

BIODIVERSITY NET GAIN IMPLEMENTATION – CUMBERLAND UNITARY AUTHORITY

Guidance for: Cumberland Unitary Authority

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GLOSSARY

BNG – Biodiversity Net Gain

CUA – Cumberland Unitary Authority

WFUA – Westmorland and Furness Unitary Authority,

DEFRA – Department for Environment, Farming, & Rural Affairs

LPA – Local Planning Authority

MRV – Monitoring, Reporting, & Verification

NPPF – National Planning Policy Framework

NNRN – National Nature Recovery Network

SSM – Small Sites Metric

CBDC – Cumbria Biodiversity Data Centre

NN – Nutrient Neutrality

LNRS – Local Nature Recovery Strategy

LLPA – Lead Local Planning Authority

PBO – Potential Biodiversity Opportunities

1. INTRODUCTION

Ricardo was commissioned by Cumbria County Council to undertake a Biodiversity Net Gain (BNG) review, provide support on the minimum requirements and supporting the Local Planning Authority on alternative options of net gain that will be required when BNG becomes a mandatory planning requirement in November 2023. Cumbria has gone through local government reorganisation, moving from six district councils and a county council to two new unitary authorities namely Cumberland Unitary Authority (CUA) and Westmorland and Furness Unitary Authority.

The resources provided in this report are to be utilised by CUA to provide BNG support. A separate report is provided for Westmorland and Furness council.

This report provides a comprehensive guide to the delivery of BNG in CUA and should be used as a reference for future decision making in relation to BNG.

The report consists of:

- An overview of the BNG process and summary of the relevant national and local legislation underpinning the process (Section 2)
- Details of how the BNG process will be managed within CUA and options for delivering off-site mitigation (Sections 4, 6, 7, 8 and 9)
- A methodology is provided detailing the BNG opportunity area mapping and how this links to identification of mitigation sites (Section 5)
- Finally, resources are provided including a BNG Supplementary Planning Document (SPD) template and a BNG e-template which have been designed to meet the needs of CUA and help a smooth transition before mandatory BNG (Sections 10, 11, 12 and 13)

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2. WHAT IS BNG AND THE MITIGATION HIERARCHY?

What this section covers:

2.1 BNG and its relevance to planning: why must BNG be considered

2.2 How BNG is calculated: summary of key points and responsibilities

2.3 Mitigation hierarchy: guidance on the approach in the context of BNG including when on- and off-site mitigation can be considered

Section Aim:

To provide a summary of BNG and its integration in to planning.

2.1 BNG AND ITS RELEVANCE TO PLANNING

An amendment to the original Natural Environment and Rural Communities Act 2006 (NERC Act)¹ section 40 duty, provided for in the Environment Act (2021)², now extends the biodiversity duty on public authorities to include the enhancement of biodiversity alongside conservation by way of creating “*the general biodiversity objective*”. This has been achieved via a revision of section 40 of the NERC Act¹ which is now in force. This requires public bodies via the planning system, in association with developers, to make a significant effort to conserve, enhance and restore biodiversity. Furthermore, from November 2023 this includes additional statutory requirements for planning permissions to contain a minimum 10% BNG in England noting that the aim of BNG as stated in the National Planning Policy Framework ((NPPF) (2021 update))³ is to promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species. Through the NPPF there is a stated requirement to identify and pursue opportunities to secure measurable net gains for biodiversity. As a result, BNG will play a substantial factor in delivering Local Nature Recovery Strategies (LNRS)⁴ that will form part of the wider National Nature Recovery Network (NNRN)⁵.

BNG is an approach to development and/or land management with the overall goal to leave the state of the environment in a significantly better state than beforehand. This can be achieved on-site, off-site or through a combination of on- and off-site measures by creating or enhancing habitats in association with developments. It can be used to complement wider biodiversity objectives ranging from new green infrastructure projects to improving a local area's climate resilience.

2.4 HOW IS BNG CALCULATED?

The responsibility of undertaking a BNG assessment lies with the developer and should be undertaken by a suitably qualified ecologist. A BNG assessment compares baseline habitat conditions to post-development plans and then numerically values the change in biodiversity units. A metric is used to calculate the habitats alongside various criteria with the current standard metric required to be used. At the time of writing this version is 4.0⁶ which was published on 24/03/2023.

The following steps are used to calculate biodiversity net gain or loss:

1. A field survey is undertaken by an ecologist to collect the baseline habitat data on the site. This survey follows UKHab methodology alongside a condition assessment.
2. Post-development habitat data is defined from the masterplan.
3. Pre-development habitat data and post-development habitat data is converted into ‘biodiversity units’ using biodiversity metric (currently version 4.0). Off-site units can be added to the BNG calculations.
4. The BNG, or loss, is calculated using the difference between the pre-development and post development habitat data.
5. A percentage is given in the metric to show how much of a gain or loss the development will achieve.
6. If a 10% net gain is unable to be achieved on-site then an off-site location will need to be secured to deliver any remaining units

The metric uses various criteria to establish the BNG score which includes:

1. *Size of habitats* – The metric uses areas of habitat (hectares) as its primary measurement, with the exception of linear habitats, such as hedgerows, lines of trees, rivers, and streams (kilometres).
2. *Distinctiveness* – Each habitat is assigned a distinctiveness score. Habitats that are typically scarce or declining in abundance are usually scored higher than more common habitats.
3. *Condition* – A condition assessment is undertaken based on criteria to establish the quality of habitats present.
4. *Strategic Significance* – These are the habitats present within a location that has been designated within an approved plan or policy as being strategically significant.

2.3 APPLYING THE MITIGATION HIERARCHY

At the heart of BNG is the mitigation hierarchy. Developers should do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with the Lead Local Planning Authority (LLPA), should developers seek to mitigate for losses that cannot be avoided.

It is particularly important to avoid any impact on ‘irreplaceable’ biodiversity, as the Environment Act² includes provision to exempt irreplaceable habitats from the mandatory BNG requirement². The NPPF already includes a list of ‘irreplaceable habitats’ such as ancient woodland and blanket bog³. Clearly, if a potential development site includes any irreplaceable habitat, this should be highlighted as a planning risk at the site selection stage (see Section 7 for BNG risk assessment). **Table 2.1** provides an order of mitigation actions that must be considered at every step based on the NPPF requirements that make it clear that avoiding harm to biodiversity should always be considered first with compensation being the last resort.

Biodiversity compensation for any loss as a result of development can be delivered on-site, off-site or via a statutory biodiversity credits scheme (the latter being set up by the Secretary of State) and noting that:

- The priority will always be for on-site delivery. This is likely to have implications in the design and viability of any scheme, so should be considered at an early stage (and indeed, the costs associated with providing BNG compensation could feed into negotiations with the relevant Local Planning Authority (LPA) regarding other planning obligations such as Section 106 (S106) contributions).
- It is possible to mix on- and off-site BNG provision. Land nearby the application site will be afforded more value than land further away. All off-site gains must be delivered within England.
- Development often results in impacts on, and losses of nature.
- By reinforcing and complementing the mitigation hierarchy, mandatory BNG requires development to deliver more for nature; setting a requirement to increase biodiversity by a minimum of 10% compared to the baseline resulting to overall more and better-quality places for wildlife to live and thrive and for people to enjoy.

Table 2.1 Applying the mitigation hierarchy

Stage	In Practice
1 Avoidance	Stage 1 is to avoid harm to biodiversity, for example, by locating to an alternative site. This is the most important stage and can ease the consent process. Missing this stage can lead to criticism, objections, and refusal of permission for the development.
2 Minimisation	If it is not possible to avoid all adverse effects, action is taken to minimise these effects, such as the Ecological Impact Assessment (EclA) ⁷ guidelines provided by the Chartered Institute of Ecology and Environment Management ⁷ (CIEEM, 2018) ⁷ . These guidelines provide information on the timing of works to avoid sensitive ecological periods.
3 Compensation or Restoration	Addressing residual effects is the final option and should only be considered after all possibilities for avoiding and minimising the effects have been presented. Compensation does not prevent the effects, rather it involves measures to make up for residual effects that cannot be prevented following justification via stages 1 and 2. Compensation or restoration may include, for example, increasing habitat connectivity to enhance existing habitats. Mitigation is a form of compensation that trades losses of biodiversity in one location with measurable gains in another and has a formal requirement for measurable outcomes. Mitigation losses of biodiversity with gains elsewhere can be within or outside of the development footprint.

3. RELEVANT NATIONAL AND LOCAL POLICIES

What this section covers:

3.1.1 Relevant national policies which relate to BNG

3.1.2 Relevant local policies which relate to BNG

Section Aim:

To provide a summary of BNG and its integration in to planning.

3.1 Key Legislative and Policy background

The key polices and legislation that currently underpin BNG management and delivery at national and local levels are summarised below.

3.1.1 National level policy

As highlighted in Section 2.1 under the Environment Act² all planning permissions granted in England (exceptions include small sites and nationally significant infrastructure projects which come into play in 2024) will have to deliver at least 10% BNG from November 2023 where net gain will need to be secured for at least 30 years². The 25 Year Environment Plan⁸ also seeks to embed an 'environmental net gain' principle for developments, including housing and infrastructure, as part of the aim to use and manage land sustainably⁸. The NPPF³ encourages a measurable net-gain but does not mandate a net-gain nor specify how a gain should be quantified or how much gain should be sought.

Furthermore, the NPPF (see also Section 2.1) requires local planning authorities to plan for biodiversity at a landscape scale, across local authority boundaries, and to set criteria-based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or, landscape areas will be judged³. This framework addresses the need to minimise impacts on and provide net gain for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. The NPPF also requires that the planning system recognises the wider benefits of ecosystem services¹³.

3.1.2 County level policy

As a result of the six district councils in Cumbria becoming two new unitary authorities there are few up to date details on council level policies related to implementing BNG into the planning process or other policies that support the restoration, protection, and enhancement of biodiversity in Cumbria. As part of the reorganisation of the authorities, new local plans will be delivered in the future. However existing local plan policies for individual districts will be in place until then. A summary of district BNG policies is shown below in **3.1** for reference across the two new unitary authorities.

