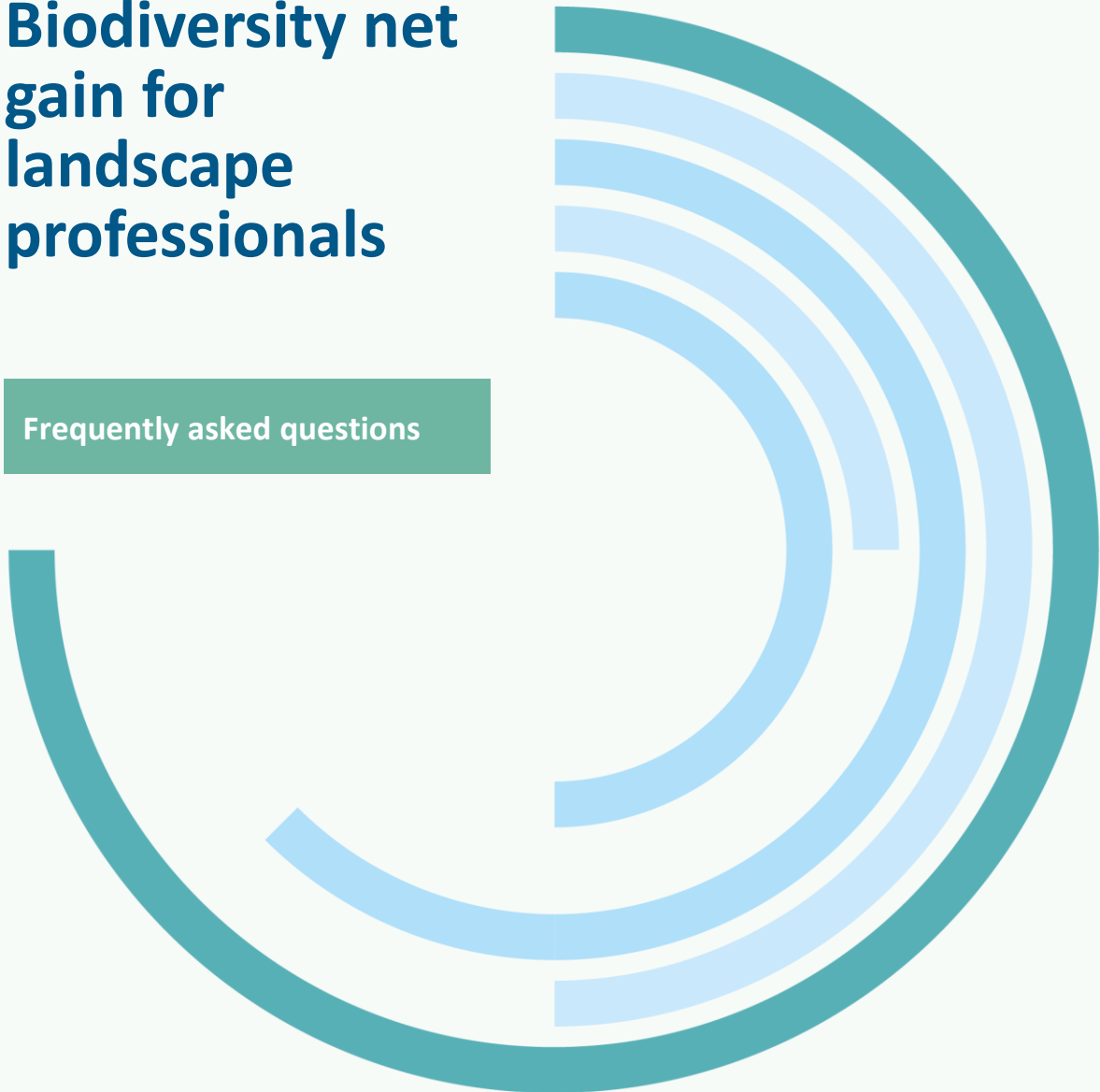


# Biodiversity net gain for landscape professionals

Frequently asked questions



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# About biodiversity net gain

Biodiversity net gain is an approach to development and land management that aims to leave the natural environment in a measurably better state than it was beforehand.<sup>1</sup> This can entail protection of existing on-site habitats; enhancement through improved management; and/or compensatory habitat creation elsewhere ('biodiversity offsetting').

Land development has long had a deleterious effect on the natural environment. While statutory protections help safeguard designated sites and species, non-protected habitats have shrunk and fragmented. Complementing existing legal and policy protections, net gain provides an opportunity to ensure that built developments provide lasting benefits for wildlife.

In 2019, the UK Government pledged in its 25 Year Environment Plan to 'hand over our planet to the next generation in a better condition than when we inherited it'.<sup>2</sup> Before this, the 2010 Lawton Report *Making Space for Nature* guided thinking on how to halt biodiversity loss through 'more, bigger, better and joined up' ecological networks.<sup>3</sup> net gain implements these principles in practice.

