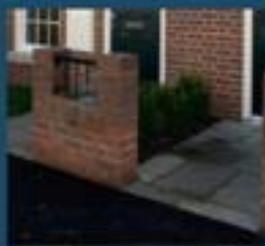




PLANNING FOR GROWTH



Biodiversity Net Gain

Draft Supplementary Planning Document (SPD)

September 2022



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1. Introduction

- 1.1 Biodiversity net gain delivers improvements for biodiversity by creating or enhancing habitats in association with development and aims to leave the natural environment in a measurably better state than before development took place. Biodiversity net gain can be achieved on-site, off-site or through a combination of on-site and off-site measures.
- 1.2 Biodiversity Net Gain is being introduced nationally in part as a response to current concerns with the state of the natural environment in the UK, which is succinctly summarised as:
- “Nature is in decline, much of England’s wildlife is deteriorating, and many ecosystems are degraded. The UK has a number of international and legislative commitments to take urgent and effective action to halt the loss of nature or biodiversity¹”.*
- 1.3 The requirement for BNG has become an increasingly important planning matter over the past few years and now has a statutory basis within the Environment Act (2021). BNG is also a key requirement in the National Planning Policy Framework (NPPF) (2019) (see section 4 for further detail on the legislative / policy background). The passing into law of the Environment Act (2021) means that for the first time, local authorities will have a legal duty to require that development takes place in such a way that biodiversity increases rather than is diminished.
- 1.4 This document has been prepared to support the adopted Local Plan Policy SADM10 - Biodiversity and Habitats and should be read in conjunction with the Biodiversity, Trees and Landscape SPD (2010)² which contains relevant advice and information on various issues relating to wildlife, biodiversity, trees and hedgerows – although not (BNG).
- 1.5 The following terms are used in this SPD:
- **Biodiversity Metric or Accounting:** this relates to how the biodiversity value of a site be ‘measured’ before, during and after a development – see section 6.
 - **Biodiversity offset or compensation:** This refers to the steps required if there is a loss to the biodiversity value of habitats as a result of a development or a development does not achieve the required level of net gain – see section 8.
- 1.6 In order to comply with this SPD and the requirements of the Local Plan, applicants will need to provide appropriate information in order to demonstrate compliance with and a commitment to BNG. Sufficient, suitable and robust information must be provided to enable the effects on biodiversity to be assessed. Proposals which have insufficient information in order for the

¹ [Environment Bill, Explanatory Notes, para 44](#)

² [Biodiversity Trees and Landscape - Part A: Introduction \(hertsmere.gov.uk\)](#)

Council to make an informed decision may be delayed when being determined or may even be refused permission.

2. Biodiversity in Hertsmere

2.1 Hertsmere supports a variety of wildlife rich priority habitats. There are a number of habitats in the borough protected as internationally important, including oak-hornbeam woodlands. In Hertsmere there are Sites of Specific Scientific Interest, local nature reserves, regionally important geological sites, local wildlife sites and woodlands (see Figure 1 for an illustration of this diversity). Priority habitats in the borough include woodland, grassland, heathland, wetland, along with rivers and ponds which support a wide range of flora and fauna. Legal protection for the natural environment varies, but all locations are protected to varying degrees through the planning system (refer to section 4). It should be emphasised that the requirements of this SPD relate to all development proposals, regardless of whether they are located within, adjacent to or some distance from a formally designated site.

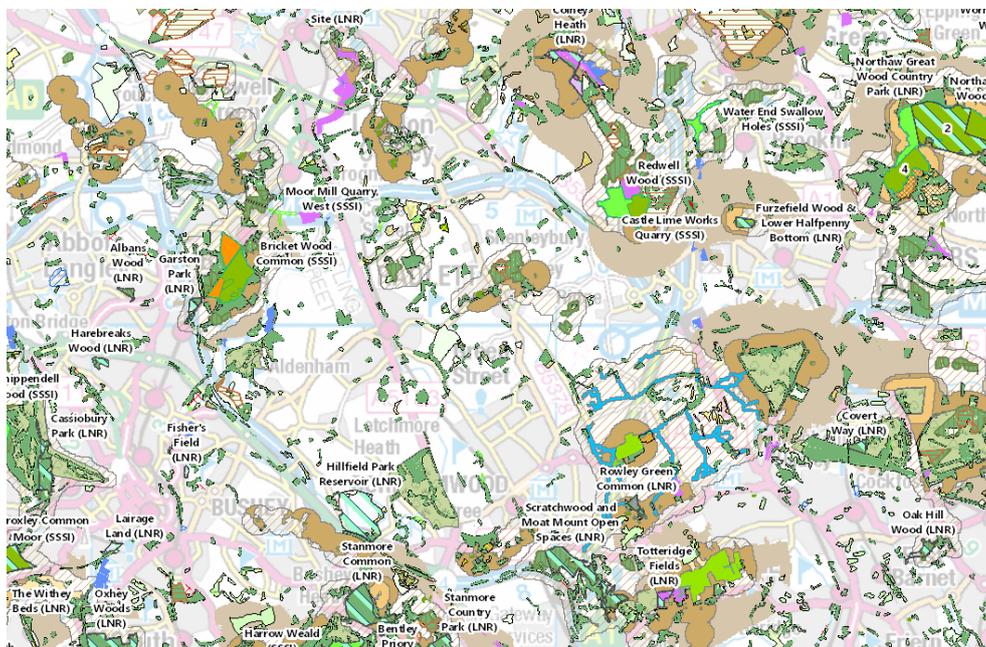


Figure 1 – some of the many ecological and species designations in the Hertsmere area

3. Principles of BNG

- 3.1 Biodiversity Net Gain is described as “a measurable target for development projects where impacts on biodiversity are outweighed by a clear mitigation hierarchy approach to first avoid and then minimise impacts, including through restoration and / or compensation”³.
- 3.2 A range of environment bodies (CIEEM, CIRIA, IEMA) have jointly established ten key principles which set out good practice for achieving biodiversity net gain to be applied in an integrated approach⁴ which are summarised in Table 3.1 below. The Council endorse this approach and advocate that developers adopt and develop these principles.