Table 3.1 Current BNG policies within Cumbria

Authority	Plan/ Document	BNG Detail
Copeland Borough Council (CUA)	Copeland Local Plan 2021- 2038 ⁹ (Although not yet formally adopted the plan has been substantially progressed.)	<ul style="list-style-type: none"> The plan states the following as one of its Strategic Objectives in reference to Copelands Places: <i>“Protecting and Enhancing Biodiversity Protect and enhance the rich biodiversity and geodiversity both within and outside of the borough’s many nationally and internationally designated sites, ensuring that habitats are extended, connected by effective wildlife corridors and that lost habitats are restored in ways that secure biodiversity net gain and defend against ecological collapse.”</i> Strategic Policy DS5PU states: <i>“The Council will secure the following infrastructure provision/enhancements through planning obligations where it is reasonable, necessary and directly related to the development:.... Environmental improvements such as landscaping, tree planting, public art, biodiversity net gain, measures to conserve and enhance heritage assets”.</i>
Barrow Borough Council (WFUA)	Barrow Borough Local Plan 2016-31 (adopted 2019) ¹⁰ Biodiversity & Development- Supplementary Planning Document (2018) ¹¹	<ul style="list-style-type: none"> Net Gains in Biodiversity are referred to in Policy N3, which seeks to maintain, protect and enhance biodiversity <i>“Proposals for new development should minimise impacts on biodiversity and provide net gains in biodiversity where possible. Proposals will be expected to improve access to important biodiversity areas, and will be required to show full details of measures to achieve this in the form of a suitable Management Plan. Consideration must be given to the Council’s Biodiversity and Development Supplementary Planning Document (SPD) and any other relevant guidance”</i> <p>Although not constituting planning policy in itself this document provides guidance.</p> <p>Biodiversity Enhancement section states: <i>“All new development should provide net gain in biodiversity where possible.”</i></p> <p>The Council’s Site Assessment document includes guidance on green infrastructure requirements on the emerging housing allocations in order to enhance biodiversity.</p> <p>Applications should include details of existing and proposed biodiversity features demonstrating how the proposal provides a net gain in biodiversity.</p>
Allerdale (CUA)	Allerdale Local Plan Part One (adopted 2014) and Part Two (adopted 2020) ¹²	<p>No reference to BNG but following references to biodiversity mentioned:</p> <p>Both plan stages refer to “enhancing biodiversity”.</p>
Eden District Council (WFUA)	Eden Local Plan 2014-2032 ¹³	<p>Policy ENV1 - Protection and Enhancement of the Natural Environment, Biodiversity and Geodiversity, whilst not stipulating BNG does require that there is no net loss of biodiversity:</p> <p><i>“New development will be required to avoid any net loss of biodiversity and geodiversity, and where possible enhance existing assets.” ... “all development, where appropriate, should follow the following principles: > It will protect and maintain</i></p>

	Zero Carbon and Biodiversity Strategy ¹⁴	<p><i>and enhance habitats or species in the Cumbria Biodiversity Action Plan, including the linked wildlife corridors which support them.”</i></p> <p>Eden District Council set an aspiration for the district to add the concept of Biodiversity Net Gain into our Local Plan by 2023.</p> <p><i>“In preparation to implement the Biodiversity Net Gain, it is important to establish a baseline taking into account the types of habitats and their state for the key natural habitats own and managed by the Council. This process will help to plan and monitor management and enhancement to deliver measurable and to assess the Biodiversity Net Gain. Eden District Council will explore opportunities to work with Government bodies and external organisations to develop or use a tool suitable for Eden’s landscape and biodiversity.”</i></p>
Carlisle (CUA)	Carlisle District Local Plan 2015-2030 ¹⁵	<p>No reference to BNG but following references to biodiversity mentioned:</p> <p>Policy GI 3 states <i>“Biodiversity assets across the District will be protected and, where possible, enhanced.”</i></p>
South Lakeland (WFUA)	<p>South Lakeland Development Management Policies Development Plan (adopted 2019)¹⁶</p> <p>Core Strategy (adopted 2010)¹⁷</p>	<p>Policy DM4 relating to Green and Blue Infrastructure, Open Space, Trees and Landscaping references environmental net gain, stressing that gains should be quantitative:</p> <p><i>“All development proposals should, unless it can be demonstrated that it is not possible, result in environmental net gains for biodiversity, green and blue infrastructure and demonstrate how the use of multifunctional green and blue infrastructure will deliver wider requirements and objectives.</i></p> <p><i>These gains should be quantitative and should be clearly demonstrated as a net gain as a result of development.”</i></p> <p>No reference to BNG but following references to biodiversity mentioned:</p> <p>CS8.1 <i>“Protect species and habitats and create new habitats and wildlife corridors where biodiversity conservation and enhancement is affected by development;”</i></p> <p>CS8.3 <i>“All development proposals should:</i></p> <ul style="list-style-type: none"> <i>• Protect, enhance and restore the biodiversity and geodiversity value of land and buildings”.</i>
Arnsdale and Silverdale AONB	Arnsdale and Silverdale AONB Development Plan (adopted 2019) ¹⁸	<p>The Development Management Policies (DPD) references maintaining and enhancing Biodiversity/Habitat in policy ASO4</p> <p><i>“To protect and enhance the robustness, function and value of the natural environment, development proposals must protect and contribute to the appropriate enhancement of the extent, value and/or integrity of: (I) any site or habitat protected for its biodiversity or geodiversity value, including limestone features, at an international, national or local level; (II) any priority habitat or species; (III) ecosystem services; (IV) ecological networks and their connectivity, including ‘stepping stones’, buffer zones, functionally linked land, corridors and other linkages, including those that connect across the AONB boundary; (V) the mosaic pattern of habitats and species and the mosaic approach to their management and protection; (VI) any other natural features or assets of significance and value in the AONB or characteristic of the AONB, including those that do not enjoy formal protected status. Exceptions will only be made where: (VII) there is an overriding public need for the development; and (VIII) the development cannot be located elsewhere; and (IX) mitigation is provided,</i></p>

		<i>or, where mitigation is not possible, compensatory measures are provided before the development's completion that result in enhancement (net gain) of the habitat's extent and value"</i>
Cumbria County Council	Cumbria Minerals and Waste Local Plan 2015 To 2030 ¹⁹	Policy SP15 states that minerals and waste management developments, including restoration and after use should, amongst other environmental aims, <i>"help to secure movement from a net loss of biodiversity towards achievement of net gains in biodiversity resources by protecting, enhancing, expanding and linking areas for wildlife within and between the locations of highest biodiversity resources and encouraging the conservation and expansion of the ecological fabric elsewhere."</i>

3.1.3 Local Nature Reserve Strategy

Prior to the change to two Unitary Authorities, Cumbria County Council was commissioned by Defra to lead a partnership through the process of developing a LNRS. A draft LNRS was submitted to Defra in May 2021 which will be developed further during 2023⁴. A core part of a LNRS is to create a map which identifies where actions could be undertaken to restore and link up habitats so that: species can thrive; support agreement of the best places to help nature recover; mitigate flood risk through natural flood management; help mitigate climate change and; create more wildlife-rich areas for people to enjoy.

4. GOVERNANCE STRUCTURE AND CLARIFICATION OF ROLES AND RESPONSIBILITIES

What this section covers:

4.1 Roles and responsibilities within CUA to manage the BNG process

4.2 Flow diagram showing the BNG process

4.3 Details of a BNG planning condition and BNG advice service

Section Aim:

To provide a structure to manage BNG with CUA and details of key responsibilities and services

With BNG becoming mandatory from November 2023 all planning applications (minus small sites and national significant infrastructure projects) will require a BNG assessment to accompany a planning application⁶. The assessment will follow the criteria outlined in Section 2.4 and summarise how a minimum of 10% net gain can be achieved on site.

The section below establishes the roles and responsibilities in CUA required to assess a BNG planning application and an applicable planning condition in relation to BNG management plans.

4.1 GOVERNANCE STRUCTURE

The CUA will need to manage the BNG process at the council level on behalf of developers as required by the Environment Act². The following flow chart (**Figure 4.1**) details the BNG process and how the CUA and other stakeholders need to be involved. **Figure 4.1** details the processes where the CUA has responsibility for checking and reviewing projects on-site during ongoing monitoring and management of the project over its mandatory 30-year minimum time frame.

One essential part of this process is to have a database recording all projects and proposals submitted to the council, to track the reviewing, monitoring and management process. This will enable CUA to manage proposals and respond accordingly when needed. The Government is also in the process of introducing a national biodiversity register where all BNG mitigation sites will be added. Specific details have yet to be released but will form part of the process of monitoring the management of the sites; until details are provided a local database is recommended.

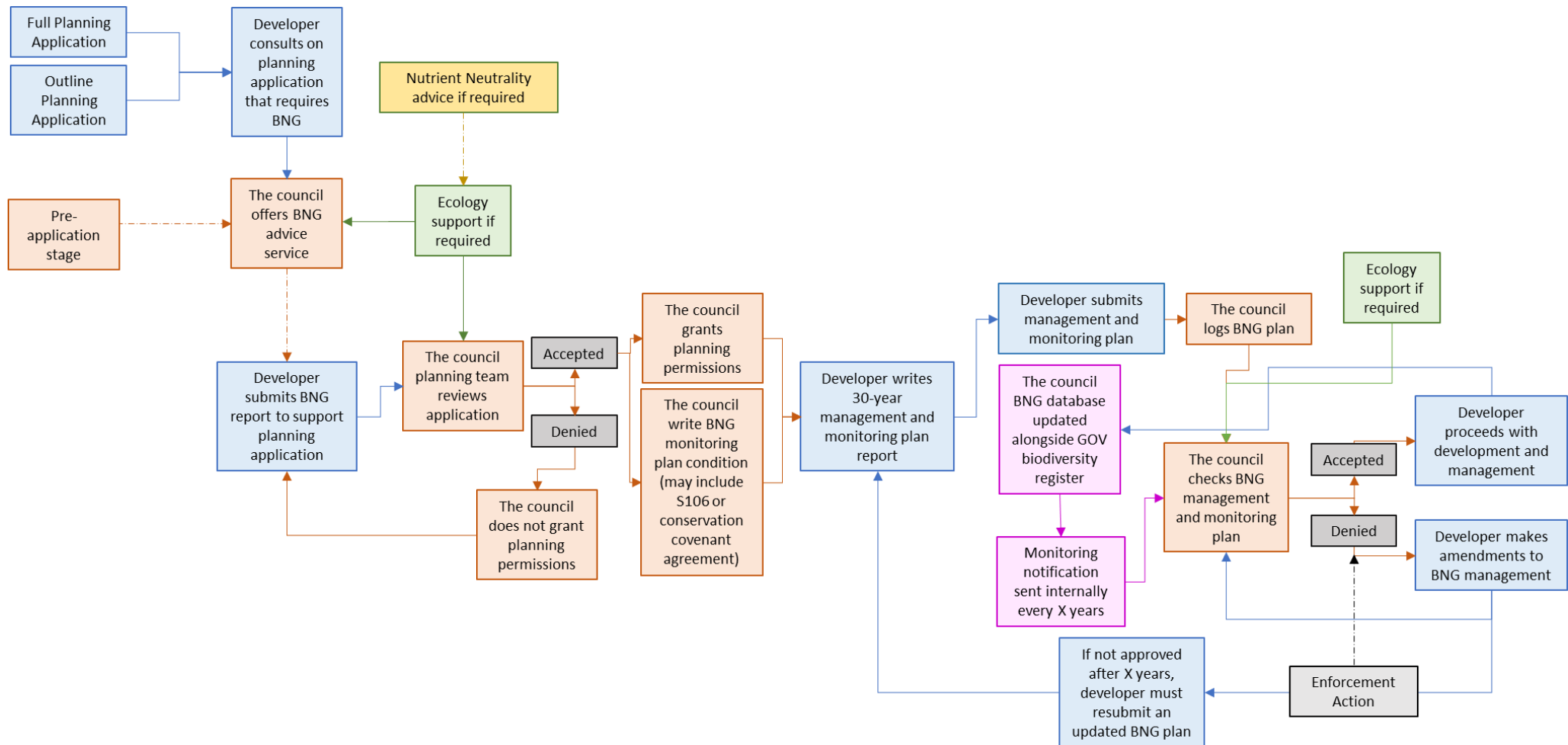


Figure 4.1 BNG management process, where the Council has responsibility for checking and reviewing projects on site

