

Biodiversity Offsetting Pilots

Guidance for developers

March 2012



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Introduction:

1. Biodiversity offsets are conservation activities designed to deliver biodiversity benefits in compensation for losses, in a measurable way. Biodiversity offsets are distinguished from other forms of ecological compensation by the requirement for measurable outcomes: the losses resulting from the impact of the development and the gains achieved through an offset are measured in the same way.
2. As announced in the Natural Environment White Paper¹, biodiversity offsetting is being piloted in England for 2 years, from April 2012. Developers in pilot areas required to provide compensation for biodiversity loss under planning policy can choose to do so through offsetting.
3. **This guidance is for developers in one of the six biodiversity offsetting pilot areas who would like to deliver compensation required for biodiversity loss by using the offsetting approach.** It explains the benefits of participating in the pilot, how to calculate the amount of offsetting needed, and different ways to source the offset.
4. If you are in one of the six biodiversity offsetting pilot areas (Doncaster, Devon, Essex, Greater Norwich, Nottinghamshire or Warwickshire with Coventry and Solihull), you should also contact your local authority to see if they have produced any further information to supplement this national guidance note. They will also want to know that you are interested in potentially using the biodiversity offsetting approach.
5. Please note that biodiversity offsetting will generally not be used in relation to areas that have been given special protection under the European Union's Habitats and Species Directive. Developments that impact on Sites of Special Scientific Interest (SSSIs) will also need to follow existing processes, as set out on Natural England's website². Biodiversity offsetting is a mechanism that can be used to implement planning policy: it doesn't change planning policy. Biodiversity offsetting will only be considered when the potential to avoid any damage, and mitigate any damage, has been fully considered.
6. Even if your local planning authority is not participating in the pilot, you may be able to use the offsetting mechanism. If you are interested, you will need to discuss this option with the local planning authority at the pre-application stage. If they agree that you can use offsetting, please contact us at bio.offsets@defra.gsi.gov.uk, as we would be interested to hear about your experience.

¹ <http://www.defra.gov.uk/environment/natural/whitepaper/>

² <http://www.naturalengland.org.uk/ourwork/conservation/designatedareas/sssi/default.aspx>

Further information

7. This document is a step by step guide to what developers need to do if they want to use the biodiversity offsetting approach. Further information and background about biodiversity offsetting is available on Defra's website³, including:

- guidance for offset providers
- more about the participating local authorities and their approaches
- general information about what biodiversity offsetting is and why it is being piloted. A range of documents explain the thinking on various issues, and the approach we have taken to designing the pilot, including:
 - the rationale and explanations behind the approach described in this document
 - why offsetting as proposed focuses on habitat
 - the principles we have used to design the approach to the offsetting pilot

What does this guidance cover?

- The basics about offsetting – what is it?
- Offsetting and planning policy
- What are the benefits of being involved with the pilots?
- A step by step guide to calculating how many 'units' of biodiversity you need to provide in compensation for your development's residual impacts
- Finding an offset provider

The basics about offsetting

What is it?

10. Using the biodiversity offsetting approach means that an offset provider delivers a quantifiable amount of biodiversity benefit to offset the loss of biodiversity resulting from a development. The losses and gains are measured in the same way, even if the habitats concerned are different. In the biodiversity offsetting pilot, the measurement is done in 'biodiversity units', which are the product of the size of an area, and the distinctiveness and condition of the habitat it comprises. The assessment of biodiversity units lost and

³ <http://www.defra.gov.uk/environment/natural/biodiversity/uk/offsetting/>

gained can be calculated using the approach set out in this guidance. (Offset providers will use the separate Guidance note for offset providers, available on Defra's website).

11. Developers can provide an offset themselves if they are able to do so, or they can commission someone else to do it for them.

12. Note that if a developer chooses to pay someone else to deliver the offset for them, it is the units of biodiversity benefit that are sold. The developer is not buying the biodiversity itself, or the land that it stands on. The units are units of biodiversity: they are not an attempt to put a price on biodiversity. The cost of providing an offset will be calculated by the offset provider, on a case-by-case basis, depending on the conservation action they are taking.

13. In the pilot areas, developers that are required to provide compensation for biodiversity loss under planning policy will be given the option of delivering that compensation by using the offsetting mechanism. If they choose not to use offsetting, they will still be required to deliver compensation that satisfies the local planning authority.

