Department
for Environment
Food & Rural Affairs

Statutory biodiversity metric (including small sites)

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Presented to Parliament pursuant to Schedule 7A of the Town and Country Planning Act 1990 as inserted by Schedule 14 of the Environment Act 2021.

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Contents

1. Introduction

1.1. Biodiversity net gain

The Environment Act 2021 introduces mandatory biodiversity net gain (BNG). It will require new development[1], unless exempt, to deliver at least a 10% net gain in biodiversity. Schedule 7A of the Town and Country Planning Act 1990 (TCPA) as inserted by Schedule 14 of the Environment Act 2021, will introduce this requirement.

The statutory biodiversity metric is the mechanism by which the biodiversity value of any habitat or habitat enhancement is to be calculated for the purposes of BNG under Schedule 7A of the Town and Country Planning Act 1990.

The statutory biodiversity metric calculates the difference in the biodiversity value of a site before and after development, and before and after off-site habitat interventions (habitat enhancement and creation) allowing the demonstration of biodiversity net gain.

The Secretary of State for Environment, Food and Rural Affairs is required under Part 1 of Schedule 7A of the TCPA as inserted by Schedule 14 to the Environment Act 2021, to produce and publish the statutory biodiversity metric.

1.1.1. Purpose

The statutory biodiversity metric (including small sites) Act paper has been drafted to be laid in Parliament pursuant to Schedule 7A of the Town and Country Planning Act 1990 as inserted by Schedule 14 of the Environment Act 2021. This document includes all the biodiversity metric data value inputs and formulae for calculating biodiversity units, **but it is not intended for use to measure biodiversity value in practice**. The statutory biodiversity metric package (see section 1.2.2) has been designed to calculate biodiversity value for the purposes of biodiversity net gain in practice and must be utilised for this purpose.

1.1.2. Application

Schedule 7A of the Town and Country Planning Act 1990 (TCPA) as inserted by Schedule 14 of the Environment Act 2021 applies to England only.

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[1] See sections 55 and 57 of the Town and Country Planning Act 1990 for the meaning of development requiring planning permission, see Schedule 7A and the associated regulations for details of the commencement and transitional arrangements and exemptions.

1.2. Statutory biodiversity metric

The statutory biodiversity metric is a document for measuring the biodiversity value or relative biodiversity value of habitat or habitat enhancement[2].

The statutory biodiversity metric uses habitat information to generate "biodiversity units," a proxy measure for biodiversity value. The statutory biodiversity metric data value inputs include habitat type, size, distinctiveness, condition, and location in the local area.

Further details of each statutory biodiversity metric data value input can be found in Section 2.

The contents of this act paper comprise the statutory biodiversity metric, including the:

- biodiversity metric data value inputs:
    - pre-development and any pre-habitat intervention (before works)
    - post-development and any post-habitat intervention (after works)
- biodiversity metric formulae for calculating biodiversity units.

The correct application of the statutory biodiversity metric (including small sites) can be demonstrated by use of the statutory biodiversity metric package (Section 1.2.2).

1.2.1. Types of statutory biodiversity metric

The statutory biodiversity metric contains two versions for measuring biodiversity value for different types of development:

- the statutory biodiversity metric – is to be used for development within the meaning of "major development" in article 2(1) of the Town and Country Planning (Development Management Procedure) (England) Order 2015 meaning development involving any one or more of the following—
    (a) the winning and working of minerals or the use of land for mineral-working deposits;
    (b) waste development;
    (c) the provision of dwellinghouses where—
        - (i) the number of dwellinghouses to be provided is 10 or more; or
        - (ii) the development is to be carried out on a site having an area of 0.5 hectares or more and it is not known whether the development falls within sub-paragraph (c)(i);

[2] See paragraph 4(1) of Schedule 7A to the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021).

(d) the provision of a building or buildings where the floor space to be created by the development is 1,000 square metres or more; or
(e) development carried out on a site having an area of 1 hectare or more

- the statutory biodiversity metric (small sites) – is to be used for development which is not "major" development unless priority habitats[3], protected sites[4] or European protected species[4] are present on-site.

If priority habitats, protected sites or European protected species are present on-site, an ecologist is required to assess the potential impacts and the statutory biodiversity metric for major development is to be used.

1.2.2. Statutory biodiversity metric package

There are a number of tools and documents which are essential to the accurate measurement of biodiversity value using the statutory biodiversity metric (including small sites) – this is called the statutory biodiversity metric package. This includes:

1. Statutory biodiversity metric calculation tools
    - statutory biodiversity metric calculation tool
    - statutory biodiversity metric (small sites) calculation tool (SSM)
2. Statutory biodiversity metric user guides
    - statutory biodiversity metric user guide
    - statutory biodiversity metric (small sites) user guide
3. Statutory biodiversity metric condition assessments

Full detail on all the supporting documents included in the statutory metric package is not included in this act paper.

1. Statutory biodiversity metric calculation tools

The statutory biodiversity metric calculation tools allow users to prove they have accurately applied the statutory biodiversity metric formulae.

The tools automatically calculate the biodiversity value of habitats in order to demonstrate the change in biodiversity value on-site pre and post development and pre and post habitat

[3] As published under section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

[4] As provided for in the Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981

intervention for offsite. This removes the need for a user to manually calculate the change in biodiversity value.

2. Statutory biodiversity metric user guides

The user guides provide essential information on how to input the relevant data values into the statutory biodiversity calculation tools.

The user guides include everything required to complete a calculation of biodiversity units.

3. Statutory biodiversity metric condition assessments

The statutory biodiversity metric condition assessments ensure users adopt standardised approaches to collecting and inputting the correct data for habitat condition when calculating biodiversity value using the statutory biodiversity metric.

Condition assessments are not required for assessing habitat condition in the statutory biodiversity metric (small sites) as this sets all habitats as moderate condition.

1.3. Use of the statutory biodiversity metric package

Use of the statutory biodiversity metric calculation tool

The statutory biodiversity metric calculation tool or the statutory biodiversity metric (small sites) calculation tool (whichever is applicable) must be used to prove biodiversity value has been calculated accurately in accordance with the statutory biodiversity metric under Schedule 7A TCPA 1990.

The biodiversity gain plan[5] must include a completed statutory biodiversity metric calculation tool or the statutory biodiversity metric (small sites) calculation tool. This will demonstrate to the relevant planning authority reviewing the biodiversity gain plan that the statutory biodiversity metric formulae have been accurately applied and the biodiversity net gain objective has been met.

Use of a standardised calculation tool will ensure consistency and transparency when completing calculations and reviewing calculations.

[5] See Part 2 of Schedule 7A to the Town and Country Planning Act 1990 (as inserted by Schedule 14 to the Environment Act 2021) and regulations made under that Part in relation to the plan which must be submitted to the planning authority for approval in respect of phased and non-phased development before development which is subject to BNG can commence.

Use of the statutory biodiversity metric user guides and condition assessments

To inform the proper use of the statutory biodiversity metric calculation tool, users must have regard to the full statutory biodiversity metric package.

1.4. Biodiversity units, habitat interventions and trading rules

The statutory biodiversity metric formulae are used to calculate different types of biodiversity units and can account for habitat loss, retention, enhancement, and creation.

1.4.1. Types of biodiversity units

There are three types of biodiversity units that can be calculated. These are split by habitat type:

- area habitat biodiversity units (AHBUs)
- hedgerow biodiversity units (HBUs)
- watercourse biodiversity units (WBU)

Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit.

1.4.2. Habitat interventions

The statutory biodiversity metric (including small sites) can account for:

- habitat loss
- habitat retention
- habitat creation
- habitat enhancement

1.4.3. Trading rules

When habitats are lost, the statutory biodiversity metric includes trading rules that set out the minimum habitat creation and enhancement requirements (which apply up until no net loss).

The trading rules are determined by the habitat type and distinctiveness (see section 2.4.1) of the lost habitat.

Table 1 Trading rules to compensate for losses

Habitat distinctiveness	Area habitats	Hedgerows	Watercourse
Very high	Priority should be given to replacing losses with area habitat units of the same habitat type However, if this is not possible, losses should be replaced by appropriate area units of the same habitat distinctness or, if that is not possible, appropriate area units of a high habitat distinctiveness	Losses must be replaced with hedgerow units of the same habitat type	Priority should be given to replacing losses with watercourse units of the same habitat type. However, if this is not possible, losses should be replaced by appropriate watercourse units of the same habitat distinctness or, if that is not possible, appropriate watercourse units of a high habitat distinctiveness
High	Losses must be replaced with area habitat units of the same habitat type	Losses must be replaced with hedgerow units of the same habitat type or of a higher distinctiveness	Losses must be replaced with watercourse units of the same habitat type
Medium	Losses must be replaced by area habitat units of either medium distinctiveness habitats within the same broad habitat type or, any habitat of a higher distinctiveness from any broad habitat type	Losses must be replaced with hedgerow units of the same or of a higher distinctiveness	Losses must be replaced with watercourse units of a higher distinctiveness

Habitat distinctiveness	Area habitats	Hedgerows	Watercourse
Low	Losses must be replaced with area habitat units of the same or of a higher distinctiveness	Losses must be replaced with hedgerow units of the same or of a higher distinctiveness	Losses must be replaced with watercourse units of a higher distinctiveness
Very Low	Not applicable	Losses must be replaced with hedgerow units of the same or of a higher distinctiveness	Not applicable

1.4.4. Deviations in how to apply this statutory biodiversity metric

When calculating biodiversity value using the statutory biodiversity metric, most projects will be required to adhere to the standard approach in respect to trading rules and data value inputs. However, there may be exceptional ecological circumstances where the relevant planning authority may be satisfied with a deviation from the standard approach to application[6].