Key to figure: Blue – developer lead action, Orange – CUA lead action, Green/Yellow – specialist advice, Pink - CUA database action, Grey – CUA decision action

4.2 BNG MONITORING AND MANAGEMENT PLAN CONDITION (SEE FIGURE 4.1)

The exact wording of any BNG planning conditions will have to be consulted on in conjunction with the development management team, however, an example condition is provided below. For mitigation a S106 agreement may be required, see also [Section 9](#) for more detail.

Example BNG planning condition:

'No development shall commence until a detailed BNG management plan and monitoring report has been submitted to and agreed in writing by the LPA. The details of any biodiversity creation and enhancement measures will be included within the report alongside a detailed monitoring plan for the 30-year monitoring and management period. Information on any off-site mitigation measures will also be included'.

Reason:

To ensure the delivery of BNG is achieved in accordance with the Environment Act 2021 and Local Plan policies.

4.3 COUNCIL PROVIDES A BNG SERVICE

In the context of a BNG service as shown in **Figure 4.1** an official meeting can be offered between the council and the developer to discuss a planning application at either pre-application or full planning application stage. The benefit of this process is that it could provide a funding scheme to the council through charging for this service. This subsequently benefits the applicant by understanding the level of reporting the council requires to assess a BNG application and to support on identifying off-site mitigation sites where required. The service should also help speed up the planning assessment as the application would already be known to the CUA with a prior understanding of how the BNG would be delivered. As shown in **Figure 4.1** at some points there may be the requirement for specific technical support (e.g. ecology and Nutrient Neutrality (NN) advice). In some cases they may require external consultancy advice.

4.4 ROLES AND RESPONSIBILITIES

There are a range of specific roles, parties and organisations with key responsibilities necessary within in the BNG process and associated planning process. These roles and responsibilities related to a range of organisations are detailed below.

Relevant organisations:

- The developer
- The original landowner*
- The mitigation provider/broker**
- LPA (CUA)
- Defra
- External ecology support (and where applicable NN support)

Notes:

*The landowner could be, for example, the Royal Society for the Project of Birds (RSPB), the Wildlife Trusts, the National Trust, the Crown Estate, the Environment Agency, the Forestry Commission, Ministry of Defence, Local Authorities, or an independent landowner.

**A broker would be an organisation working on behalf of the landowner to sell the BNG mitigation units (refer also to Section 6 of this report) under legal implications for partnership working.

Table 4.1 below covers the roles and responsibilities assumed within the BNG process. Roles will be dependent on what options are chosen to achieve BNG.

Table 4.1 Roles and responsibilities of the BNG process

Role	Responsibility
The developer	The developer, or the management organisation to which the land is passed by the developer, is responsible for managing the land to meet offset requirements and reporting on the outcomes.
The original landowner	The original landowner will be the person who owns the land where BNG mitigation will be occurring. They may sell units to the developer or sell the whole parcel of land. CUA may act as a landowner to deliver BNG mitigation.
The mitigation provider/ broker	This may be an individual or company who specialises in providing BNG mitigation units through either a funding or land banking scheme. Some brokers can also support with NN issues alongside BNG.
LPA	The LPA is the responsible body for assessing BNG applications and any management and monitoring conditions associated with the application.
Defra	In the case of BNG mitigation not being available on-site or off-site within CUA, Defra will assume responsibility for identifying and managing land to meet BNG requirements as well as the requirements to report on the outcomes. This process may be outsourced to other organisations. The developer will need to pay Defra/relevant statutory body.
Ecology support (and where applicable NN support)	Where required, CUA or developers may need additional specialist support from an accredited ecologist during the review of applications and BNG management plans, and, during the review and checking of projects once created to ensure the correct measures have been implemented to support BNG. This support can also come from the Cumbria Biodiversity Data Centre (CBDC) ²² who will have the most relevant datasets and can cross check submitted data for accuracy.

5. BNG OPPORTUNITY AREAS METHODOLOGY

What this section covers:

5.1 What is the BNG opportunity tool?

5.2 How are scores calculated?

5.3 How to use the tool

5.4 Linking to the LNRS

Section Aim:

To provide a methodology in relation to the BNG opportunity area tool

To aid the identification of BNG mitigation sites which as part of the CUA BNG assessment process (see **Figure 4.1**) Ricardo has developed a tool which aids the identification of sites based on a scoring criteria to aid the identification of mitigation sites.

5.1 WHAT IS THE BNG OPPORTUNITY TOOL?

The Potential Biodiversity Opportunity (PBO) tool developed by Ricardo scores sites based on specific criteria for their potential to offer functioning biodiversity. Based on the scoring criteria the higher the scores the more positive criteria the site is meeting and therefore the site is likely to be a more optimal site for BNG mitigation. The tool is designed to be used on a GIS platform where every parcel of land has a score assigned to it and by clicking on individual polygons, the criteria underpinning the scores can be analysed. The use of the tool is to help the identification of off-site mitigation land which may be needed as part of a BNG planning application.

5.2 HOW ARE THE SCORES CALCULATED?

Suitable sites are selected by removing constraining areas where mitigation cannot take place such as urban areas, roads and water bodies. Scores are assigned to each site to indicate their suitability related, for example to size, proximity to designated sites, landcover, ownership and local plan information (see **Table 5.1**). The

tool is underpinned by a large range of open-source datasets that are nationally available (see **Table 5.2**). A key dataset used as scoring criteria is the habitat network maps used for the draft Cumbria Local Nature Recovery Strategy. A score was assigned to the sites that fell into a restoration or creation zone which ensures links to the LNRS.

Table 5.1 Scoring criteria

Score	0	1	2	3
Size of site		<1ha	1-3ha	>5ha
On common land	yes			no
Proximity to statutory sites		>5km	2-5km	<2km
Sites within LNRS creation/restoration zones	no			yes
On priority habitats		no		yes
Proximity to ancient woodland*		>1 km	300m-1km	<300m

*Only relevant for woodland broad habitat opportunity areas

Table 5.2 All datasets used to calculate specific scores

Datasets	Link
SSSIs (England)	https://www.data.gov.uk/dataset/5b632bd7-9838-4ef2-9101-ea9384421b0d/sites-of-special-scientific-interest-england
SPAs (England)	https://www.data.gov.uk/dataset/174f4e23-acb6-4305-9365-1e33c8d0e455/special-protection-areas-england
Ramsar (England)	https://www.data.gov.uk/dataset/67b4ef48-d0b2-4b6f-b659-4efa33469889/ramsar-england
National Nature Reserves (England)	https://www.data.gov.uk/dataset/726484b0-d14e-44a3-9621-29e79fc47bfc/national-nature-reserves-england
Special Areas of Conservation (England)	https://www.data.gov.uk/dataset/a85e64d9-d0f1-4500-9080-b0e29b81fbc8/special-areas-of-conservation-england
Common Land (England)	https://www.data.gov.uk/dataset/05c61ecc-efa9-4b7f-8fe6-9911afb44e1a/database-of-registered-common-land-in-england
Priority habitat Inventory (England)	https://www.data.gov.uk/dataset/4b6ddab7-6c0f-4407-946e-d6499f19fcde/priority-habitats-inventory-england
Ancient Woodland (England)	https://www.data.gov.uk/dataset/9461f463-c363-4309-ae77-fcd7e9df7d3/ancient-woodland-england
Living England	https://www.data.gov.uk/dataset/e207e1b3-72e2-4b6a-8aec-0c7b8bb9998c/living-england-habitat-map-phase-4
CORINE Land Cover 2018	https://land.copernicus.eu/pan-european/corine-land-cover
OS Open Roads	https://www.data.gov.uk/dataset/65bf62c8-eae0-4475-9c16-a2e81afcbdb0/os-open-roads
OS Vector Map District (railway track)	https://osdatahub.os.uk/downloads/open/VectorMapDistrict
Cumbria Local Nature Recovery Strategy Habitat Network	CLNRN Story Map - Cumbria Biodiversity Data Centre (cbdc.org.uk)

5.3 HOW TO USE THE TOOL

To ensure accuracy and links to the LNRS there are five individual shapefiles which relate to five broad habitat types, these are fell, grassland, peat, wetland and woodland. These broad habitat types have the specific restoration/creation zone dataset based on the LNRS habitats that fall into each category. If the user knows which habitat requires off-site mitigation then that dataset should be used. For example, if neutral grassland is needed to be mitigated then the grassland opportunity shapefile should be used. Once the layer is open within GIS every parcel of land will have a polygon associated with it with each score showing a different colour. **Note:** the lowest and highest score differ per broad habitat type but generally within a range of 6 – 18 due to the minimum score an area of land can score is 6 but the highest range can differ.

If the development site boundary is known this can be added into the GIS and then users can compare the scores of sites within a proximity of the development. This proximity may change based on the size and scale of the development however, best practise is to aim to mitigate as close to the impact as possible. A specific site score can be toggled on and off in the GIS layer panel. If wanting to focus on higher scoring sites it is recommended to only show the highest scoring sites in proximity to the development. To interrogate what criteria underpins a sites score, the attribute table can be opened up in GIS which will show the criteria highlighted in **Table 5.1** and each score.