Table 3.1 - best practice principles of biodiversity net gain

1 Apply the mitigation hierarchy
Do everything possible to avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with the planning authority and other stakeholders, compensate for losses which cannot be avoided. Ideally such offsetting would be within the development site where this can generate the most benefits for nature conservation; where such benefits cannot be achieved, offsetting should occur elsewhere in the vicinity of the site, or where that is not practical, elsewhere in the borough.
2. Avoid losing biodiversity that cannot be offset by gains
Avoid impacts on irreplaceable biodiversity - these impacts cannot be offset. Irreplaceable habitats are not taken into account when calculating BNG because they are already covered by separate regulations.
3. Be inclusive and equitable
Achieve BNG in partnership with stakeholders where possible
4. Address risks
Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.
5. Make a measurable net gain contribution

³ CIEEM Biodiversity Net Gain Good practice principles for development: [Biodiversity-Net-Gain-Principles.pdf](#)

⁴ ibid

Achieve a clear, measurable, overall gain for biodiversity while contributing towards nature conservation priorities. This gain must be guaranteed for at least 30 years, and be added to a national register.

6. Achieve the best outcomes for biodiversity

Achieve the best outcomes for biodiversity using robust, credible evidence and local knowledge to make clearly justified choices when;

- Delivering compensation that is at least ecologically equivalent in type, amount and condition which accounts for the location and timing of biodiversity losses.
- Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation.
- Achieving BNG locally to the development, wherever possible, while also contributing towards nature conservation priorities at local, regional and national levels.
- Enhancing existing or creating new habitat.
- Enhancing ecological connectivity by creating more, better and joined areas.

7. Additionally

Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).

8. Create a Net Gain legacy

Ensure Net Gain generates long-term benefits.

9. Optimise sustainability

Prioritise biodiversity net gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.

10. Be transparent

Communicate BNG activities transparently sharing learning with all stakeholders.

4. Legislation and Policy

Legislation

Environment Act

- 4.1 The Environment Act (brought into law in 2021) sets out the following key components of mandatory biodiversity gain:
- Amends the Town and Country Planning Act 1990 (TCPA);
 - Minimum 10% gain required calculated using the Biodiversity Metric and approval of a biodiversity gain plan;
 - Habitat secured for at least 30 years via planning obligations or conservation covenants;
 - Delivered on-site, off-site or via a new statutory biodiversity credits scheme; and
 - National register for net gain delivery sites.
- 4.2 The Act does not change existing legal protections for important habitats and wildlife species and maintains the mitigation hierarchy of avoid impacts first, then mitigate and only compensate as a last resort. It applies to Nationally Significant Infrastructure Projects (NSIPs) but not marine development.
- 4.3 The new section 90A inserted by the Environment Act into the TCPA makes it a requirement that all planning permissions in England be subject to a condition to ensure biodiversity net gain of 10%, and the new Schedule (7a) of the TCPA requires all permissions to be subject to a condition requiring the submission and approval of a biodiversity gain plan.
- 4.4 A two year transition period for this requirement is included in the Act, with provision for secondary legislation to set a date for the requirement to come into force. This is expected to be by winter 2023.
- 4.5 The Act also confers power on the Secretary of State (SoS) to introduce regulations for a biodiversity gain site register for obligations with the habitat to be secured for at least 30 years to be embodied in planning obligations or conservation covenants.

Natural Environment and Rural Communities Act 2006

- 4.6 This Act places a duty on local authorities and other bodies in England to conserve biodiversity and have regards to it as far as is consistent with their functions.

National Planning Policy

National Planning Policy Framework

- 4.7 The [National Planning Policy Framework \(NPPF\) 2021](#) states [emphasis added]:

*174: Planning policies and decisions should **contribute to and enhance the natural and local environment** by: [...]*

d. minimising impacts on and **providing net gains for biodiversity**, including by establishing coherent ecological networks that are more resilient to current and future pressures

179: Plans should: [...]

b. promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and **identify and pursue opportunities for securing measurable net gains for biodiversity** and development whose primary objective is to conserve or enhance biodiversity should be supported; while **opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity**.

180: When determining planning applications, local planning authorities should apply the following principles: [...]

d. development whose primary objective is to conserve or **enhance biodiversity** should be supported; *while opportunities to **improve biodiversity in and around developments** should be integrated as part of their design, especially where this can secure **measurable net gains for biodiversity** or enhance public access to nature where this is appropriate.*

Planning Practice Guidance (PPG)

- 4.8 The PPG states that local plan documents and particularly those containing strategic policies, can be used to set out a suitable approach to both biodiversity and wider environmental net gain, how it will be achieved and which areas present the best opportunities to deliver gains. Such areas could include those identified in: natural capital plans; local biodiversity opportunity or ecological network maps; local green infrastructure strategies or strategic flood risk assessments. Circular 06/2005 (Biodiversity and geological conservation) complements PPG and the NPPF providing guidance relating to planning and nature conservation in England.

National Design Guide

- 4.9 The National Design Guide (2021)⁵ supports the principles of BNG, stating that well-designed developments include site-specific enhancements to achieve biodiversity net gains at neighbourhood, street and household level.

Natural England Biodiversity Metric

- 4.10 Natural England state that achieving BNG is more than simply outweighing losses with gains. It requires doing everything possible to avoid losing biodiversity in the first place. Ideally all gains to biodiversity need to be made locally bringing about long-lasting and meaningful benefits for the environment, society and economy, with planning applications contributing significantly towards realising these commitments. The Environment Act introduces a standardised national approach for the development industry on BNG, which has been absent until now.