Exceptional ecological circumstances occur when:

- the site has optimal conditions (such as soil condition, hydrology, nutrient status) for restoration of a wildlife-rich or historic natural habitat,
- and the project team has the expertise and resource to deliver the habitat with negligible risk of failure

This will be the case in the following circumstances:

1. Highly complex landscape scale habitat changes such as creation of heathland or a heathland grassland mosaic

[6] In relation to intertidal habitats, regard should be given to the statutory biodiversity metric user guide.

2. River re-meandering
3. Large-scale restoration of natural processes

In these circumstances the statutory biodiversity metric may not reflect the full ecological benefit being provided by a habitat intervention. For the ecological benefit to be realised, the statutory biodiversity metric calculation tool allows either:

1. Use of the 'habitat created in advance function' which affects the time to target condition and difficulty of creation of habitat (see section 2.5). This function allows a number of years to be inputted to represent a reduced risk in project delivery due to the exceptional ecological circumstances outlined above. The number of years inputted into the 'habitats created in advance function' should not exceed the time it takes to reach a poor condition for the relevant habitat type (as provided for in time to target condition tables in Annex 1.2, Annex 2.2 and Annex 3.3). The relevant planning authority needs to be satisfied that the number of years inputted appropriately reflects the reduction in time to target condition and difficulty of habitat creation for the specific habitat intervention in these circumstances.

2. Or deviation from the statutory biodiversity metric trading rules. There is no specific function in the statutory biodiversity metric calculation tool to deviate from the trading rules but in exceptional ecological circumstances the relevant planning authority may be satisfied that the habitat intervention is acceptable despite the trading rules not being met. The relevant planning authority needs to be satisfied that there is a clear ecological justification for the specific habitat intervention being delivered in lieu of the habitat required to meet the trading rules in these circumstances.

Evidence will need to be inputted into the statutory biodiversity metric calculation tool to include:

- justification of why the site has optimal conditions for the specific habitat intervention
- specific ecological expertise relevant to the site
- detail of the ecological benefits of the habitat intervention which were not realised by the statutory biodiversity metric

It is recommended that the relevant planning authority is engaged prior to the submission of the biodiversity gain plan if there are exceptional ecological circumstances in which a deviation from the application of the metric may be acceptable. In these circumstances, the biodiversity gain objective still needs to be met.

1.5. Irreplaceable habitats

The definition of irreplaceable habitat and how it is to be treated for the purposes of BNG will be provided for in secondary legislation[7]. Any losses to irreplaceable habitat cannot be calculated by the statutory biodiversity metric and bespoke compensation will need to be agreed with the relevant planning authority.

The statutory biodiversity metric will not calculate the biodiversity value of irreplaceable habitat impacted by a development - the formulae are not applied by the statutory biodiversity metric calculation tool, and it will flag that bespoke compensation is required. If irreplaceable habitat is being enhanced, the statutory biodiversity metric will calculate the biodiversity unit value of that enhancement.

[7] See paragraph 18 of Schedule 7A to the Town and Country Planning Act 1990 (as inserted by Schedule 14 to the Environment Act 2021) which provides for regulations to be made that define Irreplaceable Habitat and how it is to be treated for the purpose of biodiversity gain.

2. Statutory biodiversity metric formula data value inputs

2.1. Introduction to data value inputs

The following data value inputs are general habitat information and are applied to all types of biodiversity units:

- habitat type
- habitat size

The following data value inputs are measures of habitat quality and applied to all types of biodiversity units:

- distinctiveness
- condition
- strategic significance

The following data value inputs are only in the post-development and post-habitat intervention formula to account for the risk of creating new habitats and enhancing existing ones:

- difficulty of creation and enhancement
- time to target condition

The following data value input is only in the pre-habitat intervention and post-habitat intervention formula to account for the distance in which new habitats are created and existing ones are enhanced compared to the loss of habitat at the development:

- spatial risk

The following data value inputs are applied to watercourse biodiversity units only:

- riparian zone encroachment
- watercourse encroachment

2.2. Biodiversity unit type

The statutory biodiversity metric has three types of biodiversity unit as set out in section 1. Formula symbols are provided for each biodiversity unit type for each data value input.

Formula input symbol

Type of biodiversity unit	Formula symbol
Area habitats	AHBUs
Hedgerow	HBUs
Watercourse	WBUs

2.3. Habitat information inputs

2.3.1. Habitat type

Within the statutory biodiversity metric (including small sites), habitat types are classified using either:

- UK Habitat Classification (UKHab)
- Annex I habitats for Natura 2000
- European Nature Information System (EUNIS) habitat type hierarchical view
- Water Framework Directive (WFD) Lake typologies.

Habitat type determines categories for distinctiveness, condition, difficulty of creation and enhancement and time to target condition. There is no specific score applied for habitat type apart from habitat distinctiveness.

Annex 1 sets out all metric habitat types and their habitat classification origin.

2.3.2. Habitat size

Each habitat parcel is measured for size (area or length). A ‘habitat parcel’ is a smaller area within a site, which contains one type of habitat.

Score applied in the statutory biodiversity metric

The score is the size of the habitat parcel in the relevant unit of measurement:

Statutory biodiversity metric:

- Area habitats = hectares

- Hedgerows and lines of trees = kilometres
- Watercourses = kilometres

Statutory biodiversity metric (small sites):

- Area habitats = metres squared
- Hedgerows and lines of trees = metres
- Watercourses = metres

The statutory biodiversity metric uses set values to represent the area of the broad habitat type ‘individual trees’ depending on the tree’s diameter at breast height. The statutory biodiversity metric calculation tool has a function which generates an area value based on this (See Annex 4).

Formula input symbol

AHBUs	HBUs	WBUs
A	L	L

2.4. Habitat quality inputs

Habitat information collected during a habitat survey or desk-based assessment is applicable to pre-development, pre-habitat intervention and post-development, post-habitat intervention formulae.

2.4.1. Distinctiveness

Definition

Habitat distinctiveness is a metric specific value determined by habitat types. Distinctiveness is a measure based on the type of habitat and its distinguishing features. The statutory metric calculation tool automatically assigns distinctiveness category to selected habitats.

How it is measured

All habitats within the statutory biodiversity metric (including small sites) are assigned a habitat distinctiveness score. This is not assigned by a metric surveyor. Habitat distinctiveness measures variation in habitat quality by considering:

- species richness within a habitat

- total amount of habitat remaining in England
- the extent to which the habitat is protected by designations
- the degree to which a habitat supports species rarely found in other habitats and within European Red List categories

Score applied in the statutory biodiversity metric

There are 5 values for habitat distinctiveness from very low to very high.

Widespread and common habitats are assigned the lowest value. Habitats that are highly threatened, internationally scarce and requiring conservation action are assigned the highest value.

Table 2 Habitat distinctiveness categories and criteria thresholds

Distinctiveness category	Distinctiveness score applied in the metric	Distinctiveness category description
Very high	8	Priority habitats (see section 41 of the Natural Environment and Rural Communities Act 2006) that are: • highly threatened • internationally scarce • requiring conservation action Small amount of remaining habitat with a high proportion unprotected by designation. Critically Endangered European Red List habitats.
High	6	Priority habitats (see section 41 of the Natural Environment and Rural Communities Act 2006) that are: • requiring conservation action Near threatened and Vulnerable Red List habitats

Distinctiveness category	Distinctiveness score applied in the metric	Distinctiveness category description
Medium	4	Semi natural habitats that are not Priority habitat (except arable field margins) but have significant wildlife benefit.
Low	2	Habitat of limited biodiversity value Agricultural and urban land of lower biodiversity value
Very low	1 (hedgerow habitats only)	Hedgerow habitat of very limited biodiversity value.
Very low	0	No biodiversity value

Formula input symbol

AHBUs	HBUs	WBUs
Q_D	Q_D	Q_D

2.4.2. Condition

Definition

Habitat condition is a measure of the state of a habitat and is used to measure variation between parcels of the same habitat type. Condition is often linked to past management, present management, and land use.

How it is measured

To determine the condition of a habitat, the person completing the statutory biodiversity metric must complete a condition assessment (part of the statutory biodiversity metric package) for each habitat parcel. The person completing these assessments should have regard to the statutory biodiversity metric user guide re competency.

Some habitats are allocated a fixed condition score in the statutory biodiversity metric (including small sites) (see Annex 1 - AHBUs condition information). These habitats do not

require a condition assessment for the metric to be completed. It may still be appropriate to survey these habitats in line with other regulations or guidance.

There is a separate condition assessment methodology for watercourses that sits outside the statutory biodiversity metric package and requires the assessor to be accredited.

No condition assessment is required for assessing the habitats in the statutory biodiversity metric (small sites). The statutory biodiversity metric (small sites) calculation tool automates condition based on habitat type.

Score applied in the statutory biodiversity metric

There are 5 condition categories which a habitat parcel can be assigned. The 3 main category types can be assessed by the statutory biodiversity metric condition assessments and are applicable in the pre-development, pre-habitat intervention and post-development, post-habitat intervention calculations. The intermediate categories should only be used for the post-development, post-habitat enhancement calculations if ecologically justified.

The intermediate categories are not applicable to hedgerow biodiversity unit calculations.

Certain habitat types do not require a condition assessment (Annex 1 – AHBUs condition information). These either score 1 when they have low biodiversity value or score 0 when they have no biodiversity value.

Most habitats in the statutory biodiversity metric (small sites) are assigned a moderate condition at baseline, some are assigned a poor condition, or ‘Condition Assessment N/A’ and ‘N/A Other’. At post-development or post-intervention, good or moderate condition can be chosen for most habitats except the few that are fixed at poor condition, ‘Condition Assessment N/A’ and ‘N/A Other’ (see Annex 1.2, Annex 2.2 and Annex 3.3).