A short list can then be created of the best scoring sites which can then lead to further investigation by the developer such as baseline habitat surveys, soil samples and land ownership details.

5.4 LINKING TO THE LOCAL NATURE RECOVERY STRATEGY

After a shortlist of potential mitigation sites has been identified these sites should be cross referenced against the LNRS dataset to examine what specific habitat type within the broad habitat dataset is recommended to be created/restored. An example of this is a site might score high in the grassland opportunity area for neutral grassland mitigation however, when compared against the LNRS data a number of locations are for calcareous grassland restoration therefore not likely suitable for neutral grassland creation. By comparing against the LNRS the suitable site shortlist can be refined further.

6. PROCESS OR MECHANISM TO DELIVER ONSITE, OFFSITE AND HABITAT/LAND BANKING

What this section covers:

6.1 Details of various mechanisms for delivering BNG

6.2 Table showing examples of biodiversity management agreements

Section Aim:

To provide the details of various options for delivering BNG mitigation

6.1 OPTIONS FOR DELIVERING BNG ON AND OFF-SITE

There are four major processes to delivering on-site and off-site BNG in cases where the developer cannot sort the mitigation on their own site or off-site land. These are described below, along with key organisations and responsibilities. These options can be considered as a future way for CUA to deliver BNG.

6.1.1 Land banking: This is a process that is carried out through a network of externally provided habitat banks where public authorities or non-profit organisations acquire, hold and manage land to meet specific environmental and societal goals. Land banking provides developers with a simple, risk-free way to implement BNG and at the same time provides the opportunity for landowners to diversify their business with financial gain through paid land management associated with BNG. Land banking can also be used for NN where the same process is applied as BNG. Where land banking can be used for both BNG and NN, financial contributions can be made for both.

By leasing parcels of land, a land banking provider will manage the biodiversity management for off-site, mitigation associated with a planning application. Land banks can also create a habitat management and monitoring plan to support a BNG planning application. This can save time for developers and also remove the need for CUA to undertake the monitoring provided the results of the monitoring are submitted in the

required timeframes with sufficient evidence. It should be noted that whilst Land banking is fairly well established there is likely to be similar new providers coming on board which may not be as strategically placed and CUA will need to assess this as necessary.

Benefits of land banking:

- Provides strategic opportunities to deliver BNG
- There is low risk or liability
- The land banks are compliant with legislation
- Are nationally available
- Provide for a high level of expertise throughout the process and requires minimal support from CUA.

Limitations:

- This process means CUA will have less input into planning applications and associated mitigation
- The land where the mitigation is being undertaken will likely be leased by the land banking provider
- CUA will have less control over future management of the land after the 30-year BNG period

6.1.2 Outsourcing: This approach is similar to the land banking process however it involves CUA outsourcing the BNG management and monitoring to a local provider in Cumbria rather than a private land banking company. The Wildlife Trust can provide a BNG consultancy service and potential partnership with Cumbria Wildlife Trust could be an option noting there may be other local biodiversity partnerships available locally.

Benefits of outsourcing:

- The Wildlife Trust already has access to large areas of land such as Local Nature Reserves so the off-site mitigation could be owned and managed by the Trust
- This approach means that management for BNG is likely extend past the 30-year minimum required management period
- This approach brings with it a high level of expertise from the chosen outsource partner
- Very limited inhouse time needed and it is compliant with legislation

Limitations:

- CUA still have less control and input over locations and management of associated mitigation
- Dependant on a trusted local provider

6.1.3 Part management (partnerships): This is similar to complete outsourcing but in this case only some of the process is outsourced with other elements being managed by CUA such as landownership or management prescriptions.

Benefits of Partnership management:

- The partnership option includes some autonomy for CUA with the added benefit of a high level of expertise provided with respect to land management
- It will provide some form of internal CUA upskilling opportunities

Limitations:

- Requires more council staff time and expertise than full outsourcing due to the collaborative approach

6.1.4 In-house: This approach follows BNG guidance and legislation with no external bodies, granting the council full autonomy throughout the process.

Benefits of the In-house approach:

- Provides full autonomy from CUA
- Opportunity for rapid upskilling internally

Limitations:

- Entirely dependent on expertise in-house or access to such expertise to work on behalf of the CUA directly.

- Requires either to use CUA owned land or purchase land for the requirement of BNG that meets all relevant legislative requirements.

6.2 EXAMPLES OF SETTING UP BIODIVERSITY MANAGEMENT AGREEMENTS

Error! Reference source not found. below provides a summary of the options for setting up agreements for ongoing biodiversity management, adapted from the Greater Manchester Council BNG guidance and plans update²⁰. As more LPAs set up management plan additional examples can be updated in this table.

Table 6.1 Management agreement type, organisations involved, and description for biodiversity offsets

Biodiversity Management Type	Description	Organisations involved	Responsibilities
OPTION 1 Land purchase, or compensation on developer's own land	Developer buys or owns the land required for mitigation. This can be agreed through conditions to the planning application.	<ul style="list-style-type: none"> • The developer • The original landowner • The local planning authority • Council level ecology unit <p><i>Note:</i> This could include subcontracting the management to third parties.</p>	The Developer, or the management organisation the land is passed to by the developer, is responsible for managing the land to meet offset requirements and reporting on the outcomes. This is often the approach for land required for mitigating impacts on protected species.
OPTION 2 Payment for third party management of third party's land	Developer does not buy the land but pays the landowner (directly or via a broker) to take on the management responsibilities to meet offset requirements. Developer can specify the land required for the offset and the actions taken to deliver the biodiversity and ecosystem service gains. Can be agreed through conditions to the planning application.	<ul style="list-style-type: none"> • The developer • The landowner/offset provider or broker • The local planning authority • Council level ecology unit 	The Developer passes responsibility for identifying and managing the land to meet mitigation requirements as well as the requirements to report on the outcomes to the offset provider, i.e., the landowner or broker. Payment will normally be required as a lump sum to the landowner or broker. This can be directly to the landowner or broker or via the local planning authority.
OPTION 3 Payment for local planning authority (LPA) to set up compensation agreements	Developer pays a lump sum to an organisation who pays a third party to manage land to meet offset requirements. Developer does not buy the land but pays the local planning authority to take on the management responsibilities to meet offset requirements. Developer is not able to specify the land required for the offset or the actions taken to deliver the biodiversity and ecosystem service gains. Can be agreed through conditions to the planning application or through a section106 agreement.	<ul style="list-style-type: none"> • The developer • The local planning authority • Council level ecology unit • Note: In this situation the local planning authority is acting as the mitigation broker. 	The Developer passes responsibility for identifying and managing the land to meet offset requirements as well as the requirements to report on the outcomes to the local planning authority. Payment will normally be required as a lump sum to the local planning authority.
OPTION 4 Payment to the Secretary of State (Defra) to	The Secretary of State for Defra will provide an option of last resort, providing offsets where options 1-3 are not available.	<ul style="list-style-type: none"> • Council level ecology unit 	To be confirmed.

Biodiversity Management Type	Description	Organisations involved	Responsibilities
provide the offset.			

7. A RISK-BASED APPROACH BY WHICH PLANNERS CAN ASSESS DEVELOPERS' BNG PLANS

What this section covers:

7.1 Key BNG points that should be considered when assessing a planning application

7.2 BNG risk assessment checklist for use by planners

Section Aim:

To provide a risk assessment tool to understand assessment time required for a BNG application

BNG requires high levels of competence in habitat creation, restoration, and management planning. Design should focus on restoring or creating well-connected habitats capable of delivering multiple ecosystem services. Developing a risk-based approach by which planners can assess developer's BNG plans – i.e., lower risk developments may need a lighter touch assessment, whereas developments with more significant impacts may merit separate independent assessments to maintain 10%+ BNG.

As mentioned in the sections previously, developers can focus on engaging in collaborative and joined up partnership working to identify opportunities on-site and off-site for BNG delivery and; design, broker and deliver net gain in accordance with best practice principles and standards, using appropriate ecological expertise. Any net gain approach must be upheld by planners by assessing the development plans based on the below BNG and Risk criteria.

7.1 KEY BNG PLANNING ELEMENTS

- *10% minimum BNG*: The development must deliver a minimum of 10% biodiversity net gain.
- *Relevant biodiversity metrics*: To carry out BNG calculations using the most up to date metric (currently Metric 4.0 which is the statutory Metric in November 2023)² but noting point below related to smaller sites³
- *On-site/Off-site*: If BNG cannot be secured on site developer must identify off-site opportunities for biodiversity enhancement.
- *Statutory credits if unable to mitigate off-site*: Purchase UK Government-provided statutory biodiversity credits if off-site habitat enhancements cannot be secured on other landholdings or sourced from the market.
- *Habitat management and monitoring plan*: Requirement for a habitat management and monitoring plan describing how habitat creation or enhancements will be achieved, managed, and monitored.
- *Small Sites (biodiversity) Metric (SSM)*: There is expected to be a less onerous process for applying BNG to smaller developments, including use of the SSM which is available now for use on smaller sites (expected to be mandatory in 2024 for sites less than 1000m²).^{4, 21}

7.2 RISK ASSESSMENT CHECKLIST AND RATIONALE

The below risk criteria provide inputs into a checklist which can be used by planners to establish whether a BNG application requires more assessment time or detailed ecological expertise based on the baseline criteria and location of the application.

The key rationale for the risk assessment is to support understanding of potential internal staff needs (e.g. related to assessing an application and potential further consultation needs). Furthermore, the risk assessment

tool (cross ref to relevant section) could form part of a validation BNG checklist which comprises key documents and criteria that need to be submitted as part of a planning application.

The criteria has been designed to be a quick and easy way to establish potential BNG impacts from the application site and does not require detailed ecological knowledge or bespoke GIS datasets. The criteria is based on the use of nationally available datasets such as priority habitats and designated sites. More accurate datasets may be available from Cumbria Biodiversity Data Centre (CBDC)²². This dataset should be utilised where possible as it is likely to hold more accurate local data than national datasets.

7.3 RISK CRITERIA

A description of each risk criteria is listed below:

- *Priority habitats present:* These are defined as Habitats of Principal Importance included in the England Biodiversity List published by the Secretary of State under section 41 of the Natural Environment and Rural Communities (NERC) Act 2006¹. If a development results in any impacts to priority habitat (high or very high distinctiveness habitat using the latest biodiversity (at the time of writing metric 4), there would be no exemption from the mandatory requirement.