Local Planning Policy

Hertsmere Local Plan

- 4.11 This SPD should be read in conjunction with the adopted Hertsmere Local Plan. While the key policies have been outlined below, it is important to consider the Local Plan as a whole as matters relating to biodiversity is an important thread running throughout the plan.
- 4.12 Local Plan Core Strategy (2013)⁶
- Policy SP1 Creating sustainable development – all development should conserve and enhance biodiversity, protected trees, and sites of ecological value in the Borough and provide opportunities for habitat creation and enhancement throughout the life of a development;
 - Policy CS12 The Enhancement of the Natural Environment – development must conserve and enhance the natural environment of the Borough, including biodiversity, habitats, protected trees, landscape character, and sites of ecological and geological value, in order to maintain and improve environmental quality... Proposals should provide opportunities for habitat creation and enhancement throughout the life of a development.
- 4.13 Local Plan Site Allocations and Development Management Policies (2016)⁷

⁵ [National Design Guide \(2021\)](#)

⁶ [Core Strategy DPD 2013 \(hertsmere.gov.uk\)](#)

⁷ [FINAL-ADOPTED-SADM-01-02-2017.pdf \(hertsmere.gov.uk\)](#)

- Policy SADM10 Biodiversity and Habitats – expects development to avoid significant harm to sites of importance for ecology, geology and biodiversity;
- Policy SADM12 - Trees, Landscaping and Development – development should not result in the loss of healthy, high quality trees and hedgerows.
- Policy SADM15 - Sustainable Drainage Systems – the design of new development should include sustainable drainage measures which achieve multiple benefits, including benefits for biodiversity.
- Policy SADM16 – Watercourses – development on sites that contain a watercourse or are situated next to a watercourse will conserve or improve the natural environment of the watercourse and areas of water, and should provide opportunities to support river restoration and enhancement within the catchment of the watercourse.
- Policy SADM37 - New and Improved Open Spaces – Open space provision must maximise biodiversity benefits. New or improved open space shall incorporate areas of biodiversity habitat complementing surrounding habitats and supporting the Hertfordshire Biodiversity Action Plan. Species chosen for planting across the space must maximise the biodiversity benefit. Biodiversity benefits should be maximised where appropriate for civic spaces and other hard landscaped open space.

Other considerations

Climate Emergency

- 4.14 The council declared a climate change emergency in 2019⁸, and in the associated strategy document⁹, the scope of the planning system was recognised in offsetting greenhouse gas emissions, improving biodiversity and building climate resilience while bringing sustainable development to Hertsmere.

Biodiversity Action Plan

- 4.15 Hertfordshire Biodiversity Action Plan, Revised (2006) looks to maintain, restore, enhance and increase where appropriate, priority habitats, and populations of priority species.

New Hertsmere Local Plan

- 4.16 Public engagement was carried out on a new draft Hertsmere Local Plan (Regulation 18) in autumn/winter 2021. Following this, the council has taken a

⁸ <https://hertsmere.moderngov.co.uk/ieListDocuments.aspx?CId=106&MId=10541&Ver=4>

⁹

<https://hertsmere.moderngov.co.uk/documents/s52037/20200916FC06appA1%2020200626%20Climate%20Change%20and%20Sustainability%20Strategy%20Final.pdf>

decision to set aside the current draft Local Plan and await further clarity from central government on policy issues, including the standard method for calculating local housing targets.

- 4.17 This guidance will need to be updated should a new Local Plan be adopted to incorporate relevant local policy, and in particular if the new plan includes a BNG target which is higher than the mandatory 10%.

5. Approach to biodiversity net gain

- 5.1 Biodiversity Net Gain is an approach to development that seeks to leave the natural environment in a measurably better state than it was before the development occurred. It aims to deliver improvements through habitat creation or enhancement after firstly avoiding and then mitigating harm.
- 5.2 Biodiversity net gain relies on the application of the mitigation hierarchy taking each step in turn to avoid, mitigate or compensate for biodiversity losses, as set out in **Table 5.1**. The mitigation hierarchy should be applied iteratively at each stage in the design process, seeking additional avoidance or mitigation measures to improve the overall biodiversity impacts and the levels of BNG required.

Table 5.1 Application of the mitigation hierarchy and BNG¹⁰

Stage	In practice	
1 avoidance	The first stage is to avoid harm to biodiversity, for example by locating to an alternative site. It is the most important stage and can ease the consents process, whereas missing this stage may lead to criticism, objections or even refusal of planning permission.	Achieving biodiversity gains or net gain at all stages of the mitigation hierarchy.
2 minimisation / mitigation	If avoiding all adverse effects is not possible, action is taken to minimise these effects, such as those in the Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines (2018) which include timing works to avoid sensitive periods.	
3 compensation	Addressing residual adverse effects is the final stage, only considered after all possibilities for avoiding and minimising / mitigating the effects have been implemented. Compensation does not prevent the effects, rather it involves measures to make up for residual effects that cannot be prevented. Offsetting is a form of compensation that trades losses of biodiversity in one location with measurable gains in another – biodiversity offsets have a formal requirement for measurable outcomes. Offsetting	

¹⁰ Hierarchy based on <https://cieem.net/wp-content/uploads/2019/02/C776a-Biodiversity-net-gain.-Good-practice-principles-for-development.-A-practical-guide-web.pdf>

	losses of biodiversity with gains elsewhere can be within or outside of the development boundary.	
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6. Measuring BNG

- 6.1 To achieve BNG, a development must have a higher biodiversity value post-development compared with a pre-development baseline value. Hertsmere Borough Council expects applications to deliver **a minimum of 10% net gain**. Good practice is to achieve measurable net gains in biodiversity and the key points are contained in Appendix 1.
- 6.2 BNG is the process of providing benefits to species or habitats specifically to make up for and exceed any loss of biodiversity as a result of development. An iterative design process should be used to apply the ecological mitigation hierarchy to seek further avoidance and reinforce mitigation proposals as that can help to improve overall biodiversity impacts and achieve the levels of BNG required.

What is the biodiversity metric?

- 6.3 The metric sets out the 'biodiversity value' of different types of habitat ranging from agricultural land and low quality grassland habitat through to very high value priority habitats. The Environment Act requires the use of the Biodiversity Metric developed by DEFRA¹¹. This will not come into force until BNG becomes mandatory through amendments to the Town and Country Planning Act 1990, expected in 2023, and so alternative metrics can continue to be used prior to this. The council will also seek to specify use of the metric and the percentage of BNG required within its new Local Plan. It is recommended that the latest version of the DEFRA metric is used for new projects for future consistency.
- 6.4 Non-designated sites or features of biodiversity interest can be wide ranging in their value and the metric provides an independent way to measure the worth of such features. For example, grassland on a site may be a very common habitat or it might only just fall short of qualifying for local wildlife site designation.

What does the biodiversity metric do?

- 6.5 The biodiversity metric converts habitats into 'biodiversity units' to assist in improving positive outcomes from developments. The metric helps quantify the biodiversity value of habitats. It can be used to calculate the losses and gains in biodiversity from interventions, allowing more effective compensation mechanisms. It can be used to help determine how on-site features can be created or enhanced and used to illustrate how on-site or off-site compensation can be derived to make up for or offset biodiversity loss when that occurs.