Net gain will become compulsory across England in Winter 2023 under the provisions of the Environment Act 2021, which received royal assent on 10 November 2021. Meanwhile, the National Planning Policy Framework (NPPF) encourages local planning authorities to 'contribute to and enhance the natural and local environment by [...] minimising impacts on and providing net gains for biodiversity'.<sup>4</sup> As a result, some planning authorities throughout the UK already incorporate net gain into local policy.

The Environment Act is a significant piece of legislation that overhauls and replaces EU environmental frameworks. It introduces a

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## What is biodiversity?

**Biological diversity ('biodiversity') is the variety and variability of life on earth, including genes, ecosystems, and species. It is a fundamental measure of the state of nature and its ability to deliver benefits (ecosystem services).**

**Biodiversity is in decline. The UK State of Nature report in 2019 showed a decline of 13% in species abundance, which continues a long-term pattern of significant biodiversity losses and a failure to meet nature recovery targets. For this reason, the Landscape Institute and others have declared that there is a biodiversity emergency alongside the climate emergency.**

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<sup>1</sup> Local.gov.uk (2022). *Biodiversity Net Gain for local authorities*. [online] Available at:

<https://www.local.gov.uk/pas/topics/environment/biodiversity-net-gain-local-authorities>

<sup>2</sup> Department for Environment, Food & Rural Affairs (2018). *25 Year Environment Plan*. [online] Available at: <https://www.gov.uk/government/publications/25-year-environment-plan>

<sup>3</sup> Department for Environment, Food & Rural Affairs (2010). *Making space for nature: a review of England's wildlife sites*. [online] Available at:

<https://www.gov.uk/government/news/making-space-for-nature-a-review-of-englands-wildlife-sites-published-today>

<sup>4</sup> Ministry of Housing, Communities & Local Government (2012). *National Planning Policy Framework*. [online] Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>



requirement for development in England to deliver at minimum a **10% net gain** in biodiversity. The Department for Environment, Food & Rural Affairs (Defra) expects this ‘to result in the creation and the avoidance of loss of several thousands of hectares of habitat for wildlife each year, which represents annual natural capital benefits of around £1.4 billion’.<sup>5</sup>

Legislators expect the requirement to come into force for almost all land developments in England by November 2023, and for nationally significant infrastructure projects by 2025. (See ‘*What developments must deliver biodiversity net gain?*’ on page 3.)

Net gain is calculated using one or more quantitative metrics (see ‘*How is biodiversity net gain calculated?*’ on pages 4–5), and should be a consideration for landscape professionals across all stages of development, including management.

Net gain is an important development for landscape professionals, who collectively have long advocated that proper planning and design are crucial to maximise the benefits that ecosystem services provide. This briefing will discuss in more detail why net gain is a key concept in landscape practice; explain what role landscape designers, planners, and managers can play in delivering net gain; and answer questions professionals might have about its implementation.

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<sup>5</sup> GOV.UK. (2020). *30 January 2020: Environment Bill 2020 policy statement*. [online] Available at: <https://www.gov.uk/government/publications/environment-bill-2020/30-january-2020-environment-bill-2020-policy-statement>



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# Frequently asked questions

## Isn't biodiversity net gain an ecology concept? Why should landscape professionals be aware of it?

The purpose of the Landscape Institute (LI), as enshrined in our Royal Charter, is 'to protect, conserve and enhance the natural and built environment for the benefit of the public' <sup>6</sup>.

As landscape professionals, we have long argued that landscape science, planning, design, implementation, and management can maximise the public benefits that the development process delivers. Ecosystem services are an instrumental part of this.

But without quantification, these benefits are difficult to factor into economic and environmental assessment. Net gain helps to connect the dots between landscape interventions and the measurable positive outcomes they provide for people, place, and nature.

## What developments must deliver biodiversity net gain?

Under current government proposals, when the requirement comes into force, almost all land development projects in England will need to deliver a minimum 10% net gain. <sup>7</sup>

The net gain requirement will apply to all developments that require planning permission under the Town and Country Planning Act 1990 (the TCPA). It will also apply to nationally significant infrastructure projects (NSIP) consented under the Planning Act 2008 (the PA). <sup>8</sup>

The government has stated it does not intend to introduce broad exemptions from delivering net gain – however some types of development will be excluded *de facto* as a result of their characteristics, because they do not require planning consent, or because they have been specifically excluded.

Most obviously, schemes which are covered by permitted development rights will not require net gain. Any landscape projects which fall into this category (such as small private garden projects) would not legally require net gain, although biodiversity should still be considered.

This is also true of other development which is not covered by the Town and Country Planning Act – such as Urgent Crown Development or Marine Sites (although government are consulting on a separate "marine net gain" scheme).