Note: Use this link to identify priority habitats (<https://magic.defra.gov.uk/MagicMap.aspx>) and access data via: habitats and species > habitats > (select all priority habitats).

- *Proximity to designated sites:* This requires identifying statutory designated sites or irreplaceable habitats noting that projects negatively affecting statutory designated sites or irreplaceable habitats cannot, as a project, achieve BNG.

BNG does not apply to statutory designated sites or irreplaceable habitats which must be avoided where possible. Any impacts to designated sites should follow the necessary legislation and policy requirements including those specified under the Habitat Regulation Assessment²³. This does not fall under the BNG guidance. When not compensating for such effects, BNG designs can involve statutory designated sites when the gains are clearly additional to the reasons for designation (and any associated management requirements). In these situations, advice and verification from the statutory conservation advisor and LPA should be obtained.

Note: Use this link to identify priority habitats (<https://magic.defra.gov.uk/MagicMap.aspx>) and access data via: designations > land based designations > statutory.

- *Proximity to watercourses (water pollution risk):* This includes measures taken to avoid or reduce negative impacts and effects. Measures may include locating the development and its working areas and access routes away from areas of high ecological interest, fencing off sensitive areas during the construction period, or timing works to avoid sensitive periods. One example of a reduction measure is a reed bed silt trap that is designed to minimise the amount of polluted water running directly into an ecologically important watercourse. Depending on circumstances, mitigation measures may be located within or outside the project site⁷.

Note: Use this link to identify watercourses habitats (<https://magic.defra.gov.uk/MagicMap.aspx>).

- *Flood/drought risk:* Sites with a higher flood risk may require more detailed BNG design as some habitats may not function well under flood scenarios due to their requirements for free draining soil. Sites that fall within a flood risk zone should score higher as certain habitat creation measures may not be suitable. Using the 'flood map for planning' portal will help identify risks to sites marked for BNG and opportunities to incorporate flood resilience in BNG designs.

Note: Use this link to identify flood risk ([Where do you want to check? - GOV.UK \(check-long-term-flood-risk.service.gov.uk\)](https://www.gov.uk/check-long-term-flood-risk)) and this link to identify drought risk ([UK Water Resources Portal \(ceh.ac.uk\)](https://www.ceh.ac.uk/water-resources)).

- *Erosion risk:* Sites with higher erosion risk may not be suitable for habitat creation and enhancement measures and therefore may require more detailed consultation on BNG design. There are however cases in relation to river restoration where restoring an eroded bank could count towards river enhancement measures. When undertaking the risk assessment scoring on a river BNG application the erosion risk score may not be applicable.

Note: Use this link to identify erosion risk ([UK Soil Observatory \(bgs.ac.uk\)](https://www.bgs.ac.uk)).

- *Contaminated land:* Excessive use and misuse of pesticides or industrial processes can result in contamination of surrounding soil and water sources, causing loss of biodiversity, destroying beneficial insect populations and associated habitats. Developments on contaminated land may not be able to create or enhance habitats within the site without extensive soil manipulation.

Note: A specific CUA contaminated land dataset search will need to be checked to assess extent and type of contamination.

- *Risk to local communities:* A development site may be on land that is utilised by the local community such as through dog walking or recreational activities. In such cases the loss of such land may require BNG mitigation that also accounts for wider benefits such as recreational activities. As such the habitat loss of the site may have a greater/wider impact.

Note: Use this link to identify risk to local communities (<https://magic.defra.gov.uk/MagicMap.aspx>) and access data via: landscape > landscape classifications > built up areas.

7.4 ASSESSING RISK

Below is a risk assessment criteria table (**Table 7.1**) that CUA and planners can use to assess risk and what to look out for when they need additional support in assessment BNG opportunity viability. The final score provides a level of risk for development, either green, amber or red (as highlighted below **Table 7.1**) related to staff time needed and any uncertainty that may be related to the BNG proposed site.

To achieve an overall Risk assessment the following should be included:

- Refer to [Section 4](#) and review the information provided in the associated risk criteria link for each factor.
- When reviewing the data if a site covers several categories (e.g., moderate, and high soil erosion risk) the highest risk category should be recorded.

Table 7.1 Roles and responsibilities of the BNG process

Risk Criteria	3 Points		2 Points		1 Point	
Is the site within Priority Habitat?	Yes		Within 500m		No	
Is the site within a Designated site?	Yes		Within 500m		No	
Is the site within a Watercourse?	Yes		Within 500m		No	
Is there a flood risk?	High		Medium		Low/ Very low	
Is there a drought risk?	Exceptionally high/ Notably high		Above normal/ normal		Below normal/ Notably low/ Exceptionally low	
Erosion Risk – use Bare soil wind erosion and Bare soil water erosion.	Very high/ High		Moderate		Low-moderate/ Low	
Risk to local communities	Full loss of land utilised by community		Partial loss of land utilised by community		No loss of land utilised by community	
Is the land Contaminated	Yes		Partially		No	
Size of the project	More than 25ha		10-25ha		Less than 10ha	
Total Score						

Scoring:

Green: 0 – 12: If the score is within green; there is low risk therefore there is a low level of consultation and additional support necessary, if all BNG criteria and guidance is followed and achieved, little further action is needed.

Amber: 12 – 20: If the score is within the amber; there is medium risk therefore some consultation and additional support may be necessary.

Red: 20 – 27: If the score is within the red; there is a high risk therefore there is a higher level of consultation and additional support may be necessary. The output from the scores should be used as an initial guide to the potential level of consultation required but should not be used to fully scope out a site.

Additional information for high risk outcomes:

- Identification of potential impacts on irreplaceable habitats will automatically score red.
- Ecological reports submitted by the developer should identify any potential irreplaceable habitats on the application site.
- Where the mitigation hierarchy (**Table 2.1**) has been applied but there are still impacts on irreplaceable habitats a requirement will be to consult CUA as bespoke mitigation will be required that is not counted for in the biodiversity metric.
- A list of all irreplaceable habitats can be found in the Metric 4.0 Technical Guidance documents^{5,19}.

8. OPTIONS FOR IN-HOUSE OR OUTSOURCING ALL OR PARTS OF THE PROCESS

What this section covers:

8.1 Case study examples of management options for BNG mitigation

Section Aim:

To provide a summary of case studies of how different LPAs manage BNG

The below **Table 8.1** presents four case studies for in-house or outsourcing BNG management options. These case studies are based on LPAs who are implementing various BNG management mechanisms.

Table 8.1 Case study examples

	Land Banking	Outsourcing to Conservation Organisation	Part Management (Partnerships)	In House
Case Studies	<i>Milton Keynes:</i> Work has started to create a new Habitat Bank in Milton Keynes, from which the Environment Bank will supply BNG Units for regional developments and offset biodiversity loss. Planting has begun at the 94-acre site in Milton Keynes. Developers in the surrounding areas requiring BNG Units to fulfil their legal obligations in time for the November 2023 BNG transition period ending are welcoming this approach. ^{6 25}	<i>Staffordshire:</i> Nature recovery networks have been developed for all but one of the local authorities in the county. To help habitat restoration occurs in the most needed locations and increase good quality habitat connectivity across the landscape. The aim is that this can help achieve the goal of protecting 30% of Staffordshire land by 2030. In this example the Wildlife Trust delivers the conservation work and uses their extensive understanding of appropriate habitat	<i>Kent:</i> In response to the Kent Nature Partnership's promotion of a 20% BNG target for the county, Kent County Council (with funding support from Natural England) commissioned a strategic viability assessment of BNG. The purpose was to assist the county's planning authorities to assess whether targeting a higher BNG than the statutory minimum of 10% is potentially viable in the county.	<i>Warwickshire:</i> The Warwickshire, Coventry and Solihull sub-region was chosen as one of the 2012-2014 six national pilot areas to trial biodiversity mitigation. Following the success of this pilot all the local planning authorities within the sub-region agreed to continue with mitigation on all minor and major applications. Developers in pilot areas required to provide compensation for biodiversity loss under planning policy can choose to do so through biodiversity mitigation ^{7. 26}

		creation across the county.		
Recommendations	Ricardo would recommend either the in-house approach or the partnership approach as Cumberland Council already has a local nature recovery strategy and appropriate land to carry out the project.			

9. ACCREDITATION FOR BNG DELIVERY AND LONG-TERM MANAGEMENT

What this section covers:

9.1 Long term funding options for BNG mitigation

9.2 Section 106

9.3 Conservation covenants

9.4 Measurement and monitoring

9.5 Impact on monitoring on developers

9.6 Additional Information relevant to BNG policy decisions in Cumbria

9.7 Legal implications for partnership working

Section Aim:

To provide detail for long-term management of BNG in CUA

The legal obligation to deliver BNG will be based on the Environment Bill's²³ requirements (i.e. a minimum of 10% net gain). However, CUA may wish to adopt a specific BNG policy in any local plan updates which may increase the minimum percentage requirement to above 10%. BNG policies may be adopted in future local plans when updated which specify particular habitat types or locations for mitigation based on priority habitat or species within Cumbria. **3.1** details current BNG policies in Cumbria at local scale which will be used as the policies related to BNG before November 2023. This document should be updated at regular intervals when updated BNG policies become available to ensure consistency.

9.1 BNG LONG-TERM MANGEMENT OPTIONS

BNG will be secured via new standard planning conditions including a pre-commencement condition to submit a BNG management and monitoring plan to the local planning authority for approval (see example in Section 2.4). The plan will set out how the minimum BNG target will be delivered, either on- or off-site, with provisions for ongoing monitoring and maintenance over at least a 30-year period. The cost of the management per year will be dependent on the type of mitigation undertaken with the management plan needing to be reviewed and approved by CUA. It is proposed that developments should follow the 'mitigation hierarchy' outlined in **Table 2.1** in terms of limiting the negative impacts on biodiversity.

The delivery of BNG will need to be legally secured through either a conservation covenant or a S106 planning obligation agreement.

The 2 key mechanisms namely; S106 obligations and conservation covenants (see Section 9.2 below) as introduced by the Environment Act² outline how schemes will be implemented and secured for the 30-year minimum period.

9.2 SECTION 106

Note: Section 106 obligations are likely to be used when delivering BNG off-site where the off-site land is within the local authority's administrative area.

A s106 agreement is secured under the [Town and Country Planning Act 1990 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/1990/68)²⁴ and is a legal agreement between Local Authorities and developers. In relation to BNG this will be an agreed financial payment to undertake the management and monitoring of a site over a 30-year period.

