

Sustainability Matters

Biodiversity Net Gain



September 2019

Decision-makers are often faced with an uncomfortable compromise between protecting the environment and approving new construction which will change land-use. Traditional approaches to environmental mitigation for construction work have not always protected plant and animal life sufficiently. The Department for Environment and Rural Affairs (DEFRA) has been developing new tools to help address this challenge. In 2011 the Government's strategy for people and wildlife 'Biodiversity 2020' set the ambition to: *'halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people'*.

In 2012 DEFRA piloted a 'Biodiversity Metric' allowing the calculation of a numerical habitat-based biodiversity value. These principles to put a value on biodiversity are not new. In Australia, Biodiversity Net Gain principles have been followed for about 40 years. Highways England and Network Rail projects already commit to either No Net Loss or Net Gain outcomes for biodiversity in their infrastructure projects. In 2018 DEFRA revised their metric, improving the consideration of ecological connectivity, extending the range of habitats considered and preparing a soon, but not yet released, spreadsheet-based tool. Although the methodology in the UK remains at the consultation stage, biodiversity net gain is now referenced strongly in the current National Planning Policy Framework (2018) and must be implemented by local planning authorities. The environmental test of sustainable development requires planning policy and planning decisions to help to 'improve biodiversity' through proportionate measures.

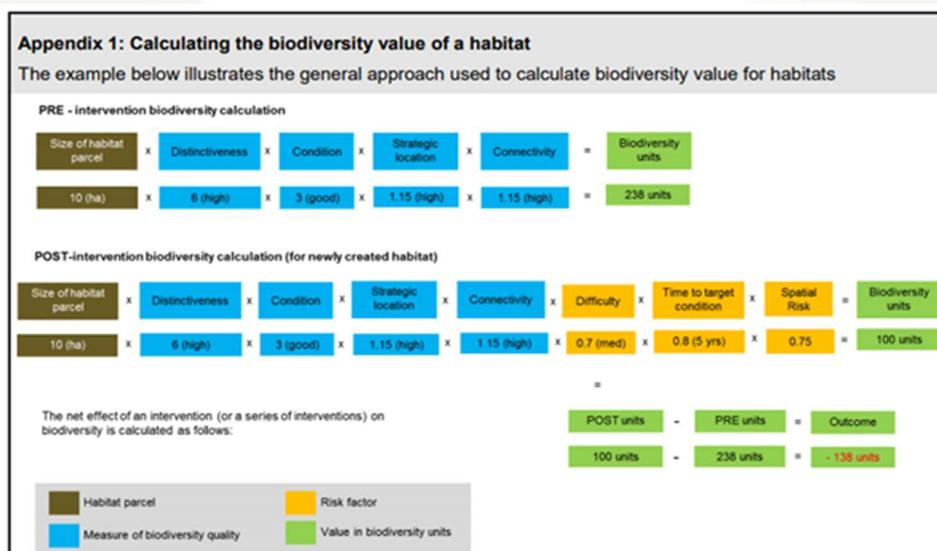
Definitions

Biodiversity Net Gain - development that leaves biodiversity in a better state than before the work started.

Biodiversity Offsetting - when a habitat is lost in one place it is compensated for by creating habitat elsewhere.

How Biodiversity Net Gain is calculated using the DEFRA 2018 approach

Biodiversity value of land is calculated by considering the size and habitat quality of a site. An assessment of distinctiveness, condition, strategic significance and habitat connectivity of the site is made to calculate a baseline value in biodiversity units. The process is then repeated to calculate the impact of development including measures to retain, enhance or create additional biodiversity and the existing qualities of the habitat where improvement work may be taking place (see the example produced by Natural England below). At this point additional factors covering risk associated with creating, restoring or enhancing habitats are considered. Risks may include the difficulty of creating or restoring habitats, timings and the available space.



Biodiversity Net Gain has been part of the Army Basing Programme strategy

A Biodiversity Offsetting Report was prepared in November 2015 to support the planning applications for the Army Basing Programme. This report adapted the 2012 DEFRA biodiversity metric methodology but specifically dealt with calcareous grassland losses, which were identified as the highest value habitats. A separate report was later prepared to address woodland losses caused by ABP work. Both reports identified and resulted in offsite habitat improvement and tree replanting projects. In addition, throughout our works we have completed extensive mitigation for protected species (bats, badgers, birds, reptiles, great crested newts and invertebrates) and their habitats.

More recently conditions associated with the new single living accommodation planning consent at Aldershot (WA0611) have stipulated a significantly increased tree planting requirements which will be delivered as an offset in a land parcel close to Basingstoke canal. The reason given in the consent is: *To ensure that biodiversity loss as a result of the development is adequately mitigated to accord with adopted New Rushmoor Local Plan (2014-2032) Policy NE4.* During consultation the ecology officer also cited Draft Policy NE2 that development *provides green infrastructure features within the development and maximises opportunities for improvement to the green infrastructure network, including restoration of fragmented parts of the network* and Draft Policy NE4 that *development proposals should seek to secure opportunities to enhance biodiversity and include proportionate measures to contribute, where possible, to a net gain in biodiversity.* Local authority officers use and translate the DEFRA consultation guidance into their Local Plans to help decide the *proportionate measures* to be taken. The resultant replanting required for WA0611 is now significantly more than the trees that will be lost because of the development in order to provide enhancement or Biodiversity Net Gain. One of the key lessons learnt from the design and town planning work for WA0611 has been the importance of early consultation with local authority officers to establish their expectations.

Biodiversity Net Gain through Biodiversity Offsetting is a controversial concept

Some stakeholders in the UK have criticised the biodiversity metric, seeing it as a 'licence to trash', allowing new construction, particularly housing, within the countryside. Applying numbers to biodiversity is controversial and complicated, partly dependent on subjective judgements and a valuation process which in the UK remains at the consultation stage. In other countries where offsetting has been encouraged for many years not all initiatives have been successful, and it is argued the policy has not delivered measurable enhancements to national biodiversity in these countries.

The UK guidance emphasises that the mitigation hierarchy should always be followed. **Biodiversity Offsetting is only relevant where there is no other option of lower impact in the hierarchy.** Avoidance is the first step in the mitigation hierarchy, involving measures to prevent adverse habitat impacts from the start of work. This is followed by minimisation, with measures taken to reduce duration, intensity and extent of impacts that cannot be completely avoided. Thirdly, restoration measures should be taken to improve degraded or removed habitat following exposure to impacts that cannot be completely avoided or minimised. Collectively avoidance, minimisation and restoration serve to reduce, as far as possible, the adverse impacts that a project has on biodiversity. Typically, however, even after their effective application, additional steps will be required to achieve Biodiversity Net Gain.

Biodiversity Net Gain is a concept gathering momentum and has significant implications to future UK construction projects. Successful stakeholder consultation at an early stage to establish expectations in terms of implementing Biodiversity Net Gain will be key. Construction projects should consult with all the relevant groups and individuals, particularly locally, at the earliest opportunity to plan how to improve areas around the schemes they are working on and then be prepared for more significant, longer term mitigation commitments. By considering Biodiversity Net Gain early on and ensuring that Biodiversity Net Gain measures are incorporated into the design, programme and budget, projects can generate long-term benefits for nature and wider benefits for society and the economy.

Biodiversity Net Gain is linked with UN Sustainable Development Goals 8, 9, 11, 12, 13, 14 & 15.