Offsetting and planning policy

14. Good developments incorporate biodiversity considerations early in their design, but can still result in some biodiversity loss when there are impacts that cannot be avoided through design and location, or mitigated by other measures.

15. Current planning policy for biodiversity and geological conservation interests is set out in the National Planning Policy Framework (NPPF) which was published and came into force on 27 March 2012. For biodiversity offsetting, the most relevant principles and policies in the NPPF are:

“The planning system should contribute to and enhance the natural and local environment by ... minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”. (Para 109)

“When determining planning applications, .. if significant harm resulting from a development cannot be avoided (through locating on an alternate site with less harmful impacts), adequately mitigated or, as a last resort, compensated for, then planning permission should be refused.” (para 118)

16. This policy reflects the 'mitigation hierarchy', whereby compensation for residual harm is a last step and comes after consideration of how harm can be avoided in the first place and then, if that is not possible, how harm can be minimised through mitigation.

17. If you are in an offsetting pilot area, the local planning authority will let you know that they are participating in the pilot in the course of the usual pre-application discussions for a proposed development. They will ask you to decide whether you would like to deliver

any compensation required under planning policy for biodiversity loss through the offsetting mechanism, or by using other existing processes.

What are the benefits of being involved with the pilots?

18. We think there are advantages to developers to using biodiversity offsetting:
- it simplifies the discussion about how much compensation is needed: the impact of the development can be measured in units, and the equivalent amount of compensation sourced.
 - it is transparent: the information about how the amount of loss involved, and the amount of compensation that will be required, is open and available to all from the start of the process.
 - the developer can choose to use an offset provider to provide compensation on their behalf, and to take on the responsibility for managing that compensation: in this case, the developer has no responsibility for the ongoing management of the offset.
19. Participating in the pilots provides an opportunity to test a new and innovative approach. Developers' feedback will be collected and used to inform a future decision on whether, and if so, how we might make greater use of biodiversity offsetting in England.

A step by step guide to calculating how many biodiversity units you need to provide compensation for

Step 1 – Apply the 'avoid, mitigate, compensate' hierarchy to understand the residual biodiversity loss.

20. Biodiversity offsets come at the end of the 'mitigation hierarchy'. The NPPF does not define these key terms, but generally accepted definitions are:

Harm – Any impact, direct or indirect, that may have an adverse effect on a biodiversity interest.

Avoid – Ensuring that negative impacts do not occur as a result of planning decisions by, for example, locating development away from areas of ecological interest.

Mitigate – Measures to mitigate are ones taken which reduce negative impacts. Examples of mitigation measures include changes to project design, construction methods or the timing of work, or enhancing or restoring other interests or areas on a site so its overall ecological value is retained.

Compensate – Measures which are taken to make up for the loss of, or permanent damage to, biodiversity. Where some harm to biodiversity is reduced through mitigation, compensation will represent the residual harm which cannot or may not be entirely mitigated. Compensation measures may be on or outside the development site.

21. **Apply this hierarchy to the action you will be taking on your development site.** If you avoid biodiversity loss, or are able to take sufficient mitigation action on site, you will not need to provide any compensation for residual biodiversity loss. If you do need to provide compensation, you can decide to use the biodiversity offsetting mechanism to do this.
22. The decision about whether a development needs to provide compensation for biodiversity loss is for the planning authority to take, in line with planning policy.
23. Some very valuable habitats are either very rare, difficult/impossible to recreate, or both. Whilst development on these habitats would be unlikely, if a local planning authority did decide that a development should go ahead on this type of habitat, any compensation would have to be bespoke, and managed on a case by case basis. It would be for the local planning authority to decide if the offsetting mechanism could be used.

Step 2 – Map the habitat type(s) impacted by your development

24. In the biodiversity offsetting pilot, habitats are pre-assigned to one of three habitat type bands, on the basis of their distinctiveness. Distinctiveness is a collective measure of biodiversity and includes parameters such as species richness, diversity, rarity and the degree to which a habitat supports species rarely found in other habitats. The list of habitats and the corresponding distinctiveness bands can be found in **Appendix 1 – Distinctiveness Bands for the Biodiversity Offsetting Pilot**, which is available on Defra’s website⁴. Each band of habitat distinctiveness has a number associated with it as shown in **Table 1** below.
25. Map the area impacted by the development (i.e. the residual biodiversity loss) by habitat type.
26. This is the starting point for calculating the number of “units” of biodiversity per hectare you will need to compensate for.