If the s106 is not complied with, it is enforceable against the person that entered into the obligation and any subsequent owner. The s106 can be enforced by injunction. In case of a breach of the obligation the authority can take direct action and recover expenses.

9.3 CONSERVATION COVENANTS

Note: Conservation covenants can be entered into between a landowner and a ‘responsible body’ designated by the government. These will likely be used when a biodiversity scheme is located away from the main development site and outside a local planning authority’s area.

In 2018, the Government issued “a Green Future: Our 25 Year Plan to Improve the Environment²⁷” which recognised the need to explore the introduction of conservation covenants. On 30th September 2022, part 7 of the Environment Act² came into force which sets out what Conservation Covenant Agreements are and how they are to be used.

Conservation covenant agreements are intended to be voluntary but legally binding with the landowner and run in a similar way to S106 Agreements. The new agreements will be made between a landowner and a designated responsible body, where a landowner promises to do, or refrain from doing, something on its land for the purposes of conservation. The conservation covenants are statutory binding on any successors of land title and protected as a local land charge meaning they can provide benefits for BNG delivery. The agreement’s goal is to be for a conservation purpose, intended for the public good.

The Government has published guidance on the use of conservation covenants^{8 28} ([conservation covenant information](#)) which includes a helpful section on the roles and responsibilities of designated responsible bodies including how to:

- register the covenant on the appropriate local land charges register;
- submit an annual return; and
- make sure the conservation covenant is created with the aim to conserve (protect, restore or enhance) the natural or heritage features of the land and be for the public good.

Local authorities who decide to become responsible bodies will therefore need to ensure they have the resources to monitor and enforce conservation covenants.

9.4 MEASUREMENT AND MONITORING

Once either a S106 or conservation covenant is legally agreed the onus will be on developer to monitor the delivery of BNG; local planning authorities will then have a duty to report on BNG delivery for their local area. Secondary legislation is set to provide more detail on how this process will work in 2024. In some cases CUA may be responsible for the site but will still be required to report on BNG actions.

Table 9.1 below gives an example monitoring planner that can be used by CUA and either completed in-house or by individual developers to ensure the management and monitoring scheme submitted meets and standardised approach for CUA. It is recommended that any monitoring plan is reviewed by an ecologist prior to implementation.

Note: For sites that are mitigating for both BNG and NN the monitoring table will need to include both BNG and NN actions.

Table 9.1. Example of BNG Monitoring Table

Why	What	How	Data	When	Who	Confidence	Evaluation
What is the objective of the BNG mitigation which are to be monitored?	What is your monitoring objective/what are you trying to observe?	What methods are you going to use?	Add information on the baseline data you have collected (type, frequency, method used)	What periods over the year and how often?	Who is going to do this?	High/ medium/ low robustness of monitoring	How/when/ who. Monitoring results collated and evaluated
<i>Creation of 1.5ha of neutral grassland in moderate condition</i>	<i>Neutral grassland plant assemblages established after 5 years and overall moderate condition</i>	<i>UKHab survey methodology and condition assessment</i>	<i>UKHab assessment on receptor site, suitable for neutral grassland creation</i>	<i>Yearly each June.</i>	<i>Developer Ecologist</i>	<i>High confidence as approved methodology</i>	<i>Yearly reports sent to Council as per condition requirement</i>

9.5 IMPACT ON DEVELOPERS

Developers need to be aware of and prepare for the new BNG requirements now given the regulatory date of November 2023. Communication is key to this. Developers need to work closely with CUA, especially where BNG policies are already being adopted, to ensure an open discussion is had about how the requirement may be met.

Steps must also be taken to identify the BNG requirement of a site as early as possible, preferably at acquisition stage, whilst acknowledging that the baseline biodiversity value will not need to be calculated until application stage. By utilising the metric and working with an ecologist, developers can evaluate what will likely be required to achieve the 10 per cent requirement and whether it may be delivered fully onsite or may need an offsite solution; ultimately a site may not be worth pursuing if it is clear the requirement cannot easily be met.

This additional due diligence will come as an extra component for developers therefore it is important CUA have an open dialogue with developers and promote resources such as the BNG opportunity area tool and the LNRS.

The new BNG requirements will inevitably present a challenge to developers. But rather than seeing this as a hurdle, the potential opportunities for the sector should also be recognised. These must be grasped in order to protect the environment, provide a better experience for residents, and ultimately, futureproof developments for years to come. Opportunities include linking BNG and NN requirements together, where units can be stacked and hence become both more financially rewarding for a landowner whilst also achieving wider benefits related to natural and societal capital (e.g. increasing access to nature requirements) though noting that in the case of NN schemes must be demonstrably operational for at least 80 years.

9.6 ADDITIONAL INFORMATION RELEVANT TO BNG POLICY DECISIONS

In relation to brownfield sites there may be situations where remediation works need to take place before development can start. However, this may be in the form of two separate planning applications that could be numerous years apart. In terms of when to assess the mitigation this will have to be undertaken on a case-by-case basis dependant on the baseline vegetation community present before remediation works. It may be applicable for mitigation to form part of the development which incorporates the remediation impacts, but this would need to be made on a case basis where the baseline is low distinctiveness habitats and poor condition where the time lag before mitigation starts would not have a significant impact of local biodiversity. Where the baseline constitutes rarer vegetation and invertebrate communities which are associated with priority habitats mitigation would need to be related to the remediation application.

The agreements should clarify acceptable practices. For example, a management plan that covers 30 years (or longer if linking to NN as this requires 80-year plans) allows activities to change, if change is necessary to secure the intended BNG/NN requirements. The agreements can also enable additional financial support to be secured in the future, especially to build on the initial BNG activities. This can be especially important for landowners taking on responsibilities to deliver BNG for a developer.

9.7 LEGAL IMPLICATIONS FOR PARTNERSHIP WORKING

Whilst there are significant benefits related to partnership approaches including risk sharing, scaling up projects, and additional expertise via collaboration, it is essential that there is clear legal project structuring. This should include details around land ownership in relation to any off-site BNG mitigation sites. Legal agreements need to be in place for the long-term management of sites especially in cases where planned mitigation is not functioning as well as expected as additional management funds may need to be required. It is important therefore to take professional advice that may be regulatory, financial and tax implications in the context of BNG delivery for at least 30 years or longer if linking to NN.

10. BNG SPD TEMPLATE

What this section covers:

10.1 BNG SPD template

Section Aim:

To provide a BNG SPD template which should be used as the base structure for the future SPD

NOTE: This is a separate standalone template for use and update as needed for any BNG-related planning assessment

10.1 BNG SPD TEMPLATE

The below document is a template to be followed for a BNG SPD for CUA. The content structure should be followed when populating the report, but additional report sections can be added in where appropriate. It is recommended that the SPD is developed and adopted no later than November 2024 which is a year after BNG becomes mandatory. This year-long period allows for internal BNG processes and lessons learnt to be used to influence the SPD. Text in italics is example text or guidance for what should be included in each section.

INTRODUCTION

PURPOSE OF THIS SPD

This document has been prepared for Cumbria Unitary Authority (previously 3 councils that have merged).

The aims of this document are as follows:

- *To support planning applicants in following the national requirement to ensure their development results in a biodiversity net gain.*
- *To outline the process of achieving biodiversity in CUA if net gain is not achievable on-site.*
- *To provide clear guidance in an accessible format that can be kept up to date.*
- *To improve the speed and quality of planning decisions.*
- *To improve the transparency of decision making so developers better understand the planning process.*

This document has been produced to provide guidance in support of the following development plans in Table 10.1 and national guidance.

A full list of relevant national legislation and planning policy can be found in the Appendix.

Table 10.1 Relevant local plan policies relating to BNG

Development Plan	Policy References
Copeland Local Plan 2021- 2038	Strategic Objectives DS5PU
Biodiversity & Development- Supplementary Planning Document (2018)	Biodiversity Enhancement Section Site Assessment Section
Zero Carbon and Biodiversity Strategy	Strategy Aspirations
South Lakeland Core Strategy (adopted 2010)	CS8.1 CS8.3
South Lakeland Development Management Policies Development Plan (adopted 2019)	DM4
Barrow Borough Local Plan 2016-31	Policy N3
Eden District Council Local Plan 2014-2032	ENV1
Arnsdale and Silverdale AONB Development Plan (adopted 2019)	AS04

WHY IS BIODIVERSITY LOSS AN ISSUE?

What is biodiversity?

This section should cover what biodiversity is, benefits of biodiversity, what impacts biodiversity and how Cumbria is tackling biodiversity loss. It could include the following sections

Benefits of biodiversity

Environment

Economy

Social

Impacts of biodiversity loss

The following negative impacts are as a result of biodiversity loss (not a complete list):

- *Habitat loss, fragmentation, isolation through removal of connecting habitat*
- *Introduction or spread of INNS*
- *Air, water, soil contamination, pollution*
- *Domestic pets influence*
- *Disturbance from recreational activities*

Climate Emergency Declarations

One of the largest threats of the climate emergency is biodiversity loss. In response, the following councils, now within Cumbria Unitary Authority (CUA) have previously declared climate emergency declarations:

- *Allerdale*
- *Carlisle*

WHY IS BIODIVERSITY SO IMPORTANT TO PLANNING IN CUMBRIA?

This section should outline features of specific ecological and biodiversity importance within the CUA district.

A full list of designated sites and protected species should be included as an Appendix.

International Designations

RAMSAR

Special Protection Areas (SPA)

Special Areas of Conservation (SAC)

National Designations

Site of Special Scientific Interest (SSSI)

National Nature Reserve (NNR)

Marine Conservation Zone (MCZ)

County Designations

County Wildlife Sites (CWS)

Local Nature Reserves (LNR)

Local Geodiversity Sites (LGS)

UK Priority Habitats

UK Post-2010 Biodiversity Framework identifies a list of 56 priority habitats and 943 priority species in England, of which many are present in with the jurisdiction of CUA.

Link to local Priority Habitats Inventory for England and Biodiversity Action Plan for CUA (once created/ updated?)

Functionally Linked Land

Functionally linked land or water that provides ecological value beyond the boundary of a protected site.

Areas within the CUA district provide functionally linked land. Link to Natural England report discussing functional linkage.

Protected and Priority Species

Areas within the CUA district provides habitat for protected and priority species.

BNG PROCESSES

WHAT IS BIODIVERSITY NET GAIN

BNG is a mandatory requirement introduced by the Environment Act² that (as of November 2023) requires developers to ensure new proposals feature at least 10% improvement to biodiversity. The Environment Act², and therefore BNG, currently only applies to England.

