

# Biodiversity Offsetting Tool Review

## Incentives Tools

TABLES Project 2012: Mini reviews	
<b>Guidance</b>	<i>Using your experience and expertise, consider the following tasks in relation to the tool. It may not be possible to complete all tasks for each tool due to a lack of available information, the task not applying to the tool, etc. <b>Please note where this is the case by writing in the reason in the space provided.</b> Please use a maximum of 6 pages of A4 (excluding diagrams and appendices). <b>Your responses are required in the white spaces.</b></i>
<b>Task 1: Basic information</b>	
<b>Name of the tool</b>	Biodiversity offsetting
<b>Type of tool (list all that apply)</b>	Economic, creating markets linking 'suppliers' of ecosystem services with their 'consumers'
<b>Group members</b>	1. Mark Everard
	2. Alister Scott
	3.
	4.
	5.

**Please provide a brief synopsis of the tool**

The principle of biodiversity offsetting is that inevitable loss of biodiversity in a development context is mitigated by the recreation of appropriate habitat supporting the desired species elsewhere. It is important to note that this should be a last-resort measure if development cannot be relocated to a less sensitive site, or if valued biodiversity cannot be safeguarded on-site.

Offsetting may be a statutory requirement, for example under 'no net loss' provisions for priority species and habitats under the EU Habitats Directive, or may be aspirational.

Intertidal habitat creation to mitigate for entrapment of fish fry in water intakes, particularly large abstractions such as for power station cooling systems, has been established in the USA since at least the 1990s. This is significant in recognising not merely habitat for a species, but also the functional (i.e. service-related) role of habitats (i.e. fish recruitment).

Risks associated with biodiversity offsetting include ensuring genuinely 'like for like' habitat recreation; many poor historic examples illustrate tokenistic implementation that has resulted in no net gain or protection of wildlife. Another key risk is that attention is shifted from prevention to mitigation, implicitly sanctioning development.

Biodiversity offsetting is encouraged in the UK White Paper on the Natural Environment, *The Natural Choice*<sup>1</sup>.

The opportunity for linking the biodiversity offsetting with the ecosystem services framework is to design and secure a wide suite of ecological and social benefits into mitigation measures.

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<sup>1</sup> HM Government. (2011). The Natural Choice: Securing the Value of Nature. [www.defra.gov.uk/environment/natural/whitepaper](http://www.defra.gov.uk/environment/natural/whitepaper)  
[neat.ecosystemsknowledge.net/](http://neat.ecosystemsknowledge.net/)

## Task 2: Use of the tool

<b>Position / Use</b> <i>If you can, please indicate which stage(s) of the decision / policy making process your tool is / could be used in (these stages were identified in the specification document)</i>	Stage	Currently used	Could be used
	Ideas	Y Biodiversity offsetting is currently implemented, though has a patchy history	Y There is strong potential for expanding scope of measures to address more ecosystem services
	Survey	Y Biodiversity offsetting is currently implemented, though has a patchy history	Y There is strong potential for expanding scope of measures to address more ecosystem services
	Assess	Y Biodiversity offsetting is currently implemented, though has a patchy history	Y There is strong potential for expanding scope of measures to address more ecosystem services
	Policy / decision	Y Biodiversity offsetting is currently implemented, though has a patchy history	Y There is strong potential for expanding scope of measures to address more ecosystem services
	Implement	Y Biodiversity offsetting is currently implemented, though has a patchy history	Y There is strong potential for expanding scope of measures to address more ecosystem services
	Evaluate	Y Biodiversity offsetting is currently implemented, though has a patchy history	Y There is strong potential for expanding scope of measures to address more ecosystem services

## Task 3: Existing literature about the tool

<b>Are you aware of any KEY policy and / or academic literature evaluating your tool?</b>	Please add any further comments here:		
	Author & Date	Title Vol pages	Web link (if available)
	The Environment Bank. (2012)	Biodiversity Offsetting: A general guide.	<a href="http://www.environmentbank.com/docs">www.environmentbank.com/docs</a>
The Environment Bank. (2012)	Biodiversity Offsetting: A new income stream for landowners	<a href="http://www.environmentbank.com/docs">www.environmentbank.com/docs</a>	

Task 4: Your experience of working on the tool		
Have you done any research/consultancy work on this tool in terms of its development, testing and/or evaluation?	I have had no direct experience implementing biodiversity offsetting, though have been involved in policy-level discussions prior to publication of the Natural Environment White Paper about opportunities to embed a wider ecosystem services perspective into the approach.	
Guidance	For Tasks 5-7, please also try to consider the <b>future</b> development and application of this tool in the TABLES project in your answers.	
Task 5: Incorporating the ecosystem approach (EA) and ecosystem services (ES)		
Using examples (from practice, research or consultancy), explain how EA and/or ES are currently incorporated in/by the tool	As indicated in the preamble, this is more about potential than current practice which is largely focussed just on favoured species and habitats.	
How <u>could</u> the ecosystem approach and/or ecosystem services be (further) incorporated within the existing tool?	In theory, the ecosystem services framework could form a wider basis for biodiversity offsetting.	
Task 6: Situating the tool within priority questions/criteria arising from the scoping interviews		
Explain how the tool can be situated within the priority questions/criteria that arose in the scoping interviews	Priority question/criteria	Does your tool address/implement this question/criteria? Or does it have the potential if it was better integrated with an EA/ES approach?
	Language and communication	
	1. Contribution to aiding the development of shared vocabulary within which principles of EA and ES can be shared with multiple stakeholders across built and/or natural environment	Discussions around what it would take to offset for a wider range ecosystem services would have strong pedagogic value
2. Capacity of the tool to develop shared understandings of the	Getting people together to agree on offsetting for a wider range ecosystem services would have strong	

