
<td></td>
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<tr>
<td>LPA</td>
<td>Plan and Status</td>
<td>Reference to:</td>
<td></td>
<td></td>
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<tr>
<td>Gedling, Nottingham</td>
<td>Core Strategy &amp; Modifications</td>
<td></td>
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<tr>
<td>Bassetlaw</td>
<td>Core Strategy and Development Management</td>
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<tr>
<td>Ashfield</td>
<td>Local Plan Preferred Option</td>
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<tr>
<td>Rushcliffe</td>
<td>Core Strategy part 1 Publication &amp; Modifications</td>
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The strategy has the status of informal guidance (it is not a Supplementary Planning Document (SPD)) for developers and offset providers for implementing local plan policies. It is supported by additional information sheets specifically for developers, ecological consultants and planning officers.

The pilot hosts felt that the simplicity of the metric helped its application, but, additional aspects of biodiversity may need to be factored in. These included the weighting of irreplaceable habitats, how a site or habitat contributes to existing ecological networks, and the user-friendliness of supporting information used to determine habitat type and condition.

The pilot hosts encouraged the application of the metric by commenting on relevant applications and liaising directly with applicants’ ecologists to agree losses and mitigation / compensation requirements.

The biodiversity offsetting metric was only applied to a few proposals and none have proposed using biodiversity offsetting. The metric was applied during the determination period for applications by the pilot hosts (NCC senior practitioner, nature conservation) being consulted. The pilot hosts noted that the process of using the metric had tended to be more ad hoc (following referral and consultation by district councils) than comprehensive and that the metric had tended to only be considered on major applications. Ideally such consultation and consideration of the metric would be at the pre-application stage, but given resources and consultation processes it was only when an application had been submitted and the district councils consult Nottinghamshire CC.

The pilot hosts believed that if use of the metric was mandatory then it would mean all parties would understand the need to ensure no-net-loss and to build in mitigation or compensation from the start, in an agreed, consistent, objective and transparent way.

While not leading to any actual offsets, the pilot hosts reported that using the metric had influenced development proposals, including improving on-site mitigation (habitat management and enhancement) and providing long term funding for this.

### 7.6 Costs

While difficult to quantify, as detailed records have not been kept, the pilot hosts estimated that the cost of producing the biodiversity offsetting strategy (lead officer time only) was in the range of £750-£1000. Natural England’s cost was estimated to have amounted to an additional 10% or so. Time and costs for other partners (including the local authorities) was assumed to be minimal given the lack of formal adoption process.
The on-going cost of promoting use of the metric and consideration of offsetting was limited to time spent commenting on planning applications – so only around 1-2 hours per week on average.

### 7.7 Ecological implementation and monitoring

No costed offset schemes had been worked up or delivered. The metric was applied to six planning applications and resulted in on-site mitigation and compensation being considered. The metric was not applied to applications for minerals development (county matter) as the pilot hosts believed that net gain in biodiversity can be delivered on site through management, restoration and after-care.

The pilot hosts reported that it was too early to say whether using the metric had helped to streamline the planning process. Their experience suggested that using the metric would enable the assessment of biodiversity during ecological impact assessments and ensure that the mitigation hierarchy was properly applied. As such they believed that it should provide an improvement on current practice in that the impacts on biodiversity could be accounted and compensated for. They also noted that it may enable delivery of wider non-environmental benefits (such as enabling development), but they conceded that this had yet to be demonstrated.

The pilot hosts reported that a benefit of the pilot programme had been raising awareness of biodiversity with local (district council) planners. However within these group biodiversity offsetting was still seen as complicated.

### 7.8 Lessons

#### 7.8.1 Barriers and challenges

The pilot hosts believed that few projects had come forward as the pilot had been conducted during the recession. In addition, the biodiversity offsetting process was seen by developers and the LPA as an additional burden, rather than enabling development. The pilot host reported that developers were generally not supportive of the concept or use of biodiversity offsetting as a means of delivering compensation.

The pilot hosts identified that a potential barrier to developers opting for biodiversity offsetting under current voluntary arrangements may be the high cost of delivery for developers, including the long term management, for offsets for large sites / developments and so it has encouraged them to consider on-site mitigation and compensation. The pilot hosts strongly felt that there is a need to guard against ‘jumping to the compensate’ stage of the mitigation hierarchy without properly addressing mitigation, and that application of the metric can help in demonstrating how the mitigation hierarchy has been applied, by both developers and LPAs.

The lack of resources available to the pilot hosts was reported by them to have prevented a more proactive approach to searching for and influencing planning applications and encouraging offset providers to come forward with sites. The pilot hosts view was that for biodiversity offsetting to work in the future, it will need to be properly resourced, i.e. LPAs will need to have access to expert (and independent) ecological advice to ensure that the mitigation hierarchy is being followed, that the metric is being properly applied and adequate compensatory habitat is provided.

The pilot hosts reported that they believe that if use of the metric became standard procedure alongside Phase 1 habitat surveys, compared to current practice it could improve the efficiency and transparency of the planning process with regard to quantification of impacts and identification and agreement of compensation.