⁴ <http://www.defra.gov.uk/environment/natural/biodiversity/uk/offsetting/>

Table 1: Habitat distinctiveness⁵

Habitat distinctiveness	
High	6
Medium	4
Low	2

Step 3 – Assess the baseline condition of each habitat

27. For the biodiversity offsetting pilot, we are using the methodology contained in the Farm Environment Plan handbook for the Higher Level Scheme, an agri-environment scheme run by Defra/Natural England, to assess habitat condition. The methodology can be found in the PDF document “Higher Level Stewardship: Farm Environment Plan (FEP) Manual”⁶

28. If you are assessing the condition at a sub-optimal time of the year (e.g. grassland in autumn or winter) you may need to take a precautionary approach or wait until a more suitable time of year to carry out the ecological assessment.

29. An assessment of the condition of the habitat will give a weighting as shown in **Table 2**.

Table 2: Condition weighting⁷

Habitat Condition	
Good	3
Moderate	2
Poor	1

⁵ Based on the paper “Biodiversity Offsets”, Treweek et al.

⁶ <http://naturalengland.etraderstores.com/NaturalEnglandShop/NE264>. Please note that – you may need to scroll to the bottom of the internet page for the link to the manual.

⁷ Based on the paper “Biodiversity Offsets”, Treweek et al.

Step 4 – Combine the habitat type and condition weighting to calculate an overall number of biodiversity units.

30. The condition weighting can be combined with the distinctiveness band to give an overall score expressed in biodiversity units per hectare, as set out in **Table 3** below.

Table 3: Matrix showing how condition and distinctiveness are combined to give the number of biodiversity units per hectare⁸

		Habitat distinctiveness		
		Low (2)	Medium (4)	High (6)
Condition	Good (3)	6	12	18
	Moderate (2)	4	8	12
	Poor (1)	2	4	6

31. This calculation will need to be done for each of the habitats impacted by a development. In many cases there will only be one habitat type, but in the case of some big developments a number of different habitats may be involved.

32. You now have one or more figures that represent the number of biodiversity units per hectare you need to provide as compensation.

Example

A development will result in the loss of 6 hectares of lowland meadow, currently in moderate condition.

Habitat	Distinctiveness	Condition	Hectares	Number of Units
Lowland meadow	6	2	6	(6x2x6) 72 biodiversity units lost

⁸ Based on the paper “Biodiversity Offsets”, Treweek et al.

Step 5 – Work out if you have particular requirements for the type of offset you will need to provide

33. If the habitat impacted is in the high distinctiveness band, the offset will usually need to be ‘like for like’ i.e. it will need to create or restore the same type of habitat. In other cases, the offset does not need to be like for like. For habitat of medium distinctiveness, the offset should be largely made up of habitat from the same distinctiveness band or higher (i.e. habitat from the medium or high distinctiveness band). Where the habitat lost was low distinctiveness, the offset project should involve a ‘trade up’ in distinctiveness (i.e. be largely made up of habitat from the medium or high distinctiveness band). This is summarised in **Table 4**. This approach reflects the guiding principle that offsetting should result in an improvement in the extent or condition of the ecological network.

34. If you are commissioning someone to provide your offset for you, you will need to make sure that they are aware of these requirements. It will also be useful to speak to your local authority, to see if there are any further points about how offsetting is being used in the pilot area that you should be aware of.

Table 4: Matching the habitat impacted with the offset project

Distinctiveness of habitat lost	Distinctiveness of habitat provided by an offset
High	High – and usually the same habitat type
Medium	Medium or high
Low	Medium or high

Step 6 – Managing hedgerows

35. Hedgerows are a very important feature within the English countryside. Their contribution, by area, to biodiversity in the landscape is far greater than even the most biodiversity rich habitats. For this reason they cannot simply be treated as another habitat.

36. If a development results in the loss of hedgerows, that loss will need to be offset with like for like habitat – i.e. an offset that involves hedgerows. Requirements relating to hedgerows will be measured in metres, rather than biodiversity units. For an offset project, it is proposed that only recreation (in effect planting new hedges) is appropriate. This is because of the complexity of defining restoration and assigning metres of offset requirement to hedge restoration work.