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<sup>6</sup> Landscape Institute (2016). *Landscape Institute Royal Charter*. [online] Available at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2016/11/Charter-2016.pdf>

<sup>7</sup> Department for Environment, Food & Rural Affairs (2022). *Consultation on Biodiversity Net Gain Regulations and Implementation*. [online] Available at: <https://consult.defra.gov.uk/defra-net-gain-consultation-team/consultation-on-biodiversity-net-gain-regulations/>

<sup>8</sup> Herbert Smith Freehills (2022). *The Environment Act 2021 - Biodiversity net gain and its implementation*. [online] Available at: <https://hsfnotes.com/realestatedevelopment/2022/01/11/the-environment-act-2021-biodiversity-net-gain-and-its-implementation/>



The government consulted in early 2022, on some targeted net gain exemptions. These are:

1. *developments impacting habitat areas below a ‘de minimis’ (minimal) threshold*
2. *householder applications*
3. *change of use applications*
4. *creation of biodiversity gain sites*
5. *self-build and custom housebuilding*

With the first two “proposed” and the latter three “considered” for exemption. As of August 2022, we are still awaiting Defra’s response to this consultation.

## Must developments deliver biodiversity net gain within the site boundary?

Net gain should be consistent with the mitigation hierarchy (see ‘*What is the mitigation hierarchy?*’ below). As such, developments should aim to deliver net gain on site where possible. The site design may require revisions to achieve this.

If on-site net gain is not possible, developers must consider off-site compensation measures. The off-site biodiversity units must fully offset the loss in biodiversity units at the development site and achieve the mandatory 10% overall net gain. The Defra Biodiversity Metric strongly incentivises delivery on, or close to, the development site by including a ‘spatial risk multiplier’, which reduces the biodiversity value of habitats delivered further away from the development.

Chapter 3 of the Biodiversity Metric 3.1 User Guide defines ‘on-site’ and ‘off-site’ in the context of the Metric, including guidance on setting the red line boundary and spatial risk multiplier for off-site land.

For more information on biodiversity offsetting, see ‘*What happens if a development cannot deliver sufficient Biodiversity Net Gain?*’ below.

## What is the mitigation hierarchy?

The mitigation hierarchy is a tool that helps user minimise the impact of development projects on biodiversity.<sup>9</sup> The four steps are as follows:

- **Avoid** loss or damage, particularly to irreplaceable habitats and those of higher value such as woodland ponds and high-quality grassland;
- **Minimise** habitat damage and habitat loss on site;
- **Restore** damaged or lost habitats;
- **Offset** damaged or lost habitats that cannot be restored, ideally close to the development or in an area identified as important for nature recovery.

Developers applying the mitigation hierarchy should therefore only consider offsetting if avoidance, minimisation, or restoration are not possible.

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<sup>9</sup> Cross Sector Biodiversity Initiative (2015). *A cross-sector guide for implementing the Mitigation Hierarchy*. [online] Available at: <http://www.csbi.org.uk/our-work/mitigation-hierarchy-guide/>



## How is biodiversity net gain calculated?

In England, various metrics have been used to calculate biodiversity change, such as Defra's Biodiversity Metric, Warwickshire County Council's Biodiversity Impact Assessment (BIA) metric, and bespoke metrics created by developers, consultants, and environmental organisations.

The [Defra Biodiversity Metric 3.1](#) is now in widespread use. First published in April 2022 as an update to the Metric 3.0, Version 3.1 is expected to inform the statutory metric that will be in place when biodiversity net gain becomes mandatory in November 2023.

The Defra Metric measures biodiversity change using the following calculation:

**Post-development biodiversity units**

minus

**Pre-development biodiversity units**

The Metric calculates pre-development biodiversity units using a multiplication of the following criteria:

1. **habitat area** (or, in the case of linear habitats such as hedgerows, lines of trees, rivers, and streams, **habitat length**);<sup>10</sup>
2. **habitat distinctiveness**, a measure of a habitat's importance for wildlife (examples of high-distinctiveness habitats are lowland calcareous (alkaline) grassland and woodland, while arable land and private gardens are low-distinctiveness);
3. **habitat condition**, a measure of the biological working order of a habitat (this can range from 'good' to 'poor', or 'not applicable' in the case of, for example, built areas);
4. **ecological connectivity**, a measure of how connected a habitat parcel is to other valuable natural or semi-natural habitats (this ranges from 'high' to 'low', or 'not applicable'); and
5. **strategic significance**, which is based on landscape-scale factors (for example, whether the habitat or site is designated for nature conservation or in an area identified as a local priority for nature recovery).