Biodiversity Net Gain (BNG) is 'an approach to development, and/or land management, that leaves nature in a measurably better state than beforehand'. The key word here is measurable. BNG takes a standardised, quantifiable approach to habitat enhancement based on a biodiversity metric and the approval of a Biodiversity Gain Plan. Any BNG must be guaranteed for 30 years, which will be secured by a Section 106 agreement or 'conservation covenant'.

THE MITIGATION HIERACHY

Summary of the Mitigation Hierarchy

Biodiversity On Site

Include a summary of the process of delivering BNG on site.

Biodiversity Offsetting

Include a summary of the process of delivering BNG off-site, where applicable. Example text:

Option 1 involves the developer paying the council an amount of money the "Financial Contribution", determined by the council's Biodiversity Accounting Financial Calculator, in exchange for the council taking on the responsibility for securing the delivery of the biodiversity net gain, offsite.

If biodiversity net gain cannot be achieved on-site and a developer has land within their control which is suitable to act as a biodiversity offset site.

If biodiversity net gain cannot be achieved on-site, a developer might choose to use a third party off-set provider, broker (or a government scheme). An offset provider or broker will take money from a developer to provide an offset in a similar way to how the council would in Option 1.

ADVICE ON PREPARING PLANNING APPLICATIONS

Biodiversity impacts should be identified during early stages of planning. This enables the avoidance of such impacts and allows for the incorporation of biodiversity into features of the development design.

Some ecological surveys can only be carried out during certain timeframes (see Appendix x); therefore this should be considered when preparing planning applications.

BASELINE SITE ECOLOGY

This section should cover surveys required to establish the baseline site ecology data. It may include advice on how to obtain an ecologist and the seasonality of surveys. Below are some surveys it might be useful to include:

Ecological Consultant Guidance

The Chartered Institute of Ecology and Environmental Management (CIEEM) maintain a list of member who offers commercial consultancy services.

Species and Habitat Surveys

Preliminary Ecological Appraisal

Desk Studies

UK Habitat Classification Survey and Condition Assessments

Protected Species

Link ecological survey calendar in appendix

European Protected Species (EPS)

- *Great crested newt*
- *Bats*
- *Hazel dormouse*
- *Otter*
- *Water vole*
- *Species of Principle Importance (SPI)*

Tree Surveys

Landscaping Plans

Ecological Impact Assessment

Ecological Constraints and Opportunities Plan

CONSTRUCTION REQUIREMENTS

Construction Environmental Management plan (CEMP)

Where a significant amount of habitat is to be retained, restored, or created the Council may use a planning condition to require the production of a Construction Environmental Management Plan.

The purpose of such documents is to identify how construction will avoid, minimise or mitigate adverse effects on the environment and surrounding communities and to help ensure that development is compliant with environmental regulations and legislation

Ecological Clerk of Works (ECoW)

An ECoW may be required during construction on site to comply with best practice guidelines or European Protected Species Licence (EPSL) requirements. The ECoW is responsible for providing advice about ecological and environmental issues during the construction of a development and for ensuring that construction follows the practices set out in the CEMP.

BNG MEASUREMENT

Using the Biodiversity Metric

Outline the process of using the metric and how it works.

Limitations of the Metric

Include limitations and assumptions to be aware of when applying the metric.

MONITORING AND LONG-TERM MANAGEMENT

Once planning permission is granted a monitoring and management plan condition will be written and need to be discharged ahead of development starting.

11. E-TEMPLATE FOR DEVELOPERS TO MAINTAIN BNG PRACTICES AND STANDARDS

What this section covers:

11.1 A e-template to be completed by developers when submitting a planning application

Section Aim:

To provide a e-template to standardise the information being submitted for a planning application that requires BNG.

NOTE: this is a separate standalone E - template for use and update as needed for any BNG-related planning assessment

11.1 E-TEMPLATE

The BNG **checklist** outlines what documents must be submitted to the Council as part of a planning application for new development.

As part of England’s 25 Year Environment Plan, new developments must provide a minimum of 10% biodiversity net-gain compared to the pre-development baseline to compensate impacts on biodiversity.

A BNG assessment must be carried out for all development sites to deliver on and/or off-site habitat creation and enhancement measures using Metric 4.0 by Natural England⁶. For all new developments, a baseline biodiversity assessment must be carried out alongside details of any habitat mitigation measures being undertaken.

The checklist together with the supporting documentation must be submitted to the planning portal.

[BNG checklist to be completed by developers](#)

Table 11.1 Application

Date completed	
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Table 11.2. Form and fee

Application Type (Outline, Full, Reserved Matter)	
Completed application form	<input type="checkbox"/>
Appropriate fee*	<input type="checkbox"/>

* see ‘Planning Portal Guide to the Fees for Planning Applications in England’ document (Link: https://ecab.planningportal.co.uk/uploads/english_application_fees.pdf)

Table 11.3. Construction site details

Name and Address of the site / location	
Grid reference of site	
Area (ha)	
Strategic Significance (see Local Nature Recovery and BNG maps)	<input type="checkbox"/> High: Within area formally identified in local strategy

	<input type="checkbox"/> Medium: Local ecologically desirable but not in local strategy <input type="checkbox"/> Low: Area/compensation not in local strategy/ no local strategy
On-site mitigation required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Off-site mitigation required?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Table 11.4. Documentation required to be submitted to planning portal

Baseline Biodiversity Assessment ²⁴	<input type="checkbox"/> Yes <input type="checkbox"/> Not necessary*
Habitat mitigation plan for on-site enhancement	<input type="checkbox"/> Yes <input type="checkbox"/> Not necessary*
Habitat mitigation plan for off-site enhancement	<input type="checkbox"/> Yes <input type="checkbox"/> Not necessary*
BNG Metric 4.0 submitted with minimum of 10% biodiversity net gain can be achieved	<input type="checkbox"/>
*If not necessary please detail reasons why	

Table 11.5. Contents of Baseline Biodiversity Assessment

Baseline map following UKHab methodology ²⁵	<input type="checkbox"/>
Baseline habitat condition assessment	<input type="checkbox"/>
Detailed explanation of how the mitigation hierarchy has been followed	<input type="checkbox"/>
Details of any off-site mitigation if required	<input type="checkbox"/> Yes <input type="checkbox"/> Not required

Table 11.6. Mitigation plan documentation

Map of post development habitats on or off-site	<input type="checkbox"/>
Table of habitat areas and proposed condition	<input type="checkbox"/>
Justification description of proposed habitat conditions	<input type="checkbox"/>
Justification for linking to LNRS and BNG maps (off-site only)	<input type="checkbox"/>

Table 11.7. Additional documentation

Does the application require a NN assessment?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Table 11.8. Additional documentation

Do you require a BNG consultation with the Council?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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12. DRAFT BNG DEVELOPMENT POLICY

What this section covers:

12.1 A draft development plan policy in relation to BNG

Section Aim:

To provide a draft BNG development plan policy which can be used for future Local Plan updates

12.1 DEVELOPEMENT PLAN POLICY

All development must provide a minimum of 10% BNG.

The following requirements shall be adhered to:

- The latest DEFRA BNG Metric (or agreed equivalent) shall be used to quantify biodiversity value of the site pre and post development.
- The BNG assessment (and any surveys required to inform this assessment) shall be undertaken by an appropriately qualified ecologist.
- A Landscape Ecology Environment Plan (LEMP) or equivalent, shall be created and provided with the planning application, detailing how the post development biodiversity values will be delivered, managed, and monitored. Ongoing monitoring and management of new or improved habitats will be required for 30 years.

All developments shall avoid having any adverse impact on the nature conservation value of a site and should consider and afford the appropriate level of protection in line with each site's position in the hierarchy below:

- 1- Internationally designated sites: RAMSAR, Special Areas of Conservation (SAC), Special Protection Areas (SPA)
- 2- Irreplaceable habitats: veteran trees, ancient woodland
- 3- Nationally designated sites: Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Marine Conservation Zones (MCZ)
- 4- Locally designated sites: Local Nature Reserves (LNR), County Wildlife Sites (CWS), Local Geological Sites (LGS)
- 5- Priority Habitats and species

Proposals must consider the mitigation hierarchy; 1- avoidance, 2- mitigation, 3- compensation. Developers should do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, should developers seek to compensate for losses that cannot be avoided. Where adverse impacts on biodiversity are unavoidable, this shall be minimised as far as possible and reflected with appropriate compensation.

Offsetting will be based on the Natural England biodiversity offsetting metric. The following factors will be considered when calculating mitigation and compensation:

- Area of biodiversity affected
- Importance of biodiversity affected
- Condition of habitats affected
- Strategic significance of habitat location and the role of such within the wider ecological network

13. RESOURCE REQUIREMENTS TO IMPLEMENT BNG IN CUMBERLAND

What this section covers:

13.1 Resource requirements for CUA staff to deliver BNG

Section Aim:

To provide an overview of additional resources that may be required to deliver BNG

13.1 RESOURCE REQUIREMENTS

Section 4 outlines the process that will be required for CUA to manage BNG planning applications. CUA currently outsource their ecological support requirements, and through meetings Ricardo has undertaken with each previous district council, this internal knowledge and skill gap has been identified as a barrier to the BNG implementation process.

Figure 4.1 shows the BNG management processes where the council has responsibility for BNG implementation and the various review stage for a BNG assessment through to final delivery.

As a result of discussion with the six district councils, Ricardo have identified key responsibilities summarised in **Table 13.1** below. The key recommendations we have highlighted are to support delivery of BNG are:

- A full time Senior Ecologist is sourced to work in house for CUA.
- Subject to funding, a more junior level ecologist is also recommended within the next few years, to assist with the anticipated rise in BNG specialist workloads (mandatory BNG for small sites expected in 2024).
- All members of the development management team and key staff members who work with BNG should be subject to specialised BNG training.
- Ensure that there is linked understanding between the BNG ecologists and key staff members related to NN where there is need to consider both BNG and NN: Outsource NN expert advice initially across Unitary Authorities noting additional in-house support should be reviewed following more knowledge on local planning requirements regarding NN in affected areas.
- NN training for key staff.

