Analysis: Building and biodiversity

11 December 2018 by Josephine Smit

Nature is often seen as a constraint on construction, but proposals to require development to deliver a biodiversity net gain seek to change that, Josephine Smit finds.

Green infrastructure can deliver benefits for places, homes and residents

The principle that development activity should leave a site's biodiversity in better shape than it was before the bulldozers arrived has gathered business momentum as well as policy backing. Major housebuilding names, such as Berkeley Group, have voluntarily enhanced the biodiversity of sites, and infrastructure provider Balfour Beatty earlier this year called for biodiversity net gain to be made obligatory under UK planning policies.

Now, under a government consultation, delivering biodiversity net gain could become mandatory for development requiring planning permission. The consultation sets out plans to require developers to enhance biodiversity onsite by 10 per cent. For those developers unable to meet this requirement, the alternative could be payment of a tariff of £9,000 to £15,000 per biodiversity unit, a measure based on a site's habitat distinctiveness, condition and area.

The proposals are set out in Net gain: consultation proposals, which were issued by the Department for Environment, Food and Rural Affairs (DEFRA) earlier this month. They follow on from the ambitions set out in the government's 25 year environment plan published at the start of the year and the objectives of the National Planning Policy Framework (NPPF). The consultation runs until 10 February 2019.

Minimum benchmark

Biodiversity net gain might be familiar to a number of developers, but the current proposals could still have a negative impact on the viability of some sites. "The key challenge is the mandatory 10 per cent level of the net gain," says Nick Graham, associate director, planning at Turley. "It could be challenging for large and complex sites, for smaller sensitive sites, and even for sites which are of low value but which, for example, depend upon access via a small but sensitive piece of land."

The decision to consult on a mandatory approach follows a pilot programme by DEFRA and local authorities,

including Warwickshire County Council. Evaluation of the pilots found that a voluntary approach was not sufficient to deliver net environmental benefits or a level playing field for developers. The pilot programme saw DEFRA and Natural England develop biodiversity units as part of a common approach to assessing biodiversity losses and compensation. "There are a range of models and approaches out there, including the use of qualitative assessment by experienced ecologists," explains Graham. "It is logical to have a common metric or standard approach, but there are concerns that the proposals could have a detrimental effect on development viability by setting a high 10 per cent minimum benchmark."

Improved communication

For some in the development sector there may need to be a shift in mindset, away from seeing biodiversity as a constraint on activity, to recognising it as a valuable asset that is actively protected and improved. Morgan Taylor, associate with sustainability and environmental consultancy Greengage Environmental, points out that this shift needs to occur at all levels of the development team. "Many have picked up on biodiversity net gain and begun to embed it within policy, design and approach. However, there is still a challenge in delivery," he says. "Translating corporate strategy or policy/legislative change to the project manager level on the ground will require improved communication and education throughout development teams."

Every site's habitat is individual, but rural sites could present demands, Taylor adds. "Given the nature of the calculation methodology, the most challenging sites are likely to be rural, particularly if opportunities for compensatory and enhanced habitat coverage are constrained on site, requiring offset arrangements."

For many sites, however, there may be little difference. "Generally, application of biodiversity net gain should not drastically change the approach already taken when surveying and assessing a site and then designing mitigation, compensation and enhancement measures within a scheme," says Taylor. "It will, however, provide a robust framework against which to secure and quantify these measures, meaning, if anything, it could make certain elements of ecological design simpler."

And the end result is likely to be better places and homes, for the environment as well as for people. There is an increasing amount of research around the economic and other benefits of natural capital, which encompasses features such as green roofs, green spaces, trees and other natural assets. "Creating biodiverse and functional spaces, prioritising the embedding of nature where people live, will have myriad benefits, not least through improvements in people's health and wellbeing," says Taylor. "Well designed green infrastructure, which could be maximised when taking the biodiversity net gain approach, is acknowledged as being crucial for new development, providing ecosystem services and the resilience needed to address risks posed by a changing climate."