#### 7.8.2 Benefits for biodiversity?

The pilot hosts reported that the benefits for biodiversity of the pilot and use of the biodiversity
offsetting process have yet to be demonstrated, given the lack of suitable developments and the time taken for determination of those to which the metric had been applied. The pilot hosts believed that the use of the metric, while not leading to offsets, had ensured the mitigation hierarchy was properly applied and residual losses were accounted and compensated for.

In summary key lessons that emerged from the pilot included:

- The benefits of an informal strategy, i.e. not having gone through formal adoption process, meant that it could be in place quickly, which was important given the limited time-frame for the pilots.
- The costs of developing the strategy were modest.
- A weakness of the informality (in terms of no pilot group or formal adoption of the Strategy) was the potential lack of ownership and awareness by LPAs.
- The voluntary approach combined with the recession resulted in few projects coming forward on which the metric was applied, and no developments opting to use offsetting to compensate for losses.
- Lack of resources for the pilot hosts constrained the amount of time available to scrutinise and influence planning applications.
- Use of the metric was found by the pilot hosts and ecological consultants to be reasonably straightforward and should help deliver better mitigation and on-site compensation rather than necessarily requiring compensation including through biodiversity offsetting.
- The pilot hosts and ecological consultants believed that use of the metric should be made part of normal practice in assessing the impacts of developments more transparently and informing mitigation and compensation, and helping ensure the mitigation hierarchy is applied properly.

7.9 Status of the pilot after the pilot phase

At the end of the pilot, the pilot hosts reported that the Council intends to continue to pursue opportunities to use the metric and consider biodiversity offsetting in future after the official pilot period ends.

7.10 Case studies

The following is a summary of a live planning application within the pilot that tested aspects of biodiversity offsetting. It has been anonymised due to the sensitive nature of the cost and planning information.

<table>
<thead>
<tr>
<th>Case Reference: Notts1</th>
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<tbody>
<tr>
<td><strong>Project summary</strong></td>
</tr>
<tr>
<td><strong>Type of development:</strong> Mixed Use</td>
</tr>
<tr>
<td><strong>Date of original application:</strong> March 2013</td>
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<td><strong>Date approval granted:</strong> Pending</td>
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<tr>
<td><strong>Summary of development</strong></td>
</tr>
<tr>
<td>A proposed large (approximately 120ha) mixed use development on a former airfield comprising 900 dwellings (approximately 31ha), primary school, community facilities, business park (approximately 30ha), access road and landscaping, involved a potential loss of a large area of calcareous grassland LWS, in a non-participating district council area.</td>
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<tr>
<td><strong>Reason for using the biodiversity offsetting approach</strong></td>
</tr>
<tr>
<td>The metric was used to assess the existing habitat quality and extent. Calcareous grassland on the site was identified as the most important feature (no protected species present). The applicant originally proposed no mitigation and in response to EIA scoping the pilot hosts recommended that the metric be used to quantify loss and identify mitigation / compensation. The calculations were used to set out the</td>
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</table>
ecological mitigation proposed. This was subject to amendment following consultation with the local planning authority and pilot hosts, and reflected in the draft s.106 agreement.

**Summary of biodiversity impacts, including offsite compensation**

Loss of calcareous grassland of different quality totalling approximately 33ha (totalling approximately 370 units), deciduous woodland totalling approximately 0.5ha (4.8 units), scrub/rough grassland matrix totalling approximately 2ha (16 units), neutral grassland totalling approximately 1.5ha (16 units) and 2ha of other habitats totalling 8 units.

Originally the application didn’t propose any mitigation, but the use of the metric and discussion with the LPAs led to agreement to provide mitigation involving management of retained calcareous grassland habitat on site (mowing and scarification to improve its condition) and translocation of areas of highest-quality habitat located under the development footprint, to be secured through a s.106 agreement.

The total units provided for through on-site mitigation and compensation equate to approximately 273 units. On-site management costs have been estimated as £1m over 25 years. No offset is required.

**Evaluation of the biodiversity offsetting approach**

It was felt by the pilot hosts that using the metric enabled quantification and valuation of the habitat that would be lost and the identification of on-site enhancement to mitigate and compensate for the loss. The proposals provide for approximately 78% - 90% of the units lost (depending on interpretation of the calculations and final agreement and implementation of the s.106 agreement).

Within this application the metric was seen by the pilot hosts as having contributed to an improved outcome for biodiversity. The client (developer) was content and it enabled visualisation of the change that would occur as a result of the development and led to agreement with the planning authority over appropriate mitigation.

Use of the metric in this case did not result in off-site offsetting, but helped in the application of the mitigation hierarchy. The application is still pending since the planning committee resolved to grant planning permission only subject to the satisfactory completion of the s.106 agreement which was not agreed before the end of the pilot programme. The development is considered likely to result in a net loss – but the pilot hosts believe that this is likely to be less of a net loss than if the metric hadn’t been used.

**Notes**

n/a