37. As with other habitats, use the “Higher Level Stewardship: Farm Environment Plan (FEP) Manual”⁹, to assess the quality of hedgerows lost. The condition of the hedgerow lost will affect the offset requirement, which is calculated by using a simple multiplier, as shown in **Table 5** below.

Table 5: Multiplier required for different conditions of offset provision

Condition of hedgerow lost	Multiplier applied
Good	3
Moderate	2
Poor	1

Examples

A development results in the loss of 100 metres of hedgerow in poor condition. As it is in poor condition, the multiplier is one. An offset will need to be found which includes 100 metres of newly planted hedgerow.

A different development results in the loss of 100 metres of hedgerow in good condition. As it is in good condition, the multiplier applied is 3. An offset will need to be found which includes 300 metres of newly planted hedgerow.

38. Although this describes how hedgerows should be dealt with when using the biodiversity offsetting mechanism, the approach could apply to other linear features such as hedge banks, ditches and rows of trees.

Step 7: Decide how you want to provide compensation

39. You may want to provide the compensation yourself. If this is the case, please refer to the guidance for offset providers, available on Defra’s website¹⁰. This further guidance explains how to calculate how many biodiversity units an offset project can provide, and includes information on other issues offset providers need to consider, for example, how to manage delivery risks using multipliers.

⁹ <http://naturalengland.etraderstores.com/NaturalEnglandShop/NE264>. Please note that – you may need to scroll to the bottom of the internet page for the link to the manual.

¹⁰ <http://www.defra.gov.uk/environment/natural/biodiversity/uk/offsetting/>

40. Note that in some cases, conservation activity carried out on the development site itself may reduce the amount of compensation that needs to be provided off-site through offsetting. Such on-site offsetting will need to be consistent with the local offsetting strategy, and deliver something additional, beyond what might otherwise have happened. In these cases, as the developer will be providing an offset, they will therefore need to calculate the number of biodiversity units that the on-site works deliver, using the Guidance for offset providers. If their proposal is acceptable to the local authority, the number of biodiversity units will be subtracted from the overall number of biodiversity units that would need to be delivered, in the absence of this activity.

41. Alternatively, you may wish to ask somebody else to provide the compensation for you.

Finding an offset provider

42. If you would like somebody else to provide the offset for you, you could:

- Speak to your local planning authority. The local authority may know of people who are interested in providing offsets. In addition, they will also have a strategy for offsetting, which will set out what habitat types they would like to see created through offsetting, and where they would like to see them. This should be helpful for finding offset providers.
- Speak to the Natural England offset pilot adviser in the pilot area. Natural England will be quality assuring offset providers and their projects and advising Local Authorities
- Speak to any existing contacts you may have, with for example, local wildlife organisations or landowners, about the potential for them to provide an offset for you

43. Standards are important to ensure that the biodiversity benefits of offsetting are delivered. Standards are also important for giving developers, local authorities and the public confidence in the approach. If offsetting were used nationally in the future, there would probably need to be an independent body setting standards, and potentially certifying offset providers. This would not be a proportionate approach for the relatively small scale biodiversity offsetting pilot, but ensuring a certain level of quality is important, to ensure that biodiversity benefits are delivered, and to ensure that confidence in the approach is not undermined by poor quality projects.

44. In the pilots, Natural England will be assessing the capability of offset providers to deliver offsetting projects, and quality-assuring their Biodiversity Offset Management Plans, in order to advise local authorities. Plans will be assessed to determine whether they are sufficiently robust and likely to deliver and maintain the proposed number of biodiversity units (some further information on what will be assessed is given in the guidance for offset providers). Your offset provider should usually have some kind of

management plan or agreement for the proposed offset project, which has been assessed by Natural England.

45. The cost of providing an offset, and therefore the price an offset provider will ask for, will depend on a range of factors, for example, what habitats they can create or enhance, what type of conservation action is involved, the costs of managing the site at the required condition in the long term, and how any risks to delivery of the biodiversity outcomes are managed. Offset providers will decide what price they will offer their offset projects for.

46. Whether an offset proposal is acceptable or not as a means of delivering required compensation is ultimately for the local planning authority to determine.