¹¹ Defra [Biodiversity metric: calculate the biodiversity net gain of a project or development - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/biodiversity-metric-calculate-the-biodiversity-net-gain-of-a-project-or-development)

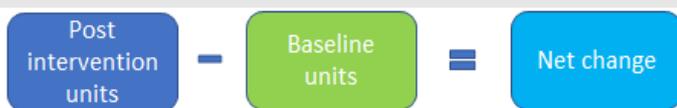
How does the Biodiversity Metric work?

- 6.6 Before BNG or compensation can be considered, the value of the habitat lost must be calculated. A survey needs to be undertaken, to map the site into parcels of distinct habitat types present using a recognised habitat classification system (to be used consistently throughout the design / application process), in order to apply the metric.
- 6.7 The metric can be used to:
- Assess the biodiversity unit value of an area of land
 - Demonstrate biodiversity net gains or losses in a consistent way
 - Measure and account for a site – such as creating or enhancing habitat on-site or off-site
- 6.8 The metric and calculator tool should always be used alongside professional ecological advice.
- 6.9 The metric calculates the values as ‘biodiversity units’. Biodiversity units are calculated using the size of the habitat, its quality and location. Quality assessment involves four key aspects:
- distinctiveness - capturing distinguishable features such as species richness or rarity;
 - condition - minimum requirements for ‘good’ condition for a certain habitat type;
 - strategic significance - reflecting the priority status of locations such as, for example, nature recovery areas; and
 - habitat connectivity - reflecting the relationship between the habitat and other similar surrounding habitats.
- 6.10 The council requires that any associated work areas – such as construction compounds are included in the survey, in addition to potential indirect impacts – such as wider hydrological or lighting zones.
- 6.11 A score is applied to each of the key elements based on an assessment of the site. A calculation uses these scores and the area of the habitat to give ‘biodiversity units’ that reflect the biodiversity value of the site.
- 6.12 This is sometimes also referred to as the ‘current habitat value’ of a site. This process for an initial calculation of biodiversity for the site at the pre-intervention or baseline stage is then repeated for the post-intervention scenario. The post-intervention value is deducted from the baseline to review the extent of change in biodiversity. The calculation will provide an overall impact score (see Figure 6.1).

Figure 6.1 – example of calculating the biodiversity metric

A simple worked example of the metric

EXISTING APPLICATION SITE / BASELINE	
• 10ha poor arable habitat	= 20 units
• 2ha neutral grassland	= 16 units
• Existing (current habitat value) biodiversity units total	= 36 units
PROPOSED APPLICATION SITE / POST INTERVENTION	
• 1 ha retained grassland	= 8 units
• 1 ha created neutral grassland	= 5.6 units
Proposed / post intervention units total	= 13.6 units
NET CHANGE	= loss 22.4 units
• Net loss to be compensated for (22.4) + 10% for net gain 3.6 (10% of current habitat value) = 26 units	
• If monetised, based on 2019 unit cost established by DEFRA £11,000 x 26 units = £286,000	



- 6.13 A positive net change in the biodiversity value illustrates a biodiversity net gain. If a 10% net biodiversity gain is achieved on-site then there is no need to consider off-site measures.
- 6.14 A negative net change in the biodiversity value illustrates a net biodiversity loss. Where there is a loss and no further scope exists for on-site mitigation or compensation, then off-site measures should be considered. In planning terms, where compensation is proposed outside of the application red line or blue line boundaries of an application, it is termed off-site ‘biodiversity offsetting’. Any off-site locations will need to be similarly assessed in terms of their biodiversity value at both the pre- and post-intervention stages to assess how much they can contribute towards net gain as compensation.
- 6.15 This offsite compensation can be achieved via the following mechanisms:
- i) The applicant sources their own biodiversity offset utilising land already in their ownership (provided the proposals meet all such offset requirements) – refer to sections **8.1 – 8.3**;
 - ii) The applicant sources units from local habitat markets
 - iii) The applicant purchases their required units (as verified biodiversity credits) from the government, which will be invested in habitat creation. The Environment Act makes provision for the purchasing of credits, but this is not yet an available option at the time of publishing this draft SPD.

- 6.16 The council stresses that the biodiversity metric is only a proxy or a measure - **it does not override the protection for designated sites, protected or priority species and irreplaceable or priority habitats**. Developers must ensure that habitat improvement will deliver a genuine additional benefit, and go further than measures already required to implement a compensation strategy.

Private gardens

- 6.17 Private gardens can make positive contributions to biodiversity, but appropriate planting and ongoing management cannot be secured in the long-term. The Biodiversity Metric recognises this in its scoring of the value of gardens.

Habitat degradation prior to submission of a planning application

- 6.18 The Environment Act includes measures that allow planning authorities to recognise any habitat degradation since 30th January 2020 and to take the earlier habitat state as the baseline for the purposes of biodiversity net gain. In order to ascertain the habitats present and their condition on 30th January 2020, aerial imagery or data sets from that time could be used. 30th January 2020 is the relevant date as it was the day the Environment Bill had its first reading in Parliament.
- 6.19 This system will take effect when the biodiversity gain requirement in the Environment Act is commenced. Natural England and DEFRA intend to produce guidance on how this will work and which data sources may be of assistance in demonstrating the former value of any degraded or destroyed habitats.

7. Planning application requirements

7.1 All applications for 5 or more dwellings or non-residential schemes creating additional floor space in excess of 1000 sq m gross should demonstrate a 10% biodiversity net gain and be accompanied by biodiversity net gain information. Biodiversity net gain is strongly encouraged on all other development sites although it will not be expected for:

- Householder planning applications
- Applications on sites that do not contain habitats
- Applications solely for change of use (other than applications for conversion of traditional buildings)

Sites with a zero or negligible baseline biodiversity value

7.2 For sites where the baseline biodiversity value is zero or negligible, the Council expects to see biodiversity unit gains calculated as a numerical unit value as opposed to a percentage. The Council encourages applications on sites with a baseline value of zero to aim for on-site post development schemes that deliver biodiversity at the ratio of 0.2 units per hectare.