Table 3 Metric condition categories and scores

Condition category	Condition score applied in the metric	Category type
Good	3	Main
Fairly Good	2.5	Intermediate
Moderate	2	Main
Fairly Poor	1.5	Intermediate
Poor	1	Main
Condition Assessment N/A	1	Main
N/A – Other	0	Main

Formula input symbol

AHBUs	HBUs	WBUs
Q_C	Q_C	Q_C

2.4.3. Strategic significance

Definition

A measure of habitat quality. Strategic significance describes the local significance of the habitat based on its location and the habitat type.

How it is measured

Relevant published Local Nature Recovery Strategy (LNRS) and the descriptions set out in table 4 should be used to assign strategic significance.

Each individual habitat parcel should be assessed, both at baseline and at post-intervention, for on-site and off-site. Habitat parcels should be split where they are intersected by:

- a boundary between two areas of different strategic significance
- a planning authority boundary

Strategic significance should be assigned for offsite habitats using relevant local documents for the off-site location rather than the on-site development location.

If an LNRS has not yet been published, a relevant planning authority should specify alternative documents for assigning strategic significance whilst an LNRS is put in place. Examples include:

- Draft Local Nature Recovery Strategies
- Local Plans and Neighbourhood Plans
- Local Planning Authority Local Ecological Networks
- Tree Strategies
- Area of Outstanding Natural Beauty Management Plans
- Biodiversity Action Plans
- Species conservation and protected sites strategies
- Woodland strategies
- Green Infrastructure Strategies
- River Basin Management Plans
- Catchment Plans and Catchment Planning Systems
- Shoreline management plans
- Estuary Strategies

Score applied in the statutory biodiversity metric

Table 4 Metric strategic significance categories, scores, and descriptions

Strategic significance category	Score applied in the metric	Description
High	1.15	Where there is a published LNRS, • the location of the habitat parcel has been mapped in the Local Habitat Map as an area where a potential measure has been proposed to help deliver the priorities of that LNRS; and • the intervention is consistent with the potential measure proposed for that location or Where there is no published LNRS and the habitat type is mapped and described as locally ecologically important within a specific location, within documents specified by the relevant planning authority.

Strategic significance category	Score applied in the metric	Description
		If your project delivers the mapped measure set out in the LNRS or alternative strategy (where the LNRS is not yet available) you should: • record strategic significance as low in the baseline • record strategic significance as high in post-intervention sheets
Medium	1.10	This category cannot be applied where the LNRS is published, or where the habitat and location is included within other strategic documents specified by the relevant planning authority. Users should: • explain how the habitat type is ecologically important within a specific location • demonstrate the importance of that habitat in providing ecological linkage to other strategically significant locations • use professional judgement
Low	1	Where the definitions for high and medium strategic significance are not met.

Formula input symbol

AHBUs	HBUs	WBUs
Q_{ss}	Q_{ss}	Q_{ss}

2.4.4. Riparian zone encroachment

Definition

The riparian zone is a set area from the bank top of the watercourse, which is the point where there is a break in slope between the river channel and the surrounding land.

Riparian zone encroachment is any feature or intervention within the riparian zone that reduces the quantity, quality, or ecological function of the riparian habitat.

This includes:

- existing buildings or hardstanding
- management practice (including agriculture)
- structures that prevent wildlife from accessing the riverbank
- created footpaths and new river crossings

The following features are exempt:

- established canal or river navigation towpaths
- established footpaths and existing river crossings
- existing small amenity features and utility units where the total footprint is less than 5% of the riparian zone area

The definitions provided in table 6 below should be used to assign encroachment. Encroachment features outside of the project boundary can be assessed from either bank. Users should:

- conduct assessments for each watercourse section entered into the metric
- assess the left-hand bank
- assess the river hand bank
- conduct assessments for each watercourse section entered into the metric
- combine the results of each assessments and enter the combination of results within the biodiversity metric calculation tool for each watercourse section

Table 5 Watercourse habitat type, riparian zone habitat categories and widths

Watercourse habitat type	Riparian zone habitat category	Riparian zone width
Priority rivers	Rivers and canals	10m from the top of each bank
Other rivers and streams	Rivers and canals	10m from the top of each bank
Canals	Rivers and canals	10m from the top of each bank
Ditches	Ditches	5m from the top of each bank
Culverts	Not applicable	Not applicable

How it is measured

Where there are area habitats or hedgerows within the site boundary, that overlap with the riparian zone, these must be recorded and assessed separately within the area or hedgerow parts of the biodiversity metric calculation tool.

Riparian zone encroachment is measured at both banks. A category is selected for each bank, and entered into the biodiversity metric calculation tool, which multipliers the final two categories together to generate the final metric multiplier.

Table 6 Riparian zone encroachment band and descriptions

Riparian zone encroachment band for a bank	Definition for rivers, streams and canals	Definition for Ditches
No encroachment	No encroachment within 10 metres of bank top	No encroachment within 5 metres of bank top
Minor	Any encroachment 8 to 10 metres from the bank top (covering up to 100% of area); or where the footprint of encroachment occupies 0-10% of the riparian zone area 4 to 10 metres from bank top	Any encroachment 4 to 5 metres from the bank top (covering up to 100% of area); or where the footprint of encroachment occupies 0-10% of the riparian zone area 2 to 5 metres from bank top
Moderate	Where the footprint of encroachment occupies between 10% to 25% of the riparian zone area 4 to 10 metres from the bank top	Where the footprint of encroachment occupies between 10% to 25% of the riparian zone area 2 to 5 metres from the bank top
Major	Any encroachment 0 to 4 metres from the bank top; or Where encroachment occupies greater than 25% of the total riparian zone area	Any encroachment 0 to 2 metres from the bank top; or Where encroachment occupies greater than 25% of the total riparian zone area

Score applied in the statutory biodiversity metric

Once a category has been assigned for both banks, the final multiplier can be identified. The higher the encroachment, the lower the multiplier.

Table 7 Riparian encroachment for both banks

	Major	Moderate	Minor	No encroachment
Major	0.75	0.8	0.84	0.87
Moderate	-	0.85	0.9	0.92
Minor	-	-	0.95	0.98
No encroachment	-	-	-	1

Formula input symbol

AHBUs	HBUs	WBUs
-	-	R_{RE}

2.4.5. Watercourse encroachment

Definition

Any feature that adversely affects the natural function of the watercourse resulting in localised changes in habitat, species, and the use of migratory pathways.

How it is measured

The descriptions in Table 8 should be used to assign watercourse encroachment for watercourse sections.

The encroachment bands are determined by the percentage of the bank length comprised of engineered bank revetment or percentage of channel encroachment across total width of the channel.

Score applied in the statutory biodiversity metric

Features that are, or have been, introduced to restore the 'condition' of the river, or reinstate natural riverine processes as encroachment should not be recorded. Examples include woody beaver dams and soft bank revetment such as coir rolls, willow spiling or floating islands.

Table 8 Watercourse encroachment bands, descriptions, and scores

Watercourse encroachment band	Watercourse encroachment score applied in the metric	Description
No encroachment	1.0	Less than 5% of the bank length comprises an engineered bank revetment **and** there is no encroachment into the channel
Minor	0.8	Between 5% to 20% of the bank length comprises an engineered bank revetment **or** there is channel encroachment across up to 10% of the channel width at any one point
Major	0.5	More than 20% of the bank length comprises an engineered bank revetment **or** there is channel encroachment across more than 10% of the channel width at any one point

Formula input symbol

AHBUs	HBUs	WBUs
-	-	R_{WE}

2.5. Risk multiplier inputs

To account for the risks of successfully creating new habitats and enhancing existing habitats, multipliers for difficulty and time required are incorporated into the post-development, post-intervention formulae.

2.5.1. Difficulty of creation and enhancement

Definition

This is applied to represent the uncertainty in the effectiveness of management techniques used to create or enhance habitat.

How it is measured

Each habitat was assessed as part of development of the statutory biodiversity metric to determine the difficulty of creating or enhancing it based on the following influencing factors such as:

- hydrological requirements
- seed source or biological material requirements
- low soil nutrient status (terrestrial only)
- ongoing management requirements
- water quality needs
- trophic status conditions (aquatic only)
- salinity regime (intertidal habitats only)
- elevation and aspect (intertidal habitats only)

Score applied in the statutory biodiversity metric

The values for difficulty are fixed values for specific habitat types. Each habitat type has separate values for creation and enhancement. The impact of the multiplier increases with delivery risk.

The score for each habitat is shown in Annex 1.1, Annex 2.1, and Annex 3.2.

Table 9 Difficulty and creation and enhancement category and score

Difficulty in creation and enhancement category	Difficulty in creation and enhancement score applied in the metric
Very high	0.1
High	0.33
Medium	0.67
Low	1

Formula input symbol

AHBUs	HBUs	WBUs
R_D	R_D	R_D

2.5.2. Time to target condition

Definition

Time to target condition represents the average time taken (in years) from starting habitat creation or enhancement to that habitat reaching its target condition and distinctiveness. This number of years differs for each habitat type and target condition, and depend on:

- whether it is created or enhanced
- what the baseline habitat is that will be enhanced to the target habitat

These values are averages based on evidence and technical expertise, and a discount rate of 3.5%[8] is applied.

How it is measured

Time to target condition is determined by distinctiveness and the proposed condition of a habitat.

[8] Social Time Preference Rate (STRP) is 3.5% as set out in The Green Book (2022) HMT.

Users can alter the time to target condition, and the resulting score, based on whether a habitat was created or enhanced in advance of development, or there is a delay in creating the habitat after destruction of existing habitats. This is known as ‘habitat created in advance or delay’. If there is no change to when a habitat is created or enhanced, the standard time to target condition is applied.

Score applied in the statutory biodiversity metric

The values for time to target condition are fixed within a set range from 0 to more than 30 years (see table 10). The impact of the multiplier increases proportionate to the time taken to reach target condition.