The Metric calculates post-development biodiversity units using the above criteria, plus three additional multipliers:

6. **time**, or how long before newly created or freshly managed habitats are likely to reach the target condition (good, moderate, or poor);
7. **difficulty**, a measure of the technical difficulty of creating the targeted habitat; and
8. **spatial risk**, which assesses the distance from the site of an off-site compensation scheme.

These additional multipliers are all measures of risk, so will reduce the number of post-development biodiversity units. This means that, for example, a hectare of created habitat would not deliver the same number of biodiversity units as a retained hectare of the same type and quality of habitat.

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<sup>10</sup> Because of the value of linear habitats as ecological corridors, the Defra Metric calculates them separately to area habitats. Additionally, the calculation tool draws further distinction between linear hedgerow and tree habitats and river and stream habitats. Rule 4 of the metric states that these three types of biodiversity unit 'are unique and cannot be summed, traded or converted'.



## Does biodiversity net gain account for protected sites and irreplaceable habitats?

Biodiversity net gain does not override the protection for designated sites, protected or priority species, or irreplaceable or priority habitats set out in the National Planning Policy Framework (NPPF).<sup>11</sup>

It is generally agreed that, in practice, developers cannot claim net gain when development results in land take from such sites. Such development, however, is not specifically exempt from the net gain requirement. As such, developers and planning authorities will need to address existing legal or policy requirements for statutory protected areas, and their features, separately.<sup>12</sup>

National planning policy guidance implies that **any** protected site, statutory or non-statutory, can be considered as comprising irreplaceable habitats.<sup>13</sup> Examples of irreplaceable habitats include ancient woodland, limestone pavements, blanket bog, salt marsh, sand dunes, lowland fen, and ancient and veteran trees. There are irreplaceable examples of other habitats, such as ancient hay meadows, which are unique forms of species-rich grassland.<sup>14</sup>

The NPPF states that local planning authorities should refuse development that results ‘in the loss or deterioration of irreplaceable habitats’ unless:

- ‘there are wholly exceptional reasons’, such as ‘infrastructure projects ... where the public benefit would clearly outweigh the loss or deterioration of habitat’; and
- ‘a suitable compensation strategy exists’.<sup>15</sup>

Thus, if loss or deterioration to irreplaceable habitats is unavoidable and the decision maker concludes that the benefits outweigh the harm, the developer would need to provide suitable bespoke compensation as proscribed either in the NPPF (and many local plans) or under [the Conservation of Habitats and Species Regulations 2017](#).

## What happens if a development cannot deliver sufficient biodiversity net gain?

If a development is unable to deliver sufficient net gain on site, the developer must seek to secure biodiversity units through local habitat creation and enhancement projects. The government expects that local landowners will provide biodiversity units for developers to purchase through a private habitat market.

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<sup>11</sup> Ministry of Housing, Communities & Local Government (2016). Natural environment. [online] Available at: <https://www.gov.uk/guidance/natural-environment>

<sup>12</sup> *Explanatory notes to the Environment Act 2021*, para 1751. [online] Available at: <https://www.legislation.gov.uk/ukpga/2021/30/notes/division/20/index.htm>

<sup>13</sup> Surrey Nature Partnership (2020). ‘*Irreplaceable Habitats’ Guidance for Surrey*. [online] Available at: [https://surreynaturepartnership.files.wordpress.com/2020/08/irreplaceable-habitats-guidance-for-surrey\\_final\\_aug2020.pdf](https://surreynaturepartnership.files.wordpress.com/2020/08/irreplaceable-habitats-guidance-for-surrey_final_aug2020.pdf)

<sup>14</sup> GOV.UK (2021). *Maintain species-rich grassland*. [online] Available at: <https://www.gov.uk/guidance/maintain-species-rich-grassland>

<sup>15</sup> Department for Levelling Up, Housing and Communities (2012). *National Planning Policy Framework - Guidance*, para 180. [online] Available at: <https://www.gov.uk/guidance/national-planning-policy-framework/15-conserving-and-enhancing-the-natural-environment%23para180>





If sufficient credits are unavailable through locally agreed off-site schemes, the developer will be able to purchase statutory biodiversity credits from the government. Section 101 of the Environment Act makes provision for the environment secretary to establish a statutory biodiversity credits scheme.<sup>16</sup> The government anticipates ‘but cannot guarantee that the market will meet demand for biodiversity units from day one’; as such, the statutory scheme will provide a ‘last resort’ option for developers.<sup>17</sup>

The government will invest the revenue generated from the sale of statutory into projects selected based on their additionality (i.e. those offering biodiversity gains that would not have materialised in the absence of a biodiversity credit market), their long-term environmental benefits, and their contribution to strategic ecological networks.