Table 13.1. Resource requirements and recommended timescales for implementation

Required Resource	Key Skills or requirements	Time Scale
BNG Training for development management team and key staff members who may work with BNG	Training should cover how to use the BNG 4.0 Metric and how to assess planning applications with BNG reports. This training should be tailored specific to Cumbria and link directly to the LNRS and BNG mapping. Training should include how to use the BNG opportunity maps and reviewing BNG management and monitoring reports. Ricardo can provide bespoke training on this element. An alternative would be to look to other local consultants based in Cumbria.	Immediate- before November 2023
1x Senior Ecologist (full time)	<ul style="list-style-type: none"> • Substantial experience (6+ years relevant experience within the ecological sector) • Full CIEEM membership • Significant experience of BNG implementation and application of BNG metrics • Experience of securing positive outcomes for biodiversity • Extensive knowledge of wildlife legislation, planning policy and mitigation • Experience of stakeholder engagement and collaborative working • Understanding on local NN desirable 	Immediate- before November 2023

1x Ecologist (full time)	<ul style="list-style-type: none"> • Experience of working in the ecological sector (3+ years) • CIEEM membership • A good understanding of BNG and implementation of the metric • Ability to carry out habitat surveys (UK Hab and condition assessments) • Strong report writing skills 	Within next 2 years
Expanding ecology team-acquisition of further junior ecological support to support senior ecologist	As above	Within next 5 years
NN Training related to BNG opportunities	<p>Training should cover an understanding of the implications of BNG and NN opportunities, plus also linked benefits and how to assess location of potential benefits for both BNG and NN.</p> <p>Ricardo can provide bespoke training on this element having carried out similar training for Welsh Government and others. An alternative would be to look to other consultants: this is a new area re training so no generic courses available.</p>	Immediately before November 2023
NN support	<ul style="list-style-type: none"> • Experience in terms of assessing location of solutions for NN • Understanding of the requirements of both BNG and NN and the associated metrics • Appropriateness of Nature Based Solutions in the context of both BNG and NN. 	Immediately with review of need within 6 months
Legal support for BNG legal agreements	Experience in legal agreements in relation to planning such a s106 and conservation covenants.	Immediate- before November 2023

14. FUTURE WORK

What this section covers:

14.1 Future work required before mandatory BNG in November 2023

Section Aim:

To provide an overview of additional work that is likely to be required before November 2023

14.1 FUTURE WORK REQUIRED

During the scope of this project various additional tasks were identified through engagement with the Borough Councils and client meetings. It is recommended that these additional tasks are undertaken before November 2023 as these will be key elements in relation to supporting the delivery of BNG. The tasks are summarised below:

- **Staff BNG Training.** It is recommended that all development management team and key staff members who may work with BNG undertaken specific training sessions on how to use the BNG 4.0 Metric and how to assess planning applications with BNG reports. This training should be tailored specific to Cumbria and link directly to the LNRS and BNG mapping.
- **Assess BNG value of Council owned land.** It is recommended that an audit is undertaken to establish the area of Council owned land and the specific BNG value of it. This will establish a baseline and can be compared to future planning applications to assess how many BNG units the Council can use their land for mitigation on and manage. This audit can be desk based but Ricardo would recommend ground truthing surveys are undertaken to ensure the correct habitat and condition assessments are recorded.

- **Refining BNG and LNRS Mapping.** At the stage the mapping was undertaking there were some elements of the LNRS data which was being updated and recommendations from Borough Council staff members on key refinements such as local green spaces and incorporating additional datasets. Once the LNRS has been finalised it is recommended that the PBO tool is re-run and incorporates these additional elements to produce the final map and figures which can be used from November 2023.
- **Develop a website page and position statement to guide developers and members of the public to BNG policies and best practise in Cumbria.** It is recommended that a dedicated BNG website page is developed as a single source of information for developers and members of the public.
- **Management and payment system for BNG.** Developing a system to manage all on and off-site BNG mitigation which links to monitoring times.

15. REFERENCES

1. *Natural environment and rural communities act 2006* (no date) *Legislation.gov.uk*. Available at: <https://www.legislation.gov.uk/ukpga/2006/16/contents> (Accessed: 02 June 2023).
2. *Environment act 2021* (no date) *Legislation.gov.uk*. Available at: <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted> (Accessed: 02 June 2023).
3. Ministry of Housing, C.& L.G. (2021) *National Planning Policy Framework*, GOV.UK. Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> (Accessed: 02 June 2023).
4. *Local nature recovery strategies: How to prepare and what to include* (2021) *Defra main page on GOV.UK*. Available at: <https://consult.defra.gov.uk/land-use/local-nature-recovery-strategies/#:~:text=Local%20Nature%20Recovery%20Strategies%20are%20a%20new%2C%20Eng%20land-wide,drive%20nature%E2%80%99s%20recovery%20and%20provide%20wider%20environmental%20benefits> (Accessed: 02 June 2023).
5. *Nature recovery network* (2022) GOV.UK. Available at: <https://www.gov.uk/government/publications/nature-recovery-network/nature-recovery-network> (Accessed: 02 June 2023).
6. England, N. (2021) *The biodiversity metric 4.0 - JP039, Natural England - Access to Evidence*. Available at: <https://publications.naturalengland.org.uk/publication/6049804846366720> (Accessed: 02 June 2023).
7. *Guidelines for ecological impact assessment (ECIA)* (2022) CIEEM. Available at: <https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/> (Accessed: 02 June 2023).
8. Department for Environment, F.& R.A. (2023) *25 year environment plan*, GOV.UK. Available at: <https://www.gov.uk/government/publications/25-year-environment-plan> (Accessed: 02 June 2023).
9. (2022) *Copeland Local Plan - Borough of Copeland*. Available at: https://www.copeland.gov.uk/sites/default/files/attachments/copeland_local_plan_2013_2028.pdf (Accessed: 02 June 2023).
10. *Barrow Borough Local Plan – Barrow -in -Furness Borough Council*. Available at: <https://www.barrowbc.gov.uk/residents/planning/planning-policy/barrow-borough-local-plan/> (Accessed 15th June 2023).
11. *Barrow Borough Council Biodiversity & Development Supplementary Planning Document – May 2018* (2018) *Biodiversity & Development Supplementary Planning Document – May 2018*. Available at: [file:///C:/Users/cw43/Downloads/FINAL%20Barrow%20Borough%20Biodiversity%20SPD%20\(4\).pdf](file:///C:/Users/cw43/Downloads/FINAL%20Barrow%20Borough%20Biodiversity%20SPD%20(4).pdf) (Accessed: 02 June 2023).
12. (2020) *Local plan - no track changes - Allerdale*. Available at: https://www-cloudfront.allerdale.gov.uk/media/filer_public/6d/d7/6dd7b720-33af-4f67-824e-3d953757d032/local_plan_final.pdf (Accessed: 02 June 2023).
13. *Eden Local Plan 2014-2032 Eden District Council*. Available at: <https://www.eden.gov.uk/media/5032/edenlocalplan2014-2032finalwithoutforeword.pdf> (Accessed 15th June 2023).
14. (No date) *Eden District Council Home Page*. Available at: https://www.eden.gov.uk/media/6142/zcandb_final_version_final_accessible.pdf (Accessed: 02 June 2023).
15. (No date a) *Proposed submission draft Carlisle district local plan 2015-2030 ...* Available at: https://www.carlisle.gov.uk/Portals/24/Documents/Local_Plan/Proposed%20Submission%20Draft/SD%20012%20-%20Equality%20Impact%20Assessment.pdf (Accessed: 02 June 2023).
16. *South Lakeland Development Management Policies Development Plan (Adopted Version, 2019)*. *South Lakeland District Council*. Available at: <https://www.southlakeland.gov.uk/media/6466/final-dm-dpd-adoption-accessible.pdf>
17. (2010) *Local plan - South Lakeland*. Available at: <https://democracy.southlakeland.gov.uk/documents/s4446/Local%20Plan%20Apx%202.pdf> (Accessed: 02 June 2023).
18. *Arnsdale & Silverdale Area of Outstanding Natural Beauty (AONB) Development Plan Document (DPD) (Adopted Version, 2019)* *South Lakeland District Council, Lancaster City Council*. Available at: <https://www.southlakeland.gov.uk/media/6461/final-aonb-dpd-adoption-accessible.pdf> (Accessed: 15th June 2023)
19. *Cumbria Minerals and Waste Local Plan 2015 – 2030 (adopted 2017)* *Cumbria County Council*. Available at: <https://cumbria.gov.uk/elibrary/Content/Internet/538/755/1929/4298491253.PDF> (Accessed June 15th 2023)

20. (2021) *Home - Greater Manchester combined authority*. Available at: https://www.greatermanchester-ca.gov.uk/media/4244/gmca-bng-guidance-update_250221-final-edited.pdf (Accessed: 02 June 2023).
21. England, N. (2021) *The small sites metric (biodiversity metric 4.0) - JP040, Natural England - Access to Evidence*. Available at: <https://publications.naturalengland.org.uk/publication/6047259574927360> (Accessed: 02 June 2023).
22. *Contact us* (2023) *Cumbria Biodiversity Data Centre*. Available at: <http://www.cbdc.org.uk/contact-us/> (Accessed: 02 June 2023).
23. *Appropriate assessment* (2019) GOV.UK. Available at: <https://www.gov.uk/guidance/appropriate-assessment> (Accessed: 02 June 2023).
24. (2023) *The Biodiversity Metric 4.0 User Guide – Technical Annex 2*. Available at: [file:///C:/Users/cw43/Downloads/The%20Biodiversity%20Metric%204.0%20-%20Technical%20Annex%202%20-%20Technical%20Information%20\(2\).pdf](file:///C:/Users/cw43/Downloads/The%20Biodiversity%20Metric%204.0%20-%20Technical%20Annex%202%20-%20Technical%20Information%20(2).pdf) (Accessed: 02 June 2023).
25. *Environment Bank raising BNG units in Milton Keynes* (2023) *Environment Bank*. Available at: <https://environmentbank.com/blog/posts/environment-bank-raising-bng-units-in-milton-keynes> (Accessed: 02 June 2023).
26. Warwickshire County Council (no date) *Biodiversity Offsetting Activities, Warwickshire County Council*. Available at: <https://www.warwickshire.gov.uk/biodiversityoffsetting> (Accessed: 02 June 2023).
27. (2018) *A Green Future: Our 25 Year Plan to Improve the Environment*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf (Accessed: 06 June 2023).
28. *Getting and using a conservation covenant agreement* (2022) GOV.UK. Available at: <https://www.gov.uk/guidance/getting-and-using-a-conservation-covenant-agreement> (Accessed: 02 June 2023).
29. (2021) *Chartered Institute of Ecology and Environmental Management*. Available at: <https://cieem.net/wp-content/uploads/2021/07/CIEEM-BNG-Report-and-Audit-templates2.pdf> (Accessed: 02 June 2023).
30. *UK habitat classification* (no date) UKHab. Available at: <https://ukhab.org/> (Accessed: 02 June 2023).



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