Table 10 Time to target condition values applied in the metric

Year	Time to target Multiplier
0	1.000
1	0.965
2	0.931
3	0.899
4	0.867
5	0.837
6	0.808
7	0.779
8	0.752
9	0.726
10	0.700
11	0.676

Year	Time to target Multiplier
12	0.652
13	0.629
14	0.607
15	0.586
16	0.566
17	0.546
18	0.527
19	0.508
20	0.490
21	0.473
22	0.457
23	0.441
24	0.425
25	0.410
26	0.396
27	0.382
28	0.369
29	0.356
30	0.343

Year	Time to target Multiplier
31	0.331
30+	0.320
-	N/A

Formula input symbol

AHBUs	HBUs	WBUs
R_T	R_T	R_T

2.5.3. Spatial risk

Definition

Applied to off-site calculations only. Spatial risk reflects the relationship between the locations where a biodiversity loss is occurring and where the off-site habitat is being delivered.

How it is measured

The values for spatial risk multipliers are fixed within a set range and represent the relationship between the location of biodiversity loss and where the off-site habitat is being delivered.

Score applied in the statutory biodiversity metric

The scores are only applied in the main statutory biodiversity metric calculation tool. Spatial risk categories are selected for each habitat parcel in the pre-habitat intervention and post-habitat intervention, allowing the statutory biodiversity metric calculation tool to apply a deduction based on the location comparatively to the development (see table 11).

The statutory biodiversity metric (small sites) does not calculate off-site gains. If small sites want to calculate off-site gains, the off-site provider will need to calculate this in a separate main statutory biodiversity metric calculation tool.

Table 11 Spatial risk multiplier category and the value applied in the statutory biodiversity metric only

Spatial risk category	Spatial risk score applied in the metric	AHBUs and HBUs	WBUs
Within	1.0	• Within Local Planning Authority (LPA) boundary or National Character Area (NCA) of impact site Intertidal habitats: • Within Marine Plan Area of impact site	Within waterbody catchment
Neighbouring	0.75	• Outside LPA or NCA of impact site, but within neighbouring LPA or NCA Intertidal habitats: • Outside Marine Plan Area of impact site, but within neighbouring Marine Plan Area	Outside waterbody catchment, but within operational catchment
Outside	0.5	• Outside LPA or NCA of impact site and outside neighbouring LPA or NCA Intertidal habitats: • Outside Marine Plan Area of impact site and outside	Outside operational catchment

Spatial risk category	Spatial risk score applied in the metric	AHBUs and HBUs	WBUs
		neighbouring Marine Plan Area	

Formula input symbol

AHBUs	HBUs	WBUs
R_{OS}	R_{OS}	R_{OS}

3. Statutory biodiversity metric formulae

3.1. Habitat interventions

The statutory biodiversity metric formulae calculate a change in biodiversity value on-site, off-site, and overall (the difference between the off-site unit change and on-site unit change). The statutory biodiversity metric can then calculate the net percentage change in biodiversity units.

The statutory biodiversity metric accounts for various habitat interventions such as retention, enhancement, and creation.

3.1.2. Habitat retention

Habitat retention should be chosen when:

- there is no loss of habitat,
- habitat is retained in its baseline habitat type and condition,
- and there is no action to enhance the habitat.

Habitats subject to retention may still require ongoing intervention to maintain their baseline habitat type and condition. Where the condition of retained habitat cannot be maintained or enhanced over the project timeframe, users should:

- record the habitat as lost,
- record the same area and habitat type as created (in a lower condition)
- set the ‘habitat created in advance’ function to 30 plus years,
- and provide ecological reasoning.

Formula input symbol

AHBUs	HBUs	WBUs
rA	rL	rL

3.1.3. Habitat enhancement

Habitat enhancement should be selected where the habitat is retained and there is:

- an improvement in condition compared to the baseline,
- a change to a higher distinctiveness habitat within the same broad habitat group compared to the baseline,

- a restoration of relict high or very high distinctiveness habitats,
- or restoration of intertidal habitats or coastal processes which have been historically lost

When recording enhancement, measures should be taken to ensure condition stays the same or improves, including when enhancing to a higher distinctiveness habitat.

3.1.4. Habitat creation

Habitat creation should be chosen for area habitat and hedgerow habitats[9] where there is:

- a loss of baseline habitat (and it is replaced with another),
- or a change in broad habitat type, such as a change from grassland to woodland

Formula input symbols

Table 12 Data input symbols for all the metric formulae for calculating biodiversity units

Input symbol	Definition	Data value type	Biodiversity units
t0	Pre-development, Pre-habitat intervention	Phase	All
t1	Post-development, Post-habitat intervention	Phase	All
A	Area of habitat (Hectares or metres squared)	Size	AHBU
L	Length of habitat (Kilometres or metres)	Size	HBU WBU
r	Retained habitat	Habitat intervention	All

[9] Watercourse definition for habitat creation varies and is provided for in the Statutory biodiversity metric user guide

Input symbol	Definition	Data value type	Biodiversity units
Q_D	Distinctiveness	Habitat quality	All
Q_C	Condition	Habitat quality	All
Q_{SS}	Strategic significance	Habitat quality	All
R_D	Difficulty of creation or enhancement	Risk multiplier	All
R_T	Time to target condition	Risk multiplier	All
R_{OS}	Spatial risk	Risk multiplier	All
R_{RE}	Riparian encroachment multiplier	Habitat quality	WBU
R_{WE}	Watercourse encroachment multiplier	Habitat quality	WBU

3.2. Statutory biodiversity metric calculation order

The statutory biodiversity metric calculations are carried out in a particular order, resulting in the final calculation of net biodiversity unit change, and the resulting net percentage change relative to the pre-development biodiversity value. The order of calculations is set out below:

1. Re-development baseline
2. Post development habitat creation or enhancement
3. Net change in on-site biodiversity units
4. Net percentage change in on-site biodiversity units relative to the on-site baseline

Where the off-site biodiversity units are also required for the project to meet the BNG requirement, the additional steps are required:

5. Pre-habitat intervention baseline
6. Post-habitat intervention creation or enhancement
7. Net change in off-site biodiversity units
8. Overall net change in on-site and off-site biodiversity units
9. Overall net percentage change in biodiversity units relative to the pre-development value

As well as the net change in biodiversity units for the project as a whole, the metric also calculates whether the trading rules have been met for each habitat present in the pre-development baseline.

3.3. On-site biodiversity value

On-site includes all land within the red line boundary of a planning application.

There are 4 on-site formulae for each type of biodiversity unit:

- pre-development (baseline) = value of the development site before works
- post-development (retained) = value of retained habitat on the development site
- post-development (creation) = value of proposed habitat creation on the development site
- post-development (enhancement) = value of the proposed habitat enhancements through improvements to existing habitats on the development site

Table 13 Metric formulae for calculating on-site area habitat biodiversity units (AHBUs)

Formula title	Equation	Simplified equation
Pre-development AHBUs	$t_0\ Baseline\ AHBU\ =\ (A^{t0} \times Q_D^{t0} \times Q_C^{t0}) \times (Q_{SS}^{t0})$ This equation shows how the statutory biodiversity metric calculates area habitat biodiversity units on-site pre-development (baseline)	(Pre-development Area of habitat x Pre-development distinctiveness x Pre-development condition) x (Pre-development strategic significance)
Post-development creation AHBUs	$t_1\ Creation\ AHBU\ =\ \{[A^{t1} \times Q_D^{t1} \times Q_C^{t1}] \times [R_D\ \times R_T\ ][Q_{SS}^{t1}]\}$ This equation shows how the statutory biodiversity metric calculates area habitat biodiversity units for habitat creation on-site post-development.	{[Post-development area of habitat x Post-development distinctiveness x Post-development condition] x [Difficulty risk x Time to target condition risk] x [Post-development strategic significance]}
Post-development retained AHBUs	$t1\ Retained\ AHBU\ =\ \ (rA^{t1} \times Q_D^{t0} \times Q_C^{t0}) \times (Q_{SS}^{t0})$ This equation shows how the statutory biodiversity metric calculates area habitat biodiversity units for retained habitats on-site post-development.	(Post-development retained Area of habitat x Post-development distinctiveness x Post-development condition) x (Post-development strategic significance)
Post-development enhancement AHBUs	$t1\ Enhancement\ AHBU\ =\ \big[[([\{A^{t1} \times Q_D^{t1} \times Q_C^{t1}\} - \{A^{t1} \times Q_D^{t0} \times Q_C^{t0}\}] \times \{R_D \times R_T\}) + \{A^{t1} \times Q_D^{t0} \times Q_C^{t0}\}] \times \{Q_{SS}^{t1}\}\big]$ This equation shows how the statutory biodiversity metric calculates area habitat biodiversity units for habitat enhancement on-site post-development.	[[([{Post-development Area of habitat x Post-development distinctiveness x Post-development condition} – {Post-development Area of habitat x Pre-development distinctiveness x Pre-development condition}] x {Difficulty risk x Time to target condition risk}) + {Post-development area x Pre-development distinctiveness x Pre-development condition}] x {Post-

Formula title	Equation	Simplified equation
		development strategic significance}]

Table 14 On-site hedgerow biodiversity units (HBUs)