Some organisations, such as the [Environment Bank](#) and [Landscape Enterprise Networks \(LENs\)](#), already offer private ‘habitat bank’ schemes. The government are currently conducting a price review of statutory biodiversity credits to ensure that the scheme does not undermine the current private habitat market, and to reflect that the scheme should be a last resort for developments that cannot achieve net gain on-site, off-site, or by purchasing credits privately. The government intends to set an initial credit price in advance of net gain becoming mandatory.

### Must developers provide mitigation habitat on a ‘like for like’ basis?

The Defra Biodiversity Metric uses biodiversity units rather than habitat areas and qualities to assess biodiversity change. Different habitat types have different biodiversity unit value.

However, Natural England’s Biodiversity Metric 3.1 User Guide states in its ‘*Principles and rules for using the metric*’ (pp 16-19) that developers must avoid ‘trading down’, and should compensate for habitat losses ‘on a “like for like” or “like for better” basis’. New habitats ‘should aim to achieve a higher distinctiveness and/or condition’ than those lost or damaged. Site conditions should be suitable to support the target habitat, and developers may need to evidence this – particularly in the case of high and very high-distinctiveness habitats.

**Note: The risk factors of time, difficulty, and spatial risk also mean that the area of mitigation habitat must be greater than the lost or damaged habitat it offsets.**

Enhancement or restoration of habitats currently in poor condition can also be considered compensation. In these cases, restored habitats should also be of higher distinctiveness and/or condition than those lost or damaged.

Natural England’s guide assists users with interpreting these requirements. The Biodiversity Metric tool also has embedded rules that prevent the user from inadvertently specifying inappropriate compensatory measures.

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<sup>16</sup> *Environment Act 2021*, s 101. [online] Available at: <https://www.legislation.gov.uk/ukpga/2021/30/section/101/enacted>

<sup>17</sup> Department for Environment, Food & Rural Affairs (2022). *Consultation on Biodiversity Net Gain Regulations and Implementation*. [online] Available at: [https://consult.defra.gov.uk/defra-net-gain-consultation-team/consultation-on-biodiversity-net-gain-regulations/supporting\\_documents/Consultation%20on%20Biodiversity%20Net%20Gain%20Regulations%20and%20Implementation\\_January2022.pdf](https://consult.defra.gov.uk/defra-net-gain-consultation-team/consultation-on-biodiversity-net-gain-regulations/supporting_documents/Consultation%20on%20Biodiversity%20Net%20Gain%20Regulations%20and%20Implementation_January2022.pdf)



## How long will biodiversity net gain agreements run for?

Under the approach set out in the Environment Act, there is a requirement for developers to manage new habitats and enhancements for at least 30 years.<sup>18</sup> The Act provides for the provision of legally binding ‘conservation covenants’ between the landowner and a responsible body who will manage and maintain the land and habitats.<sup>19</sup>

## Will the net gain requirements apply to phased developments that span the two-year transition period?

Many phased developments, such as large, multi-stage residential developments, will receive outline planning permission during the two-year transition period, but will need to make detailed planning applications (‘reserved matters’ applications) once BNG is in full force.

Reserved matters applications pertaining to outline applications approved during the transition period will not be subject to the net gain requirement. (Such applications must still demonstrate net gain in accordance with the National Planning Policy Framework and relevant local frameworks, however.)

The government acknowledges that phased developments ‘will require flexibility to accommodate changes over time’. We recommend early engagement with local planning authorities to develop a pragmatic approach for individual sites.

## What role can landscape architects play in delivering biodiversity net gain?

Landscape architects will play a key role in net gain delivery. This will include liaising closely with project ecologists from inception and translating their recommendations for biodiversity enhancement into technical plans, documents, and reports for planning submission and delivery. Close collaboration with the project ecologist will also help understand the short- and long-term opportunities for net gain on a given scheme.

Sensitive design to retain key existing habitats will be a valuable and cost-effective part of delivering net gain. There may be a range of opportunities to contribute to net gain through habitat creation and enhancement available on the development site. Some of these will be quick and simple treatments; others will require more complex management but provide longer-term benefits.

Landscape architects should seek to align the short- and long-term interests of the client or landowners, and likely resources for delivery, with the appropriate net gain treatment. For example, complex habitat creation and management schemes may suit a client with long-term interests in a site, such as a managed university campus. These are subjective judgements, but landscape architects are well placed to advise on the optimal treatment for a given context.

In developing net gain schemes, landscape architects should consider the climate resilience and biosecurity of proposed habitat creation measures within the design and specification of the works, regardless of net gain scoring.

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<sup>18</sup> *Environment Act 2021*, s 100. [online] Available at: <https://www.legislation.gov.uk/ukpga/2021/30/section/100/enacted>

<sup>19</sup> *Environment Act 2021*, pt 7. [online] Available at: <https://www.legislation.gov.uk/ukpga/2021/30/part/7/enacted>



## What role can landscape planners play in delivering biodiversity net gain?

Landscape planners will play a key role in net gain delivery by supporting landowners and developers at the feasibility and land acquisition stages. The quantum and layout of development that a given site can accommodate will depend in part of the existing biodiversity and habitat value, and the subsequent requirement for net gain. Planners may need to explain – using the available metric – that derelict urban landscapes can sometimes deliver high biodiversity value.