7.3 It cannot be assumed that just because a site is small it has no baseline value. The baseline value reflects the ecological value of the pre-development site, not its size. Where larger sites exist which may have a negligible baseline value, expected net gain values may be set through site-specific requirements in the new Local Plan.

7.4 A simplified illustration showing the application process relating to BNG is provided in Figure 7.1. A more detailed application process of biodiversity considerations is provided in Part B of the Council's SPD on Biodiversity, Trees and Landscape¹² - although that does not relate sufficiently to BNG considerations.

¹² [Biodiversity Trees and Landscape Part B - Biodiversity \(hertsmere.gov.uk\)](https://www.hertsmere.gov.uk/biodiversity-trees-and-landscape-part-b-biodiversity)

Figure 7.1 – Biodiversity net gain application process

Biodiversity Net Gain - simplified application process

Key stages	Key activities and issues
Pre application (for all applications 5+ new dwellings or 1000sq m+ new floorspace the expectation to secure 10+% BNG)	Establish baseline conditions taking mitigation hierarchy into account Ecological appraisal Undertake surveys and assessments
Design development	Engage with Hertsmere Borough Council and other stakeholders Calculate pre-development + post development baselines
	Can 10% minimum biodiversity net gain be achieved on site? N
	Y ↓
	Revisit design + repeat BNG assessment Develop proposals for BNG offsite as a last resort
	Devise on-site biodiversity gain plan to accompany application Devise offsite biodiversity gain plan to accompany application including any arrangements for third party provision
Application submission and determination	
Post decision	Compliance with conditions. Develop BNG management + monitoring plan for approval by Council
Construction and ongoing maintenance stages	Implement BNG + subsequent management and monitoring

Indicative biodiversity net gain process

Site selection	In line with mitigation hierarchy, avoid or minimise habitat loss by considering biodiversity in site selection and site design.	
Pre-application	Check whether mandatory biodiversity net gain will apply to the development and what the percentage requirement is.	
	Include indicative percentage biodiversity net gain and any preliminary biodiversity metric outputs in pre-application discussions with the relevant planning authority.	
	Prepare biodiversity gain information. This should detail pre-development biodiversity values, steps taken to minimise adverse biodiversity impacts, and proposed approaches to enhancing biodiversity on and off site.	
	If biodiversity net gain is achieved on site, it is not necessary to look for off-site enhancements.	If 10% biodiversity net gain cannot be achieved on site after revisiting the design stage and considering all reasonable options, identify opportunities for a combination of on and off-site biodiversity enhancements.
	If biodiversity net gain cannot be achieved through a combination of on-site and off-site proposals, arrange to buy statutory biodiversity credits from government as a last resort.	
Applications for planning permission	Submit biodiversity gain information alongside any application for planning permission. This must fulfil minimum requirement for biodiversity gain information, and may include further information towards a complete biodiversity gain plan should such information be available at this stage.	
	If the council is satisfied the application for planning permission is acceptable in planning terms, planning permission will be granted subject to the mandatory biodiversity net gain condition and any other condition or obligations considered appropriate.	
Pre-commencement	<p>If further information is required, the following may need to be considered before the biodiversity gain plan is completed and submitted for approval:</p> <ul style="list-style-type: none"> • any necessary changes to information or proposals • any off-site biodiversity gains are secured and registered 	

	<ul style="list-style-type: none"> any statutory biodiversity credits are purchased.
	<p>The biodiversity gain plan is submitted to the council and approved.</p>
<p>Commencement and management</p>	<p>Development can commence, provided that all relevant pre-commencement and any other necessary permissions are in place.</p>
	<p>Ongoing management, monitoring, reporting and appropriate enforcement of biodiversity gains continues for at least the agreed maintenance period.</p>

Pre-application issues

- 7.5 Applicants are encouraged to specifically raise BNG as part of pre-application discussions. While the Council will seek to provide advice on the most suitable means of providing BNG in the area at the anticipated time of application submission applicants are also encourage to engage with the Herts and Middlesex Wildlife Trust and other potential partners (see **section 8**). Such discussions should help to understand the potential impacts of a development, help to outline the scope of surveys and assessments required to support an application and consider potential scheme modifications to enhance biodiversity.
- 7.6 The likelihood as to whether nature conservation will be affected by a development proposal or not must be established using the DEFRA metric before a planning application is submitted. For further guidance to assess the likelihood of nature conservation being affected by a development, applicants should refer to Natural England's advice¹³. Applicants may also find the following references useful in supporting their baseline:
- Hertfordshire County Council landscape and ecology principles¹⁴
 - Hertfordshire Biodiversity Action Plan (link as the preceding bullet point).
 - Hertsmere Landscape and Visual Sensitivity Assessment and Landscape Appraisals¹⁵
- 7.7 At the time of writing, Hertfordshire County Council is preparing a countywide biodiversity baseline. This desk-based assessment will not be site-specific or replace the need for individual specialist site assessments. The baseline will not include nationally protected habitats like ancient woodland as these are not a part of the DEFRA metric or the net gain system, and require specialised consideration.
- 7.8 Where there is potential for a proposed development to cause harm to internationally, nationally or locally designated sites, protected or priority species or habitats, then the applicant must undertake appropriate surveys and assessments to a nationally recognised standard prior to the submission of a planning proposal in the usual manner.

Biodiversity metric

- 7.9 The DEFRA metric is discussed above. For habitat condition assessments in association with development, it is the developer's responsibility to provide the Biodiversity Metric calculations to include in the Biodiversity Gain Plan. The

¹³ [Planning and development: Protected sites and species - detailed information - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/topics/protected-sites-and-species)

¹⁴ <https://www.hertfordshire.gov.uk/microsites/building-futures/a-sustainable-design-toolkit/technical-modules/landscape-and-biodiversity/basic-principles.aspx>

¹⁵ <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/Landscape-Sensitivity-Assessment-Final-Report.pdf>
<https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/Outline-Landscape-Appraisals-Report-Sept-2020.pdf>

Biodiversity Gain Plan will require a statement of competency for a named person who has carried out the assessment and metric calculation. This will usually be the person who has conducted the habitat survey and assessments.