Formula title	Equation	Simplified equation
Pre-development HBUs	$t_0\ Baseline\ HBU\ =\ (L^{t0} \times Q_D^{t0} \times Q_C^{t0}) \times (Q_{SS}^{t0})$ This equation shows how the statutory biodiversity metric calculates hedgerow biodiversity units on-site pre-development (baseline)	(Pre-development Length x Pre-development distinctiveness x Pre-development condition) x (Pre-development strategic significance)
Post-development creation HBUs	$t_1\ Creation\ HBU = \{[L^{t1} \times Q_D^{t1} \times Q_C^{t1}] \times [R_D^{t1} \times R_T^{t1}] \times [Q_{SS}^{t1}]\}$ This equation shows how the statutory biodiversity metric calculates hedgerow biodiversity units for habitat creation on-site post-development.	{[Post-development Length x Post-development distinctiveness x Post-development condition] x [Difficulty risk x Time to target condition risk] x [Post-development strategic significance]}
Post-development retained HBUs	$t1\ Retained\ HBU = (rL^{t1} \times Q_D^{t0} \times Q_C^{t0}) \times (Q_{SS}^{t0}) -\ t_0\ HBU$ This equation shows how the statutory biodiversity metric calculates hedgerow biodiversity units for retained habitats on-site post-development.	Post-development retained Length x Post-development distinctiveness x Post-development condition) x (Post-development strategic significance)
Post-development enhancement HBUs	$t_1 Enhancement\ HBU = \{[([\{L^{t1} \times Q_D^{t1} \times Q_C^{t1}\} - \{L^{t1} \times Q_D^{t0} \times Q_C^{t0}\}] \times \{R_D \times R_T\}) + \{L^{t1} \times Q_D^{t0} \times Q_C^{t0}\}] \times Q_{ss}^{t1}\}$	{[([{Post-development Length x Post-development distinctiveness x Post-development condition} – {Post-development Length x Pre-development

Formula title	Equation	Simplified equation
	This equation shows how the statutory biodiversity metric calculates hedgerow biodiversity units for habitat enhancement on-site post-development.	distinctiveness x Pre-development condition}] x {Difficulty risk x Time to target condition risk}) + {Post-development Length x Pre-development distinctiveness x Pre-development condition}] x Post-development strategic significance}

Table 15 Metric formulae for calculating watercourse biodiversity units (WBUs)

Formula title	Equation	Simplified equation
Pre-development WBUs	$t_0\ Baseline\ WBU = (L^{t0} \times Q_D^{t0} \times Q_C^{t0} \times Q_{SS}^{t0}) \times R_{RE}^{t0} \times R_{WE}^{t0}$ This equation shows how the statutory biodiversity metric calculates watercourse biodiversity units on-site pre-development (baseline)	(Pre-development Length x Pre-development distinctiveness x Pre-development condition x Pre-development strategic significance) x Pre-development Riparian encroachment x Pre-development Watercourse encroachment
Post-development creation WBUs	$t1\ Creation\ WBU = [L^{t1} \times Q_D^{t1} \times Q_C^{t1} \times Q_{SS}^{t1}] \times [R_D \times R_T] \times [R_{RE}^{t1} \times R_{WE}^{t1}]$ This equation shows how the statutory biodiversity metric calculates watercourse biodiversity units for habitat creation on-site post-development.	{[Post-development Length x Post-development distinctiveness x Post-development condition x Post-development strategic significance] x [Difficulty risk x Time to target condition risk] x [Post-development Riparian encroachment x Post-development Watercourse encroachment]
Post-development retained WBUs	$t1\ Retained\ WBU = (rL^{t1} \times Q_D^{t0} \times Q_C^{t0}) \times (Q_{SS}^{t0}) \times R_{RE}^{t0} \times R_{WE}^{t0}$ This equation shows how the statutory biodiversity metric	(Post-development retained Length x Post-development distinctiveness x Post-development condition) x (Post-development strategic significance) x Post-development Riparian encroachment x Post-

Formula title	Equation	Simplified equation
	calculates watercourse biodiversity units for retained habitats on-site post-development.	development Watercourse encroachment
Post-development enhancement WBUs	$t1\ Enhancement\ WBU\ =$ $\{[([\{L^{t1} \times Q_D^{t1} \times Q_C^{t1}\} - \{L^{t1} \times Q_D^{t0} \times Q_C^{t0}\}] \times \{R_D \times R_T\}) + \{L^{t1} \times Q_D^{t0} \times Q_C^{t0}\}] \times Q_{SS}^{t1}\} \times [R_{RE}^{t1} \times R_{WE}^{t1}]$ This equation shows how the statutory biodiversity metric calculates watercourse biodiversity units for habitat enhancement on-site post-development.	[[([{Post-development Length x Post-development distinctiveness x Post-development condition} – {Post-development Length x Pre-development distinctiveness x Pre-development condition}] x {Difficulty risk x Time to target condition risk}) + {Post-development Length x Pre-development distinctiveness x Pre-development condition}] x Post-development strategic significance} x [Post-development Riparian encroachment multiplier x Post-development Watercourse encroachment]

3.4. Off-site biodiversity value

Off-site includes all land outside of the on-site boundary being used to deliver off-site BNG, regardless of ownership.

There are 4 off-site formulae for each type of biodiversity unit:

- pre-habitat intervention (baseline) = value of the off-site land before habitat enhancement works
- post-habitat intervention (retained) = value of retained habitat on the off-site land
- post-habitat intervention (creation) = value of proposed habitat creation on the off-site land
- post-habitat intervention (enhancement) = value of the proposed habitat enhancements through improvements to existing habitats on the off-site land

Table 16 Off-site area habitat biodiversity units (AHBUs)

Formula title	Equation	Simplified equation
Off-site pre-habitat intervention AHBUs	$t_0\ Off-site\ \ BaselineAHBU\ = (A^{t0} \times Q_D^{t0} \times Q_C^{t0}) \times (Q_{SS}^{t0}) \times R_{OS}$ This equation shows how the statutory biodiversity metric calculates area habitat biodiversity units off-site pre-habitat intervention (baseline)	(Pre-habitat intervention Area of habitat x Pre-habitat intervention distinctiveness x Pre-habitat intervention condition) x (Pre-habitat intervention strategic significance) x Spatial risk
Off-site post-habitat intervention creation AHBUs	$t_1\ Off-site\ creation\ AHBU\ = \{[A^{t1} \times Q_D^{t1} \times Q_C^{t1}] \times [R_D \times R_T] \times [Q_{SS}^{t1}]\} \times R_{OS}$ This equation shows how the statutory biodiversity metric calculates area habitat biodiversity units for habitat creation off-site post-habitat intervention.	{[Post-habitat intervention Area of habitat x Post-habitat intervention distinctiveness x Post-habitat intervention condition] x [Difficulty risk x Time to target condition risk] x [Post-habitat intervention strategic significance]} x Spatial risk
Off-site post-habitat intervention retained AHBUs	$t1\ Off-site\ retained\ AHBU = (rA^{t1} \times Q_D^{t1} \times Q_C^{t1}) \times (Q_{SS}^{t1}) \times R_{OS}$ This equation shows how the statutory biodiversity metric calculates area habitat biodiversity units for retained habitats off-site post-habitat intervention.	(Post-habitat intervention retained Area of habitat x Post-habitat intervention distinctiveness x Post-habitat intervention condition) x (Post-habitat intervention strategic significance) x Spatial Risk
Off-site post-habitat intervention enhancement AHBUs	$t1\ Off-site\ Enhancement\ AHBU\ = \left[[([\{A^{t1} \times Q_D^{t1} \times Q_C^{t1}\} - \{A^{t1} \times Q_D^{t0} \times Q_C^{t0}\}] \times \{R_D \times R_T\}) + \{A^{t1} \times Q_D^{t0} \times Q_C^{t0}\}] \times \{Q_{SS}^{t1}\}\right] \times R_{OS}$ This equation shows how the statutory biodiversity metric calculates area habitat biodiversity	[[([{Post-habitat intervention Area of habitat x Post-habitat intervention distinctiveness x Post-habitat intervention condition} – {Post-habitat intervention Area of habitat x Pre-habitat intervention distinctiveness x Pre-habitat intervention condition}] x {Difficulty risk x Time to target condition risk}) + {Post-habitat

Formula title	Equation	Simplified equation
	units for habitat enhancement off-site post-habitat intervention.	intervention area x Pre-habitat intervention distinctiveness x Pre-habitat intervention condition}] x {Post-habitat intervention strategic significance}] x Spatial risk

Table 17 Off-site hedgerow biodiversity units (HBUs)

Formula title	Equation	Simplified equation
Off-site Pre-habitat intervention HBUs	$t_0\ Off-site\ Baseline\ HBU = (L^{t0} \times Q_D^{t0} \times Q_C^{t0}) \times (Q_{SS}^{t0}) \times R_{OS}$ This equation shows how the statutory biodiversity metric calculates hedgerow biodiversity units pre-habitat intervention (baseline)	(Pre-habitat intervention Length x Pre-habitat intervention distinctiveness x Pre-habitat intervention condition) x (Pre-habitat intervention strategic significance) x Spatial risk
Off-site post-habitat intervention creation HBUs	$t_1\ Off-site\ Creation\ HBU = \{[L^{t1} \times Q_D^{t1} \times Q_C^{t1}] \times [R_D \times R_T] \times [Q_{SS}^{t1}]\} \times R_{OS}$ This equation shows how the statutory biodiversity metric calculates hedgerow biodiversity units for habitat creation off-site post-habitat intervention.	{[Post-habitat intervention Length x Post-habitat intervention distinctiveness x Post-habitat intervention condition] x [Difficulty risk x Time to target condition risk] x [Post-habitat intervention strategic significance]} x Spatial risk
Off-site Post-habitat intervention retained HBUs	$t1\ Off-site\ Retained\ HBU = (rL^{t1} \times Q_D^{t1} \times Q_C^{t1}) \times (Q_{SS}^{t1}) \times R_{OS}$ This equation shows how the statutory biodiversity metric calculates hedgerow biodiversity units for retained habitats off-site post-habitat intervention.	(Post-habitat intervention retained Length x Post-habitat intervention distinctiveness x Post-habitat intervention condition) x (Post-habitat intervention strategic significance) x spatial risk