	many identities and values of places from the perspectives of multiple visitors, residents and businesses	pedagogic value, linking up societal sectors
3.	Capacity of the tool to improve or enable engagement across different publics so avoiding the usual suspect problem	Getting people together to consider offsetting for a wider range ecosystem services would have strong pedagogic value, linking up different constituencies of people
<b>Learning from experience/pedagogy</b>		
4.	Capacity of the tool to help reveal and value 'hidden' assets that are not recognised by communities or publics that use them	Getting people together to so consider offsetting for a wider range ecosystem services would help reveal overlooked values and the often overlooked value systems of different people, also adding resilience to habitat mitigated for species loss in development
5.	Extent to which tool is building on other tools or EA/ES progress	Biodiversity offsetting is an established tool not only in the UK but also the US and elsewhere, into which the ecosystem approach could be integrated
6.	Extent to which tool is locally derived or grounded or can be adjusted to closely reflect 'local' context. Is the tool suitable for an open source approach?	As noted above, this is an established tool into which the ecosystem approach could be integrated
7.	Extent to which the tool is open to interpretation and application in a variety of forms (that reflect 'cultural' differences)	This tool can be developed on a context-specific basis, though it is important to ensure 'like for like' mitigation
<b>Developing and selecting tools</b>		
8.	Is the tool dependent on a specific funding source? How onerous is the application procedure? What are the chances of success?	Most likely the tool would be applied as mitigation for a planned development, and so funded by development proponents
9.	Does skills development (essential or optional?) and support exist for the tool or is there a body to ensure the optimal and correct use of it?	There is as yet a paucity of knowledge about how to mitigate for a range of ecosystem services
10.	Extent to which current statutory hooks can be exploited by the tool or will benefit the quality or application of the tool (e.g. NNPF's duty to cooperate, SUDS, ecol. networks)	NNPF, Natural Environment White Paper, EU Habitats Directive and UK implementation, etc.
<b>Informing resultant policies effectively</b>		
11.	Extent to which the tool informs or improves policies/decisions. What does the tool cover? (full range of	Planning for mitigation of a wider range of ecosystem services could be a useful screening mechanism to ensure better targeting of policies and decisions

positive and negative economic, social and environment impacts / trade-offs?)	
12. How does the tool link into the planning system (applications and processes). At what cost / extra burden?	Offsetting is inherently linked to the planning system: extending its reach from 'biodiversity' alone to a wider suite of ecosystem services could add to the value of outcomes
<b>Delivering management objectives</b>	
13. Suitability or capacity of the tool to assist with managing visitor needs and pressures within protected areas / the considered area? How?	Management of the mitigated site would be important to ensure that desired biodiversity and service outcomes are achieved
<b>Local ownership/new governance</b>	
14. To what extent can the tool assist in developing statutory plans (local and management plans) and improve ownership and use by publics?	Biodiversity offsetting, expanded to address more desired ecosystem services, could help inform risks and required outcomes of planning and the siting of contentious developments
15. To what extent does/could the tool contribute to a new form of community governance in management of the environment?	Public engagement in planning for offsets, including identification of where habitat should not be surrendered to development, could promote community governance
<b>Improved tools: understanding flows, interconnections and spatial issues</b>	
16. Capacity to improve spatial understandings of the flows and interactions of various ecosystem services between sectors and at different scales	An increased sense of habitats important for supporting species but also for providing desired services could better inform the finite nature of important habitats and the flows between service production and its many societal benefits
17. Capacity of the tool to reconcile assessments of options and benefits across different scales (and sectors)	An ecosystem services perspective of the function of habitats, including supporting desired wildlife, can help better target development sympathetic with habitat functions
18. Extent to which the tool is capable or can be manipulated to work across sectoral and administrative boundaries	A cross-sectoral view of what habitat is important for a range of societal values will promote cross-sectoral understanding and working
19. Extent to which the tool can handle data shortages and gaps (or is effectiveness considerably compromised?)	We have an incomplete knowledge of how some services are produced, so this data gap may be critical; a precautionary approach should be taken before deciding that mitigation is feasible
20. To what extent has/could the tool put landscape/nature conservation and designated species/sites on the radar (positively or resulting in resentment?)	The functional value of habitat for a range of societal benefits should promote awareness of the value of some landscapes and other natural resources

*Please add any further comments here:*

**Task 7: A SWOT analysis of the tool**

**Referring back to the relevant policy and academic literature (listed in Task 3), plus your own expertise (listed in Task 4) and the way in which the tool is situated within the priority questions/criteria (listed in Task 6), please complete a summary SWOT analysis ensuring that each point is well justified**

**Strengths** *(of the tool in delivering intended outcomes)*

- An already established approach, though with some difficulties
- Amenable to expansion to address a wider range of societal benefits from natural systems
- Can form the basis of consensus-building about optimal siting of development
- Can form the basis for agreeing on important habitat for a range of societal benefits

**Weaknesses** *(factors that detract from the tool’s ability to deliver intended outcomes)*

- Can be blinkered to desirable species only
- It is not always easy to ensure ‘like for like’ mitigation

**Opportunities** *(consider opportunities for application of the ecosystem approach and services)*

- Can be linked with the ecosystem services framework

**Threats** *(factors which negatively affect the tool and its outcomes)*

Threat	Seriousness (high, medium, low)	Probability of occurrence (high, medium, low)
Risks capture by those with narrow service interests	High	Medium
May marginalise non-designated species and historically-overlooked services	High	Medium

Please add further comments here:

**Guidance** *Please now use the remainder of the document (box below) to make any general comments, observations or analyses of the tool*

**Further comments**