

The Natural Capital benefits of delivering Biodiversity Net Gain

What is Biodiversity Net Gain?

Put at its most simple, Biodiversity Net Gain is when development leaves biodiversity in a better state than before. One way for developers to achieve Biodiversity Net Gain is to partner with local stakeholders and support their matching priorities for biodiversity. This collaborative approach can generate wider benefits for society and the economy in addition to the goal of Biodiversity Net Gain. In the UK while Biodiversity Net Gain can be measured in 'biodiversity units' using Defra's metric, there is no standardised way to value the wider societal and economic benefits.

Why measure Natural Capital?

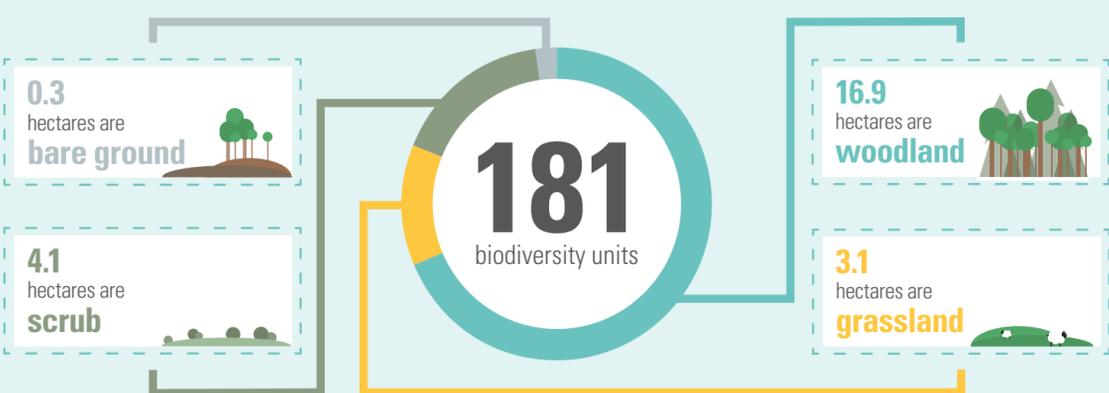
Natural Capital refers to stocks of natural assets such as soil, air, water and wildlife. These provide services that make human life possible for example food, medicine, climate regulation by forests and crop pollination by insects. Putting a financial value on elements of Natural Capital can reveal a range of wider benefits that arise from Biodiversity Net Gain. This can support better decision making on what, where and how development should proceed to be genuinely sustainable.

This infographic

Balfour Beatty collaborated with eftec and Forest Trends on this industry-first project: to value the community benefits (using the Natural Capital approach) generated by achieving Biodiversity Net Gain on a project to upgrade transport infrastructure. Note: only air quality, climate regulation and recreation have been calculated for this project, but there are many other community benefits from Biodiversity Net Gain.

Stage One: Before Works Commence

The project footprint comprises 24.5 hectares of transport verges, of which:



Community benefits after 50 YEARS are estimated at...



Stage Two: During Works

The project is designed to avoid and minimise impacts on biodiversity as far as possible given its spatial constraints. After following the mitigation hierarchy:



The cleared areas are left to regrow as grassland and 0.3 hectares of bare earth is seeded with wildflowers

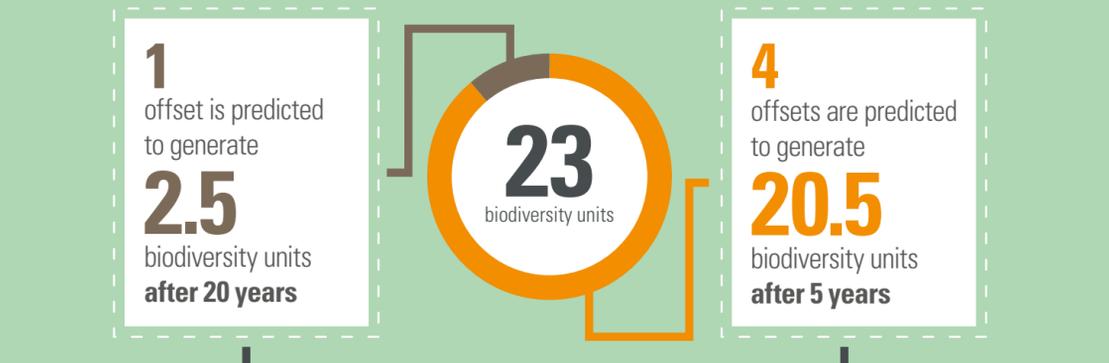
This results in a loss of 20 biodiversity units



It is not possible to achieve Net Gain within the project footprint, so a method called biodiversity offsetting is used after strict application of the mitigation hierarchy

Stage Three: Delivering Biodiversity Net Gain

The developer invested in five biodiversity offsets. These are important local wildlife projects in nature reserves close to the site.



This yields a small net increase in biodiversity for the project!

In addition, the offsets generate £1.4m of community benefits over 50+ years



The end result of the project in terms of biodiversity and the associated community benefits from Natural Capital are:

- + A small increase in biodiversity from 181 to 183 biodiversity units
- + An increase in net natural capital value from £4.9m to £5.2m