Formula title	Equation	Simplified equation
Off-site post-habitat intervention enhancement HBUs	$t1\ Off-site\ Enhancement\ HBU = \left[[([\{L^{t1} \times Q_D^{t1} \times Q_C^{t1}\} - \{L^{t1} \times Q_D^{t0} \times Q_C^{t0}\}] \times \{R_D \times R_T\}) + \{L^{t1} \times Q_D^{t0} \times Q_C^{t0}\}] \times \{Q_{SS}^{t1}\}\right] \times R_{OS}$ This equation shows how the statutory biodiversity metric calculates hedgerow biodiversity units for habitat enhancement off-site post-habitat intervention.	[[([{Post-habitat intervention Length x Post-habitat intervention distinctiveness x Post-habitat intervention condition} – {Post-habitat intervention Length x Pre-habitat intervention distinctiveness x Pre-habitat intervention condition}] x {Difficulty risk x Time to target condition risk}) + {Post-habitat intervention Length x Pre-habitat intervention distinctiveness x Pre-habitat intervention condition}] x {Post-habitat intervention strategic significance}] x Spatial risk

Table 18 Off-site watercourse biodiversity units (WBUs)

Formula title	Equation	Simplified equation
Off-site Pre-habitat intervention WBUs	$t_0\ Off-site\ Baseline\ WBU = (L^{t0} \times Q_D^{t0} \times Q_C^{t0} \times Q_{SS}^{t0}) \times [R_{RE}^{t0} \times R_{WE}^{t0}] \times R_{OS}$ This equation shows how the statutory biodiversity metric calculates watercourse biodiversity units pre-habitat intervention (baseline)	(Pre-habitat intervention Length x Pre-habitat intervention distinctiveness x Pre-habitat intervention condition x Pre-habitat intervention strategic significance) x [Post-development Riparian encroachment x Post-development Watercourse encroachment] x Spatial risk
Off-site post-habitat intervention creation WBUs	$t_1\ Off-site\ Creation\ WBU = \{[L^{t1} \times Q_D^{t1} \times Q_C^{t1} \times Q_{SS}^{t1}] \times [R_D \times R_T] \times [R_{RE}^{t1} \times R_{WE}^{t1}]\} \times R_{OS}$ This equation shows how the statutory biodiversity metric calculates watercourse biodiversity	{[Post-habitat intervention Length x Post-habitat intervention distinctiveness x Post-habitat intervention condition x Post-habitat intervention strategic significance] x [Difficulty risk x Time to target condition risk] x

Formula title	Equation	Simplified equation
	units for habitat creation off-site post-habitat intervention.	[Post-development Riparian encroachment multiplier x Post-development Watercourse encroachment]} x Spatial risk
Off-site post-habitat retained WBUs	$t1\ Retained\ WBU = (rL^{t1} \times Q_D^{t0} \times Q_C^{t0}) \times (Q_{SS}^{t0}) \times (R_{RE}^{t0} \times R_{WE}^{t0}) \times R_{OS}$ This equation shows how the statutory biodiversity metric calculates watercourse biodiversity units for retained habitats off-site post-habitat intervention.	(Post-development retained Length x Post-development distinctiveness x Post-development condition) x (Post-development strategic significance) x (Post-development Riparian encroachment x Post-development Watercourse encroachment) x Spatial risk
Off-site post-habitat intervention enhancement WBUs	$t1\ Off - site\ Enhancement\ WBU = \{[([\{L^{t1} \times Q_D^{t1} \times Q_C^{t1}\} - \{L^{t0} \times Q_D^{t0} \times Q_C^{t0}\}]\{R_D \times R_T\}) + \{L^{t0} \times Q_D^{t0} \times Q_C^{t0}\}] \times Q_{SS}^{t1}\} \times [R_{RE}^{t1} \times R_{WE}^{t1}]\ X\ Ros$ This equation shows how the statutory biodiversity metric calculates watercourse biodiversity units for habitat enhancement off-site post-habitat intervention.	[[([{Post-habitat intervention Length x Post-habitat intervention distinctiveness x post-habitat intervention condition} – {Pre-habitat intervention Length x Pre-habitat intervention distinctiveness x Pre-habitat intervention condition}] x {Difficulty risk x Time to target condition risk}) + {Pre-habitat intervention Length x Pre-habitat intervention distinctiveness x Pre-habitat intervention condition}] x {Post-habitat intervention strategic significance} x [Post-development Riparian encroachment multiplier x Post-development Watercourse encroachment] x Spatial risk

3.5. Change in biodiversity value

To calculate total change in biodiversity value, the difference in biodiversity value for on-site and off-site (where relevant) are needed for each type of biodiversity unit:

- On-site biodiversity unit change = difference between the post-development and pre-development biodiversity value on-site
- Off-site biodiversity unit change = difference between the post-habitat intervention and pre-habitat intervention biodiversity value off-site
- Total unit change = difference between the off-site unit change and on-site unit change

Off-site biodiversity units cannot be calculated within the statutory biodiversity metric (small sites). The change in biodiversity value for small sites is therefore only applicable to the change in on-site biodiversity value. If small sites need to calculate off-site units, the off-site provider will need to use the main statutory calculation tool and total unit change can be summarised within the biodiversity gain plan.

If the change in biodiversity value for on-site small developments is below the 10% BNG objective, the off-site unit change is calculated in a separate statutory biodiversity metric.

Table 19 Change in area habitat biodiversity unit (AHBU) value

Formula title	Equation	Simplified equation
On-site AHBU change	On-site AHBU change = ({t1 Enhancement AHBU + t1 Creation AHBU + t1 Retained AHBU} - {t0 Pre-development AHBU}) This equation shows how the on-site change in area habitat biodiversity units is calculated.	Post-development enhancement area habitat biodiversity units + Post-development creation area habitat biodiversity units + Post-development retained area habitat biodiversity units} – {Pre-development units})
Off-site AHBU change	Off-site AHBU change = ({t1 Off-site enhancement AHBU + t1 Off-site creation AHBU + t1 Off-site retained AHBU} - {t0 Pre-habitat intervention AHBU}) This equation shows how the off-site change in area habitat biodiversity units is calculated.	({Post-habitat intervention off-site enhancement area habitat biodiversity units + Post-habitat intervention off-site creation area habitat biodiversity units + Post-habitat intervention off-site retained area habitat biodiversity units}

Formula title	Equation	Simplified equation
		– {Pre-habitat intervention area habitat biodiversity units})
Total AHBU change	Total AHBU change = On-site AHBU change + Off-site AHBU change This equation shows how the total change in area habitat biodiversity units is calculated.	On-site Area habitat biodiversity unit change + Off-site Area habitat biodiversity unit change

Table 20 Change in hedgerow biodiversity unit (HBU) value

Formula title	Equation	Simplified equation
On-site HBU change	On-site HBU change = ({t1 Enhancement HBU + t1 Creation HBU + t1 Retained HBU} - {t0 Pre-development HBU}) This equation shows how the on-site change in hedgerow biodiversity units is calculated.	({Post-development enhancement hedgerow biodiversity units + Post-development creation hedgerow biodiversity units + Post-development retained hedgerow biodiversity units} – {Pre-development hedgerow biodiversity units})
Off-site HBU change	Off-site HBU change = ({t1 Off-site Enhancement HBU + t1 Off-site Creation HBU + t1 Off-site Retained HBU} - {t0 Pre-habitat intervention HBU}) This equation shows how the off-site change in hedgerow biodiversity units is calculated.	({Post-habitat intervention off-site enhancement hedgerow biodiversity units + Post-habitat intervention off-site creation hedgerow biodiversity units + Post-habitat intervention off-site retained hedgerow biodiversity units} – {Pre-habitat intervention hedgerow biodiversity units})
Total HBU change	Total HBU change = On-site HBU change + Off-site HBU change	On-site hedgerow biodiversity unit change + Off-site hedgerow biodiversity unit change

Formula title	Equation	Simplified equation
	This equation shows how the total change in hedgerow biodiversity units is calculated.	

Table 21 Change in watercourse biodiversity unit (WBU) biodiversity value

Formula title	Equation	Simplified equation
On-site WBU change	On-site WBU change = ({t1 Enhancement WBU + t1 Creation WBU + t1 Retained WBU} – {t0 Pre-development WBU}) This equation shows how the on-site change in watercourse biodiversity units is calculated.	({Post-development enhancement watercourse biodiversity units + Post-development creation watercourse biodiversity units + Post-development retained watercourse biodiversity units} – {Pre-development watercourse biodiversity units})
Off-site WBU change	Off-site WBU change = ({t1 Off-site Enhancement WBU + t1 Off-site Creation WBU + t1 Off-site Retained WBU} - {t0 Pre-habitat intervention WBU}) This equation shows how the off-site change in watercourse biodiversity units is calculated.	({Post-habitat intervention off-site enhancement watercourse biodiversity units + Post-habitat intervention off-site creation watercourse biodiversity units + Post-habitat intervention off-site retained watercourse biodiversity units } – {Pre-habitat intervention watercourse biodiversity units })
Total WBU change	Total WBU change = WBU Change + Off-site WBU Change This equation shows how the total change in watercourse biodiversity units is calculated.	On-site watercourse biodiversity unit change + Off-site watercourse biodiversity unit change

3.5.1. Net percentage change

The net biodiversity unit change is calculated to indicate whether there has been a net percentage increase or decrease in biodiversity units for each type (AHBUs, HBUs and WBUs). This is calculated relative to the pre-development baseline of each biodiversity unit type and the formulae for this are below:

- AHBU percentage change = Total AHBU change / On-site pre-development AHBUs x 100
- HBU percentage change = Total HBU change / On-site pre-development HBUs x 100
- WBU percentage change = Total WBU change / On-site pre-development WBUs x 100

Annex 1 AHBUs data

1.1. AHBUs distinctiveness information

Table 22 Coastal AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Coastal lagoons	Coastal lagoons	High	6	Same habitat required	Medium	0.67	Medium	0.67	No
Coastal saltmarsh	Coastal saltmarshes and saline reedbeds	High	6	Same habitat required	High	0.33	Medium	0.67	Yes/No
Coastal saltmarsh	Artificial saltmarshes and saline reedbeds	Low	2	Same distinctiveness or better habitat required	High	0.33	Medium	0.67	Yes/No