- 7.10 A 'competent person' is defined as someone able to confidently identify the positive and negative indicator species for the range of habitats likely to occur in a given geographic location at the time of year the survey is undertaken. For a full metric application, the competent person should be an ecologist. However, in circumstances where the development fits with the criteria to use the Small Sites Metric, it is not necessary for the metric to be completed by an ecologist but by someone who is competent to use that metric.¹⁶
- 7.11 The full metric spreadsheets must be shared with the council with such information being published alongside other supporting documents on the planning applications section of the Council's website; screenshots or other images cannot be accepted. The council will review and check the metric spreadsheets in consultation with ecologists where necessary.

Phasing

- 7.12 The advance design and planning of ecological works should always be considered early in a project as some schemes may require the collation of ecological data over an extended period of time in order to provide the required baseline and devise and agree the most suitable mitigation. Receptor sites may sometimes need to be in place and fully established before works on an approved planning application can commence.

Application Size Threshold

- 7.13 The level of BNG required will be set by negotiation with the LPA and should form part of pre-app discussions – but will usually be at a minimum of 10%. Developments of 5 or more dwellings or non-residential schemes creating additional floor space in excess of 1000 sq m gross will generally need to undertake a biodiversity impact assessment, unless otherwise advised by the Council.

Viability

- 7.14 The 10% set out in legislation is mandatory and therefore there is no scope for local authorities to allow a reduction on viability grounds. If developers submit above 10% this is voluntary and anything above 10% would be subject to negotiation (and possibly would include viability justification) as part of planning application discussions with the LPA.

¹⁶ [Biodiversity Net Gain FAQs - Frequently Asked Questions | Local Government Association](#)

Biodiversity Gain Plans

- 7.15 Not only should development proposals in Hertsmere maintain and protect biodiversity, they will be expected to result in a measurable net gain in biodiversity of at least 10%. If significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated or, as a last resort, compensated for then planning permission may be refused.
- 7.16 Where net gains are required, developers will need to clearly demonstrate how they will be secured when a planning application is submitted. Developers will need to submit a well thought through BNG plan – which is not only incorporated into the planning application (including any EIA where that is required) - but which is integral to the scheme or the design proposed. The BNG plan should include:
- Measures taken which avoid, mitigate or compensate for negative effects on biodiversity and the intended outcomes of those;
 - Details of the approach to onsite mitigation to minimise adverse effects from the development;
 - Which steps have been taken in relation to biodiversity and the overall scheme design;
 - Details of the pre–development biodiversity and the post-development value and how any shortfall in the net gain is to be compensated for; and
 - the proposed future management and maintenance arrangements.

Demonstrating a Local first approach to BNG delivery

- 7.17 It is important to clearly demonstrate, firstly how the mitigation hierarchy has been followed and secondly how a local first approach to delivery of biodiversity units has been adopted as part of the design process.
- 7.18 Unavoidable impacts should be compensated for as close to the point of impact as possible. This is important as it will help to deliver the greatest benefits to the biodiversity and local communities most impacted by a development proposal.
- 7.19 In order to demonstrate this, draft Biodiversity Net Gain Plans submitted with a planning application as part of the required Biodiversity Net Gain report should set out how the steps below have been taken in designing a scheme and its Biodiversity Net Gain delivery.
- 7.20 Final details, and evidence that steps 3, 4 and 5 below have been secured, will then be required prior to the commencement of development and will usually be secured via a section 106 agreement. More information on the timing of when certain pieces of information will be needed is detailed in Table 3.

Additionality or 'stacking' of BNG alongside other mitigation and benefits

- 7.21 Natural England and DEFRA are currently looking at 'additionality' or 'stacking' to understand how to work out whether enough habitat has been provided for different mitigation/compensation aspects alongside BNG such as through: district level licensing for great crested newts (GCN); SANG (Suitable Alternative Natural Greenspace); sites provided as Natura 2000 site mitigation; carbon sequestration; flood risk management and other ecosystem services.
- 7.22 The current position¹⁷ is that it is possible to use sites delivering nutrient neutrality/SANG/GCN habitat to also deliver biodiversity net gain, on the basis that:
- Delivery of the non-BNG outcomes via habitat creation/enhancement could contribute up to a point equivalent to no net loss of BNG (as calculated by the Biodiversity Metric) but not beyond
 - Additional habitat features created or enhanced on that same land beyond those delivered for the purpose of non-BNG outcomes could be counted towards BNG, if measured and demonstrated using the metric, and assuming they meet other BNG requirements (e.g. agreement type/duration etc.)
 - Good practice would be to illustrate BNG contributions derived from the above using a separate accounting line for transparency reasons. It is intended for this to be required in the biodiversity gain plan. Further details are expected to be provided by DEFRA.
 - Habitats created for District Level Licensing for Great Crested Newts can never count beyond no net loss. To achieve the required biodiversity unit uplift beyond no net loss to meet the BNG requirement, there must be habitat provision or enhancement beyond the minimum requirements of DLL.
- 7.23 Use of Natural England's Environmental Benefits from Nature Tool¹⁸ can assist with understanding the wider benefits for people and nature from biodiversity net gain. It is designed to work alongside Biodiversity metric 3.0, and designed to support the Government's 25 Year Environment Plan commitment to *expand net gain approaches to include wider Natural Capital benefits such as flood protection, recreation and improved water and air quality.*

Steps to be shown within the draft Biodiversity Net Gain Plan

- 7.24 Applicants should demonstrate they have taken the following steps within the draft Biodiversity Net Gain Plan. Applicants should only proceed to the next

¹⁷ [Biodiversity Net Gain FAQs - Frequently Asked Questions | Local Government Association](#)

¹⁸ [The Environmental Benefits from Nature Tool - Beta Test Version - JP038 \(naturalengland.org.uk\)](#)

step when they have demonstrated why the former one(s) cannot be achieved, either in part or in full (see Table 2).