It is important that high-level stakeholders understand this value at the feasibility and acquisition stages, since it may affect the financial and logistical viability of a development. Early ecological support can help ascertain not only the on-site biodiversity value in general terms, but also the location of any strategic habitat corridors (both on- and off-site) that the development may need to retain or reinforce as part of the mitigation hierarchy. (See ‘*What is the mitigation hierarchy?*’ on page 4.) These constraints and opportunities may influence site access and movement and the strategic form of development.

Biodiversity net gain may also help to drive spatial planning at a wider landscape scale; for example, by encouraging innovative nature-based solutions that deliver ‘more, bigger, better and joined up’ sites as advocated in the 2010 Lawton Report ‘*Making Space for Nature*’.<sup>20</sup> A good example of this in practice is the West of England Nature Partnership’s [Nature Recovery Network](#).

## What role can landscape managers play in delivering biodiversity net gain?

Because conservation covenants will run for a minimum of 30 years, landscape management plans must address both establishment phases and long-term resourcing. Typically, many planning conditions have required landscape management plans that cover only a five-year post-construction period. In the early years following the adoption of mandatory net gain, landscape managers may face difficulties explaining the need for long-term management planning to developers and landowners whose financial model has not typically required it.

Landscape managers will need to understand both the design intent and long-term aspirations for habitat creation and restoration under a net gain scheme. Ecological and design information provided as part of a planning approval will usually require additional development and detailing to allow a long-term management plan to cover scheduling and delivery of specific management activities.

Landscape managers should ensure suitable management resources (human and financial) are available prior to starting a management plan or contract.

A simple but structured system of recording management activities and monitoring habitat development will be helpful in demonstrating compliance with net gain obligations. Additionally, the experience gained through live estate management can provide a key resource to inform future net gain initiatives.

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<sup>20</sup> Lawton, J. and Frs, C. (2010). *Making Space for Nature: A review of England’s Wildlife Sites and Ecological Network*. [online] Available at: [https://webarchive.nationalarchives.gov.uk/ukgwa/20130402170324mp\\_/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf](https://webarchive.nationalarchives.gov.uk/ukgwa/20130402170324mp_/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf)



Natural England's Biodiversity Metric 3.1 User Guide defines the target condition of the range of habitats listed in the Metric. Landscape managers will need to advise on the feasibility of achieving the target condition, the required management inputs, and the costs. For some habitats, such as woodlands, management techniques are widely known, and a good contractor base exists. Other, more unusual habitats will require more bespoke management planning and procurement of specialist contractors.

Both the User Guide and Technical Supplement make clear that the Metric is not intended as management guidance. Paragraph 1.4 of the Technical Supplement states: 'Any habitat creation and management plans should make use of the wide array of guidance developed by government, conservation NGOs, industry and professional bodies.'

### **Does designing for net gain mean restricting public access or reducing aesthetic appeal?**

No. Sometimes public access needs to be limited to protect sensitive wildlife or delicate habitats. However, areas with public access can also support habitats delivering net gain. Landscape architects have extensive experience of designing new landscapes that deliver value for both people and nature. The following questions explore in more detail the role that landscape professionals can play in delivering net gain.

### **How does biodiversity net gain relate to environmental net gain and natural capital assessment?**

Biodiversity net gain is a step towards the wider concept of implementing environmental net gain through development. Environmental net gain aims for the net improvement of a suite of ecosystem services that land provides, such as climate mitigation, flood management, improving water quality, enabling access to natural spaces, and restoring landscape distinctiveness.

There will be challenges in delivering these wider environmental benefits without watering down the wildlife benefits of biodiversity net gain. Engagement across professions will be necessary to effectively deliver biodiversity net gain and move towards the end goal of environmental net gain.

The services that healthy, functioning ecosystems provide are key concepts in the natural capital approach, involving people and valuing the wider environment in decision making.<sup>21</sup>

### **How does biodiversity net gain relate to building information modelling (BIM)?**

Net gain requires the establishment of an initial biodiversity baseline, against which developers first assess and then monitor net gain outcomes. Developers need to consider net gain as an entire lifecycle process, much in the same way as BIM: from project inception stages to design, construction, operation, and decommission. BIM provides a robust, collaborative process for better specification and delivery of information throughout the design, construction, and operation of projects.