Table 23 Cropland AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Cropland	Arable field margins cultivated annually	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No
Cropland	Arable field margins game bird mix	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No
Cropland	Arable field margins pollen and nectar	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No
Cropland	Arable field margins tussocky	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No
Cropland	Cereal crops	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Cropland	Winter stubble	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Cropland	Horticulture	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Cropland	Intensive orchards	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Cropland	Non - cereal crops	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Cropland	Temporary grass and clover leys	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No

Table 24 Grassland AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Grassland	Traditional orchards	High	6	Same habitat required	Low	1	Medium	0.67	No
Grassland	Bracken	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Grassland	Floodplain wetland mosaic and CFGM	High	6	Same habitat required	High	0.33	Medium	0.67	No
Grassland	Lowland calcareous grassland	High	6	Same habitat required	High	0.33	High	0.33	No
Grassland	Lowland dry acid grassland	V.High	8	Same habitat required - bespoke compensation option	High	0.33	High	0.33	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Grassland	Lowland meadows	V.High	8	Same habitat required - bespoke compensation option	High	0.33	Medium	0.67	No
Grassland	Modified grassland	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Grassland	Other lowland acid grassland	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No
Grassland	Other neutral grassland	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No
Grassland	Tall herb communities (H6430)	High	6	Same habitat required	High	0.33	High	0.33	No
Grassland	Upland acid grassland	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Grassland	Upland calcareous grassland	High	6	Same habitat required	High	0.33	High	0.33	No
Grassland	Upland hay meadows	V.High	8	Same habitat required - bespoke compensation option	High	0.33	Medium	0.67	No

Table 25 Heathland and shrub AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Heathland and shrub	Blackthorn scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No
Heathland and shrub	Bramble scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Heathland and shrub	Gorse scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No
Heathland and shrub	Hawthorn scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No
Heathland and shrub	Hazel scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Medium	0.67	Low	1	No
Heathland and shrub	Lowland heathland	High	6	Same habitat required	High	0.33	Medium	0.67	No
Heathland and shrub	Mixed scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	No
Heathland and shrub	Mountain heaths and willow scrub	V.High	8	Same habitat required - bespoke compensation option	High	0.33	High	0.33	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Heathland and shrub	Rhododendron scrub	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Heathland and shrub	Dunes with sea buckthorn (H2160)	High	6	Same habitat required	Medium	0.67	Low	1	No
Heathland and shrub	Other sea buckthorn scrub	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Heathland and shrub	Willow scrub	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Medium	0.67	Low	1	No
Heathland and shrub	Upland heathland	High	6	Same habitat required	Medium	0.67	Medium	0.67	No

Table 26 Individual trees AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Individual trees	Urban tree	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	Yes/No
Individual trees	Rural tree	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	Yes/No

Table 27 Intertidal AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Intertidal sediment	Littoral coarse sediment	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Medium	0.67	Medium	0.67	No
Intertidal sediment	Littoral mud	High	6	Same habitat required	High	0.33	Medium	0.67	No
Intertidal sediment	Littoral mixed sediments	High	6	Same habitat required	High	0.33	Medium	0.67	No
Intertidal sediment	Littoral seagrass	High	6	Same habitat required	High	0.33	High	0.33	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Intertidal sediment	Littoral seagrass on peat, clay or chalk	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	High	0.33	No
Intertidal sediment	Littoral biogenic reefs - Mussels	High	6	Same habitat required	High	0.33	Medium	0.67	No
Intertidal sediment	Littoral biogenic reefs - Sabellaria	High	6	Same habitat required	High	0.33	Medium	0.67	No
Intertidal sediment	Features of littoral sediment	High	6	Same habitat required	High	0.33	Medium	0.67	No
Intertidal sediment	Artificial littoral coarse sediment	Low	2	Same distinctiveness or better habitat required	Medium	0.67	Medium	0.67	No
Intertidal sediment	Artificial littoral mud	Low	2	Same distinctiveness or better habitat required	High	0.33	Medium	0.67	No
Intertidal sediment	Artificial littoral sand	Low	2	Same distinctiveness or better habitat required	Medium	0.67	Medium	0.67	No
Intertidal sediment	Artificial littoral muddy sand	Low	2	Same distinctiveness or better habitat required	High	0.33	Medium	0.67	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Intertidal sediment	Artificial littoral mixed sediments	Low	2	Same distinctiveness or better habitat required	High	0.33	Medium	0.67	No
Intertidal sediment	Artificial littoral seagrass	Low	2	Same distinctiveness or better habitat required	High	0.33	High	0.33	No
Intertidal sediment	Artificial littoral biogenic reefs	Low	2	Same distinctiveness or better habitat required	High	0.33	Medium	0.67	No
Intertidal sediment	Littoral sand	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Medium	0.67	Medium	0.67	No
Intertidal sediment	Littoral muddy sand	High	6	Same habitat required	High	0.33	Medium	0.67	No
Intertidal hard structures	Artificial hard structures	Low	2	Same distinctiveness or better habitat required	Medium	0.67	Medium	0.67	No
Intertidal hard structures	Artificial features of hard structures	Low	2	Same distinctiveness or better habitat required	Medium	0.67	Medium	0.67	No
Intertidal hard structures	Artificial hard structures with integrated	Medium	4	Same broad habitat or a higher	Medium	0.67	Medium	0.67	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
	greening of grey infrastructure (IGGI)			distinctiveness habitat required					

Table 28 Lakes AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Lakes	Aquifer fed naturally fluctuating water bodies	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	High	0.33	No
Lakes	Ornamental lake or pond	Low	2	Same distinctiveness or better habitat required	Low	1	High	0.33	No
Lakes	High alkalinity lakes	High	6	Same habitat required	High	0.33	High	0.33	No
Lakes	Low alkalinity lakes	High	6	Same habitat required	High	0.33	Medium	0.67	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Lakes	Marl lakes	High	6	Same habitat required	High	0.33	High	0.33	No
Lakes	Moderate alkalinity lakes	High	6	Same habitat required	High	0.33	High	0.33	No
Lakes	Peat lakes	High	6	Same habitat required	High	0.33	High	0.33	No
Lakes	Ponds (priority habitat)	High	6	Same habitat required	Medium	0.67	Medium	0.67	No
Lakes	Ponds (non-priority habitat)	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Medium	0.67	No
Lakes	Reservoirs	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Medium	0.67	Medium	0.67	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Lakes	Temporary lakes ponds and pools (H3170)	High	6	Same habitat required	Medium	0.67	Medium	0.67	No

Table 29 Rocky shore AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Rocky shore	High energy littoral rock	High	6	Same habitat required	High	0.33	Medium	0.67	No
Rocky shore	High energy littoral rock - on peat, clay or chalk	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	Medium	0.67	No
Rocky shore	Moderate energy littoral rock	High	6	Same habitat required	High	0.33	Medium	0.67	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Rocky shore	Moderate energy littoral rock - on peat, clay or chalk	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	Medium	0.67	No
Rocky shore	Low energy littoral rock	High	6	Same habitat required	High	0.33	Medium	0.67	No
Rocky shore	Low energy littoral rock - on peat, clay or chalk	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	Medium	0.67	No
Rocky shore	Features of littoral rock	High	6	Same habitat required	High	0.33	Medium	0.67	No
Rocky shore	Features of littoral rock - on peat, clay or chalk	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	Medium	0.67	No

Table 30 Sparsely vegetated land AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Sparsely vegetated land	Calaminarian grasslands	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	Medium	0.67	No
Sparsely vegetated land	Coastal sand dunes	High	6	Same habitat required	Very High	0.1	Medium	0.67	Yes
Sparsely vegetated land	Coastal vegetated shingle	High	6	Same habitat required	Very High	0.1	Medium	0.67	No
Sparsely vegetated land	Ruderal/Ephemeral	Low	2	Same distinctiveness or better habitat required	Low	1	Medium	0.67	No
Sparsely vegetated land	Tall forbs	Low	2	Same distinctiveness or better habitat required	Low	1	Medium	0.67	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Sparsely vegetated land	Inland rock outcrop and scree habitats	High	6	Same habitat required	High	0.33	Low	1	No
Sparsely vegetated land	Limestone pavement	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	Medium	0.67	Yes
Sparsely vegetated land	Maritime cliff and slopes	High	6	Same habitat required	High	0.33	Medium	0.67	No
Sparsely vegetated land	Other inland rock and scree	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Medium	0.67	Medium	0.67	No

Table 31 Urban AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Urban	Allotments	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Urban	Artificial unvegetated, unsealed surface	V.Low	0	Compensation Not Required	Low	1	Low	1	No
Urban	Bioswale	Low	2	Same distinctiveness or better habitat required	Medium	0.67	Low	1	No
Urban	Intensive green roof	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Urban	Built linear features	V.Low	0	Compensation Not Required	Low	1	Low	1	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Urban	Cemeteries and churchyards	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Medium	0.67	Low	1	No
Urban	Developed land; sealed surface	V.Low	0	Compensation Not Required	Low	1	Low	1	No
Urban	Other green roof	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Urban	Façade-bound green wall	Low	2	Same distinctiveness or better habitat required	Medium	0.67	Medium	0.67	No
Urban	Ground based green wall	Low	2	Same distinctiveness or better habitat required	Medium	0.67	Medium	0.67	No
Urban	Ground level planters	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Urban	Biodiverse green roof	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Medium	0.67	Medium	0.67	No
Urban	Introduced shrub	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Urban	Open mosaic habitats on previously developed land	High	6	Same habitat required	Medium	0.67	Medium	0.67	No
Urban	Rain garden	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Urban	Actively worked sand pit quarry or open cast mine	Low	2	Same distinctiveness or better habitat required	Medium	0.67	Low	1	No
Urban	Sustainable drainage system	Low	2	Same distinctiveness or better habitat required	Medium	0.67	Medium	0.67	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Urban	Unvegetated garden	V.Low	0	Compensation Not Required	Low	1	Low	1	No
Urban	Vacant or derelict land	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Urban	Bare ground	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No
Urban	Vegetated garden	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	No