Step	Points to be demonstrated within Biodiversity Net Gain Plan for local BNG delivery
STEP 1	Demonstrate how negative impacts on site have been avoided wherever possible through good design.
STEP 2	Explain mitigation measures taken to lessen any unavoidable harmful impacts.
STEP 3	Show how delivery of new habitat/compensation has been maximised within the red line boundary of the planning application.
STEP 4	<p>Demonstrate a local first approach to offsite BNG delivery by seeking opportunities to secure offsite biodiversity from the local habitat market within Hertsmere, as close to the proposed development as possible.</p> <ul style="list-style-type: none"> • If no suitable offsite biodiversity net gain projects can be found within Hertsmere, then provide details of a BNG project that will be secured elsewhere within South West Hertfordshire (Watford, Three Rivers, Dacorum and St Albans) or Welwyn Hatfield, or an adjacent north London borough (LBs Barnet, Harrow or Enfield).
STEP 5	<p><u>Provide details of a BNG project that will deliver the required biodiversity units, following the locational hierarchy below:</u></p> <ul style="list-style-type: none"> • <u>elsewhere within Hertfordshire</u> • within other neighbouring areas (Buckinghamshire/ Bedfordshire/ Essex/ Cambridgeshire / Greater London); • within the south-east of England; • elsewhere in England. <p><u>Once Statutory Credits become available from Central Government (anticipated Winter 2023), there will be an additional final option to state the intention to purchase statutory credits.</u></p>

7.25 Applicants can avoid potential delays to application determination by considering a range of matters to include in their biodiversity gain plans including:

- providing relevant information on the mitigation hierarchy;
- identification of any gaps, assessing risks and opportunities;
- providing evidence of decisions being based on data and local considerations;

- Demonstrating how BNG could contribute towards local biodiversity projects;
- Demonstrating best practice and quality assurance;
- Phasing and implementation information;
- Ensuring engagement with appropriate partners and stakeholders;
- Devising sufficient review, monitoring, management and performance issues if required.

Independent technical review

- 7.26 Applicants may be requested to reimburse the Council to ensure that any evidence and rationale supplied is technically reviewed and validated independently by an appropriate expert. This is particularly the case for larger or more complex developments. Arrangements for this should be discussed at the pre-application stage and may subsequently be secured through a Planning Performance Agreement. The purpose of that review will include whether the assessments have been fully completed and whether sufficient steps have been taken to comply with the mitigation hierarchy.

8. Delivery of BNG

Offsite delivery of BNG

- 8.1 In circumstances where 10% BNG cannot be secured on site, it is the developer's responsibility to find a suitable location for off-site BNG delivery. Land will need to be legally secured and managed for the duration of the BNG period. Further guidance on how offsite BNG will be secured, monitored and enforced and the role of LPAs and the planning decision process (including conditions and S106) is expected in due course from DEFRA and Natural England.
- 8.2 Developers are encouraged to work with the Council and other relevant stakeholders such as the local wildlife trust¹⁹ and the County Council to develop opportunities for the provision of suitable projects or locations where projects and enhancements could take place. That is sometimes referred to as 'habitat banking' where a BNG initiative is set up to serve multiple developments. Land may be provided or acquired by a wildlife or nature conservation trust or charity, by the council or another public sector organisation, or by a developer or private landowner to implement BNG projects.
- 8.3 Larger scale 'habitat bank' projects may require funding from multiple planning applications in order to be fully delivered. This will generally be acceptable to the Council, provided applicants do not seek to cover the same elements of the same scheme. Applicants are therefore requested to clearly specify what additionality to those other projects they aim to deliver. The Council will not agree to multiple applicants seeking to pay for the same offset elements of the same offset projects, and all units must be recorded on the national biodiversity gains register. Similarly, any proposals for BNG should be in addition to and separate from carbon offset projects
- 8.4 A commercial habitats market is developing, and so it should be possible for site developers to purchase biodiversity units within such a scheme within the local area. Biodiversity units purchased must be compatible with the type and quality of any habitat being lost on the development site.
- 8.5 Key considerations regarding the location for off-site BNG include:
- Confirmation that the compensation design will result in the optimum long-term solution for biodiversity.
 - The optimum location for the gains should be to secure the optimum outcome. While a sequential site or geographic approach shown in points i-iv below will be considered as the Council's preference for BNGs, the over-arching factor will always be the optimum location, achieving the optimum gains:
 - within the development site;

¹⁹ <https://www.hertswildlifetrust.org.uk/>

- adjacent to, or in close proximity to the development site;
- next to, or in close proximity to the settlement or locality accommodating the development; or
- in another area identified as benefitting from such projects by the Council or other relevant agency.

8.6 It is expected that land used for off-site BNG delivery will be secured for the length of the net gain agreement (at least 30 years), either via Section 106 agreements, or a conservation covenant. A conservation covenant is a private voluntary legal agreement, made in writing, between a Responsible Body and a landowner which establishes that land will be used for a conservation purpose.

Third party providers

8.7 A developer may have land elsewhere or be able to secure it for BNG projects. The LPA or developers may work with landowners who elect to become providers of biodiversity offsetting schemes who have land available for habitat restoration or creation. In this way third party stakeholders may be used who have the ability to deliver a net gain scheme on behalf of an applicant. All proposals relating to third party provision would need to be discussed and agreed with the Council and will be assessed on a project by project basis.

8.8 Proposals for off-site compensation measures will generally need to demonstrate:

- A methodology for identification of receptor sites. Applicants are requested to consider whether off site provision for BNG will be resilient to future pressures from further development and how that resilience will be secured;
- Whether a contractual agreement is required with any third party landowner or delivery bodies responsible for certain elements of a project. Any such contractual arrangements will need to clarify land tenure – for example whether or not a developer will purchase or lease land for a BNG offset project;
- Accountability. Who will deliver the required levels of BNG and how will that be undertaken successfully? Details of accountability for delivery, management, maintenance and monitoring of BNG projects must clearly be provided, to take into account the various life cycles of a project (see [section 9.1](#)).
- The provision of arrangements to secure the delivery of any compensation measures, plus a programme including phasing for their delivery. A BNG should as far as possible avoid or reduce time-lags between any losses and gains being achieved. BNG may often need to commence before any habitat clearance or

commencement of development. Applicants should provide details of the timescales to deliver BNG, and the Council will seek to attach conditions and / or s106 provisions regarding the phasing of such works, which may include short, medium and longer term interventions.

- 8.9 Based on advice by DEFRA, it is important to note that the cost of such third party land or the costs of buying the services of a provider will not be factored into the BNG metrics – only the level of BNG secured itself is relevant in such circumstances.