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<sup>21</sup> Neal, P. and Brown, B. (2019). Environmental Net Gain: Capturing the opportunity for the Landscape Profession. *Landscape: The journal of the Landscape Institute*, [online] pp. 34–38. Available at: <https://issuu.com/landscape-institute/docs/climatejournal/s/165905>



Commitment to net gain starts at the feasibility stage, when the vision, purpose, and/or objectives of the project are recorded in the BIM Execution Plan (BEP). The design stage records a measurable net gain target for the project compared its biodiversity baseline. The net gain target provides a quantifiable measure against which designers can test and modify design proposals. The net gain management and maintenance plan (MMP) records roles, responsibilities, and activities during the construction and operational stages.

## How does biodiversity net gain relate to geographical information systems (GIS)?

Gathering biodiversity information will often require consideration of the project site in context, and its connectivity to ecological networks on a larger scale.

The establishment of an initial biodiversity baseline will require a combination of site surveys and desk-based investigations using GIS to gather ecological and associated social and environmental information.

GIS is a valuable approach, as data (such as habitat type and condition) can be linked to specific areas, making net gain calculations easier. In mapping existing habitats and designing future landscapes, areas need to be drawn in GIS or computer-aided design (CAD) in a way that allows them to be measured precisely and correctly. Accurate translation of habitat boundaries between GIS and CAD is vital to avoid frustration and delays.

## What does a landscape professional working in the public sector need to learn and implement?

Landscape professionals will need to assist their planning and ecological colleagues in interpreting net gain plans submitted by developers. This will include advice on the feasibility and appropriateness of delivering the habitats, and the net gain claimed for the proposed new landscape. They will also need to evaluate long-term landscape management plans submitted by developers. Proper implementation will require collective training and awareness-raising across these disciplines, which is one reason the Environment Act allows for a two-year transition period.

Net gain offers an opportunity for funding habitat creation and enhancement on public sector land. Many developers will be content to pay a commuted sum to the local authority to discharge their net gain requirement. But it will be necessary for the authority to demonstrate how the funds will be used and how the land will be secured under long-term management.

Net gain monies can be pooled to fund habitat improvements at strategically important green spaces. However, landscape professionals will need to understand the rules associated with the Defra Biodiversity Metric – notably the need to avoid ‘trading down’. (See ‘*Must developers provide mitigation habitat on a ‘like for like’ basis?’* on page 7.)

The Environment Act places new obligations on public bodies, including the need to regard the conservation **and enhancement** of biodiversity in the exercise of their functions (underlining emphasising the extended duty).

There will be a new system of spatial strategies for nature in England, called Local Nature Recovery Strategies (LNRS). LNRS will create a compulsory requirement for authorities to map the most valuable existing habitats for nature, set out proposals for creating or improving habitats, and agree priorities for recovery. These priorities will include consideration of the



role that nature-based solutions can play in addressing wider environmental issues, such as carbon sequestration for climate mitigation.

In short, the role of the public sector landscape professional is key to long-term biodiversity conservation and enhancement, and to upholding related cultural and recreational value.

## How does this apply to Scotland?

The legally-binding Biodiversity Net Gain (BNG) regulations described above do not apply to Scotland. As of August 2022, the Scottish Government has not stated an intention to introduce legal quantitative requirements for the delivery of biodiversity net gain.

However, this does not mean that net gain should not be a consideration for landscape professionals working in Scotland. The delivery of biodiversity outcomes are still required in national policy through the new draft National Planning Framework (NPF4),<sup>22</sup> including the requirement to 'secure positive effects for biodiversity'. Policy 3 of the new NPF4 ('Nature Crisis')<sup>23</sup> states that development plans should "facilitate biodiversity enhancement, nature recovery and nature restoration". However, this is not backed up with a quantitative metric as in England.

Individual local planning authorities in Scotland may also have their own planning requirements for biodiversity outcomes.

NatureScot, Scotland's nature agency has drafted guidance on securing positive effects for biodiversity with a focus on local development, to give more detailed understanding of the approach laid out in NPF4. This will be finalised pending final publication of NPF4.

The Edinburgh Declaration on post-2020 global biodiversity framework<sup>24</sup> outlines the aspirations of Scottish Government in delivering for nature over the next decade.

## How does this apply to Wales?

The legally-binding Biodiversity Net Gain (BNG) regulations described above do not apply to Wales. As of August 2022, the Welsh Assembly has not stated an intention to introduce legal quantitative requirements for the delivery of biodiversity net gain.

However, this does not mean that net gain should not be a consideration for landscape professionals working in Wales. The delivery of biodiversity outcomes are still required in national policy through Planning Policy Wales 11,<sup>25</sup> which includes a number of positive policies to promote "Distinctive and Natural Places" covering Green Infrastructure, Landscape, and Biodiversity and Ecological Networks.

Individual local planning authorities in Wales may also have their own planning requirements for biodiversity outcomes.