9. Post planning permission

BNG management and monitoring plan

- 9.1 The focus of BNG is becoming an increasingly significant issue in relation to planning, environmental protection and ecological enhancement. Delivering biodiversity compensation or offsetting in a measurable way should be used as a last resort in order to offset impacts, but is an essential way to demonstrate how a net-gain to biodiversity value can be achieved. BNG will help to ensure that developments in Hertsmere deliver sustainable schemes, and the aim of this SPD and the draft Local Plan is to ensure that a strong contribution to achieving enhanced biodiversity is secured in line with national and local priorities.
- 9.2 Once a scheme has received planning permission, the Council will consider the need for a BNG management and monitoring plan to be prepared and submitted as a planning condition and / or a s106 planning legal agreement. That may be required to include some or all of:
- Details of any third party or partner organisation who may deliver the required levels of BNG and how that delivery will be secured and be undertaken successfully.
 - Details of the provision and maintenance of the compensation measures following best practice.
 - Clear timed and measurable objectives for delivering BNG;
 - Commitments to appropriate management and monitoring usually covering the 30 year duration required for BNG under this SPD;
 - Any wider public access matters;
 - Suitable review process, to take account of shortfalls which may occur.

Hertsmere monitoring and reporting

- 9.3 The Council will ensure that high level information on BNG is to be made available either via inclusion in its Authority Monitoring Report or a bespoke BNG monitoring report. In accordance with best practice guidance, that reporting will include information on compensation sites and reporting on their status or progress. That will also enable monitoring of the policies and priorities that have been adopted by Hertsmere, including this SPD, to measure their effectiveness.

10. Future considerations

1. Updates are required to HBC's application validation checklist, in particular to reflect the need for a biodiversity gain plan.
2. Consideration will be given to the need to update Biodiversity, Trees and Landscape SPD (2010) in due course.
3. The SPD will be reviewed once the 'transitional arrangements' (the timescale for implementation of different elements contained within the Act) are finalised.
4. Further engagement with HCC, local wildlife trust and others will be needed to seek out partners who are landowners or can secure land for developers to undertake BNG projects on or provide their offset contributions for that.
5. HBC should also review its own land holdings and, where possible, make land available for BNG projects.

Appendices

Appendix 1 Best Practice in Measuring Net Gains²⁰ (CIEEM)

Key points	Summary
Justify the method used to measure BNG	For example, Defra's biodiversity metric was stipulated by the LPA (Defra, 2012c).
Use the same method, consistently	The same measurement used for a project's biodiversity baseline and impact assessment should be used to measure BNG throughout the project life cycle. It should also quantify outcomes from avoidance, minimisation and compensation measures, demonstrating the additional gains.
Make explicit the reference scenario	BNG is an outcome compared to a reference scenario, which should be defined and justified. For construction projects, this can be the biodiversity baseline established as part of an EclA. For an estate or land under routine maintenance, the point in time when the baseline is established should be justified.
Show the full working	When presenting measurable net gains in biodiversity, the full working should be presented, not just the resulting final number. For example, users of Defra's biodiversity metric should present survey data on habitat condition assessments and 'biodiversity units' for individual features before and after the development.
Use qualitative and quantitative assessments to capture all aspects of biodiversity	Measures of biodiversity are not absolute values. They are proxies for biodiversity value before and after a development, and might not capture all the features affected. For example, Defra's biodiversity metric calculates biodiversity units but does not reflect features such as a vital wildlife corridor within an urban locality. Both qualitative and quantitative assessments should be used when designing, implementing, maintaining and monitoring BNG to capture all aspects of biodiversity, and to avoid decisions being based purely on numbers. Qualitative aspects of BNG should be communicated alongside a quantitative assessment, especially to demonstrate that the net gains are commensurate to biodiversity affected by the development (or biodiversity within or surrounding a development, if there are no negative effects). This is especially important for ensuring that biodiversity losses are not replaced with features of lower value
Measure individual features	BNG is to improve the quality or extent of individual features, those affected by a development or those within or surrounding a development if the development does not affect biodiversity. Measurable net gains in biodiversity should be presented for individual features – do not aggregate all features together into a single summed number for a project
Add contingency	A project's design stage is a prediction of the BNG outcomes over a set timeframe, as no activities have yet been undertaken. Predictions, by their nature, are based on uncertainties such as whether complex habitats can be created within the anticipated timeframe. Uncertainties should be incorporated into BNG calculations. This can be by adding contingency, according to the level and type of uncertainty, to increase the amount of biodiversity needed to achieve net gain.
Carefully consider how much is net gain	This approach to BNG is not simply outweighing losses of biodiversity with gains. It is development projects that apply all of the good practice principles in combination throughout the project life cycle. One of those principles – achieve measurable net gains in biodiversity – requires careful consideration as to how much biodiversity could be a net gain. Some LPAs, industry professional bodies and commissioning agencies have set percentage figures on BNG, for example see Boxes 1.3 and 1.4. Chapter 6 gives advice on setting percentage targets for BNG – any such targets should be carefully considered, not just within the context of the specific development project but also to account for accuracy when measuring losses and gains in biodiversity. For example, if a biodiversity metric is too crude to measure change within five per cent, then increases in biodiversity of five per cent may not be actual gains. If the metric's accuracy is unknown, guidance from credible industry bodies should be followed (eg see BRE, 2016b) and/or the precautionary approach should be undertaken.

²⁰ <https://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development-a-practical-guide/>

<p>Avoid pitfalls when quantifying losses and gains in biodiversity, such as:</p>	<ul style="list-style-type: none"> ■ focusing on numbers to only outweigh losses of biodiversity with gains without generating any meaningful benefits ■ missing opportunities to benefit key species that are affected by a project but not directly accounted for within a biodiversity metric ■ showing a quantified net gain in biodiversity but the project causes a critical loss of, for example, ecological connectivity, a rare habitat, green space or some other key feature ■ replacing highly valuable features with features of lower ecological value, or replacing locally important features with features further away ■ causing negative social impacts, eg when people negatively affected by a project's impact on biodiversity are not the same as those benefitting from the net gains in biodiversity.
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Key points	Summary
<p>Present quantifiable evidence that demonstrates measurable net gains</p>	<p>Designs are predictions of BNG outcomes when no activities have been undertaken. Communications on actual achievements in BNG require quantifiable evidence that demonstrates measurable net gains in biodiversity – such evidence is usually monitoring data over a timeframe that is commensurable with the specific biodiversity features of the net gain design.</p>