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<sup>22</sup> The consultation on Draft NPF4 closed on 31 March 2022 and a final version of the framework will be published pending analysis of responses. This is currently anticipated to be approved by summer 2022.

<sup>23</sup> <https://www.transformingplanning.scot/national-planning-framework/draft-npf4/>

<sup>24</sup> <https://www.gov.scot/publications/edinburgh-declaration-on-post-2020-biodiversity-framework>

<sup>25</sup> <https://gov.wales/planning-policy-wales>



Wales also passed its own Environment (Wales) Act in 2016, which mandates a “biodiversity duty” for all public bodies,<sup>26</sup> which states that: “A public authority must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions.”

Wales also has a National Biodiversity Strategy and Action Plan,<sup>27</sup> in the form of its *Nature Recovery Action Plan*. A new one-year action plan was published for 2020-21, and as of August 2022, a new Action Plan is in the process of publication.

## How does this apply to Northern Ireland?

The legally-binding Biodiversity Net Gain (BNG) regulations described above do not apply to Northern Ireland. As of August 2022, the Northern Ireland Executive has not stated an intention to introduce legal quantitative requirements for the delivery of biodiversity net gain.

However, this does not mean that net gain should not be a consideration for landscape professionals working in Northern Ireland. The delivery of biodiversity outcomes are still encouraged through national policy in the Strategic Planning Policy Statement for Northern Ireland,<sup>28</sup> which describes the government’s ambitions in regards to development and biodiversity. The SPPS states that “Landscape design and planting considerations are [...] an integral part of design and can contribute to biodiversity.”

Individual local planning authorities in Northern Ireland may also have their own planning requirements for biodiversity outcomes.

The Biodiversity Strategy for Northern Ireland ran to 2020, and was a key document in describing national ambitions for biodiversity. As of August 2022, no new strategy has yet been published.

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<sup>26</sup> <https://gov.wales/section-6-biodiversity-and-resilience-ecosystems-duty-reporting-guidance>

<sup>27</sup> <https://gov.wales/nature-recovery-action-plan>

<sup>28</sup> <https://www.infrastructure-ni.gov.uk/publications/strategic-planning-policy-statement>



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## Useful links

### [The Biodiversity Metric 3.1](#)

The widely used means of assessing changes in biodiversity value brought about by development or changes in land management.

### [The Small Sites Metric](#)

A simplified version of the above Metric, currently released as beta test version, designed to assess changes in biodiversity value on smaller development sites.

### [BS 8683 - Process for designing and implementing Biodiversity Net Gain](#)

A new British Standard that sets out the process for implementing biodiversity net gain at any class or scale of built environment development or land or estate management.

**N.B. The LI is a licensed BSI Distributor, meaning that our members can purchase standards from the BSI shop at a 30% discount. [More details here.](#)**

### [Explanatory notes to the Environment Act 2021](#)

Notes prepared by Defra to assist readers in understanding the Act. These notes do not form part of the Act and have not been endorsed by Parliament.

### [25 Year Environment Plan](#)

The landmark 2018 government policy paper that sets out the government's aspiration to mainstream biodiversity net gain and natural capital approaches in the planning system.

### [Planning Advisory Service \(PAS\) biodiversity net gain information](#)

An in-development resource providing advice and guidance for planners and councillors involved in planning on biodiversity net gain.

### [Environmental Net Gain: Capturing the opportunity for the landscape profession](#)

From *Landscape Autumn 2019: The Climate Emergency Edition*.

### [Biodiversity resources](#)

Resources produced by the Chartered Institute of Ecology and Environmental Management (CIEEM), Construction Industry Research and Information Association (CIRIA), and Institute of Environmental Management and Assessment (IEMA), including:

- [Good practice principles for development](#)
- [Good practice principles for development: A practical guide](#)





- [Biodiversity net gain case studies](#)

## **Natural environment planning practice guidance**

Government guidance on implementing planning policy to protect and enhance the natural environment, including local requirements.



## About the Landscape Institute

The Landscape Institute (LI) is the chartered body for the landscape profession. We are an educational charity that promotes the art and science of landscape practice.

The LI's aim, through the work of our members, is to protect, conserve, and enhance the natural and built environment for the public benefit.

The LI provides a professional home for all landscape practitioners including landscape architects, landscape managers, landscape planners, landscape scientists, and urban designers.

## About LI policy and research

The LI undertakes research, builds networks, and provides policy advice to local and national policymakers, regulators, and stakeholders. We seek to demonstrate how landscape and green infrastructure can deliver maximum benefits for society, the environment, and the economy.

The work of the LI policy team is overseen by the LI Policy and Communications Committee (PCC), one of three standing committees that report to the LI's Board of Trustees.

To find out more or get involved, email the policy team at [policy@landscapeinstitute.org](mailto:policy@landscapeinstitute.org).

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