Table 32 Watercourse footprint AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Watercourse footprint	Watercourse footprint	V.low	0	Compensation Not Required	Low	1	Low	1	No

Table 33 Wetland AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Wetland	Blanket bog	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	High	0.33	Yes
Wetland	Depressions on peat substrates (H7150)	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	High	0.33	No
Wetland	Fens (upland and lowland)	V.High	8	Same habitat required - bespoke compensation option	High	0.33	High	0.33	Yes/No
Wetland	Lowland raised bog	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	High	0.33	Yes
Wetland	Oceanic valley mire[1] (D2.1)	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	High	0.33	No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Wetland	Purple moor grass and rush pastures	V.High	8	Same habitat required - bespoke compensation option	High	0.33	High	0.33	No
Wetland	Reedbeds	High	6	Same habitat required	Medium	0.67	Medium	0.67	No
Wetland	Transition mires and quaking bogs (H7140)	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	High	0.33	No

Table 34 Woodland and forest AHBU distinctiveness and difficulty

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Woodland and forest	Felled	High	6	Same habitat required	High	0.33	Low	1	Yes/No
Woodland and forest	Lowland beech and yew woodland	High	6	Same habitat required	High	0.33	High	0.33	Yes/No
Woodland and forest	Lowland mixed deciduous woodland	High	6	Same habitat required	High	0.33	High	0.33	Yes/No
Woodland and forest	Native pine woodlands	High	6	Same habitat required	High	0.33	High	0.33	Yes/No
Woodland and forest	Other coniferous woodland	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1	Yes/No
Woodland and forest	Other Scot's pine woodland	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Medium	0.67	Medium	0.67	Yes/No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Woodland and forest	Other woodland; broadleaved	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	Yes/No
Woodland and forest	Other woodland; mixed	Medium	4	Same broad habitat or a higher distinctiveness habitat required	Low	1	Low	1	Yes/No
Woodland and forest	Upland birchwoods	High	6	Same habitat required	Medium	0.67	Medium	0.67	Yes/No
Woodland and forest	Upland mixed ashwoods	High	6	Same habitat required	High	0.33	High	0.33	Yes/No
Woodland and forest	Upland oakwood	High	6	Same habitat required	High	0.33	High	0.33	Yes/No
Woodland and forest	Wet woodland	High	6	Same habitat required	Medium	0.67	Medium	0.67	Yes/No

Broad habitat type	Habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Difficulty of creation	Difficulty of creation multiplier	Difficulty of enhancement	Difficulty of enhancement multiplier	Irreplaceable Habitat status
Woodland and forest	Wood-pasture and parkland	V.High	8	Same habitat required - bespoke compensation option	Very High	0.1	High	0.33	Yes/No

1.2. AHBUs condition information

The following habitats do not require a condition assessment and are given standardised conditions and scores in the metric.

Table 35 AHBU condition information (habitats not requiring a condition assessment)

Broad habitat type	Habitat type	Condition category	Condition score
Woodland and forest	Felled	Good	3
Woodland and forest	Replacement for felled woodland	Good	3
Cropland	Arable field margins cultivated annually	Condition Assessment N/A	1
Cropland	Arable field margins game bird mix	Condition Assessment N/A	1
Cropland	Arable field margins pollen and nectar	Condition Assessment N/A	1
Cropland	Arable field margins tussocky	Condition Assessment N/A	1
Cropland	Cereal crops	Condition Assessment N/A	1
Cropland	Winter stubble	Condition Assessment N/A	1
Cropland	Horticulture	Condition Assessment N/A	1
Cropland	Intensive orchards	Condition Assessment N/A	1
Cropland	Non-cereal crops	Condition Assessment N/A	1
Cropland	Temporary grass and clover leys	Condition Assessment N/A	1
Grassland	Bracken	Condition Assessment N/A	1
Heathland and shrub	Bramble scrub	Condition Assessment N/A	1
Heathland and shrub	Rhododendron scrub	Condition Assessment N/A	1

Broad habitat type	Habitat type	Condition category	Condition score
Heathland and shrub	Other sea buckthorn scrub	Condition Assessment N/A	1
Urban	Other green roof	Condition Assessment N/A	1
Urban	Ground level planters	Condition Assessment N/A	1
Urban	Introduced shrub	Condition Assessment N/A	1
Urban	Actively worked sand pit quarry or open cast mine	Condition Assessment N/A	1
Urban	Vegetated garden	Condition Assessment N/A	1
Urban	Built linear features	N/A - Other	0
Urban	Artificial unvegetated, unsealed surface	N/A – Other	0
Urban	Developed land; sealed surface	N/A - Other	0
Urban	Unvegetated garden	N/A - Other	0
Watercourse footprint	Watercourse footprint	N/A - Other	0

Table 36 Coastal Time to target condition in years for creation of area habitat biodiversity units for all condition categories

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Coastal lagoons	Coastal lagoons	10	0.700	8	0.752	5	0.837	3	0.899	1	0.965
Coastal saltmarsh	Saltmarshes and saline reedbeds	15	0.586	10	0.700	7	0.779	3	0.899	1	0.965

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Coastal saltmarsh	Artificial saltmarshes and saline reedbeds	15	0.586	10	0.700	7	0.779	3	0.899	1	0.965

Table 37 Grassland Time to target condition in years for creation of area habitat biodiversity units for all condition categories

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Grassland	Traditional orchards	30	0.343	25	0.410	20	0.490	10	0.700	5	0.837
Grassland	Floodplain wetland mosaic and CFGM	20	0.490	15	0.586	10	0.700	8	0.752	5	0.837
Grassland	Lowland calcareous grassland	20	0.490	15	0.586	10	0.700	8	0.752	5	0.837
Grassland	Lowland dry acid grassland	30+	0.320	25	0.410	20	0.490	15	0.586	10	0.700

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Grassland	Lowland meadows	15	0.586	12	0.652	10	0.700	8	0.752	5	0.837
Grassland	Modified grassland	7	0.779	5	0.837	4	0.867	2	0.931	1	0.965
Grassland	Other lowland acid grassland	15	0.586	12	0.652	10	0.700	5	0.837	1	0.965
Grassland	Other neutral grassland	10	0.700	7	0.779	5	0.837	3	0.899	2	0.931
Grassland	Tall herb communities (H6430)	30	0.343	25	0.410	20	0.490	15	0.586	10	0.700
Grassland	Upland acid grassland	15	0.586	12	0.652	10	0.700	5	0.837	1	0.965
Grassland	Upland calcareous grassland	25	0.410	20	0.490	15	0.586	12	0.652	10	0.700

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Grassland	Upland hay meadows	20	0.490	18	0.527	15	0.586	12	0.652	10	0.700

Table 38 Heathland Time to target condition in years for creation of area habitat biodiversity units for all condition categories

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Heathland and shrub	Blackthorn scrub	10	0.700	7	0.779	5	0.837	3	0.899	1	0.965
Heathland and shrub	Gorse scrub	10	0.700	7	0.779	5	0.837	3	0.899	1	0.965
Heathland and shrub	Hawthorn scrub	10	0.700	7	0.779	5	0.837	3	0.899	1	0.965
Heathland and shrub	Hazel scrub	15	0.586	12	0.652	10	0.700	7	0.779	5	0.837
Heathland and shrub	Willow scrub	15	0.586	12	0.652	10	0.700	7	0.779	5	0.837
Heathland and shrub	Lowland heathland	30+	0.320	25	0.410	20	0.490	15	0.586	10	0.700

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Heathland and shrub	Mixed scrub	10	0.700	7	0.779	5	0.837	3	0.899	1	0.965
Heathland and shrub	Mountain heaths and willow scrub	30+	0.320	30+	0.320	25	0.410	23	0.441	15	0.586
Heathland and shrub	Dunes with sea buckthorn (H2160)	10	0.700	7	0.779	5	0.837	3	0.899	1	0.965
Heathland and shrub	Upland heathland	30	0.343	25	0.410	20	0.490	15	0.586	10	0.700

Table 39 Individual trees Time to target condition in years for creation of area habitat biodiversity units for all condition categories

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Individual trees	Urban tree	30+	0.320	30+	0.320	27	0.382	19	0.508	10	0.700
Individual trees	Rural tree	30+	0.320	30+	0.320	27	0.382	19	0.508	10	0.700

Table 40 Intertidal Time to target condition in years for creation of area habitat biodiversity units for all condition categories

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Intertidal sediment	Littoral coarse sediment	3	0.899	2	0.931	1	0.965	1	0.965	1	0.965
Intertidal sediment	Littoral mud	6	0.808	4	0.867	3	0.899	2	0.931	1	0.965
Intertidal sediment	Littoral mixed sediments	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Intertidal sediment	Littoral seagrass	20	0.490	15	0.586	10	0.700	5	0.837	2	0.931
Intertidal sediment	Littoral seagrass on peat, clay or chalk	30+	0.320	30+	0.320	30+	0.320	30+	0.320	30+	0.320
Intertidal sediment	Littoral biogenic reefs - Mussels	15	0.586	10	0.700	5	0.837	3	0.899	3	0.899
Intertidal sediment	Littoral biogenic reefs - Sabellaria	15	0.586	10	0.700	5	0.837	3	0.899	3	0.899
Intertidal sediment	Features of littoral sediment	10	0.700	7	0.779	5	0.837	3	0.899	3	0.899

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Intertidal sediment	Artificial littoral coarse sediment	3	0.899	2	0.931	1	0.965	1	0.965	1	0.965
Intertidal sediment	Artificial littoral mud	6	0.808	4	0.867	3	0.899	2	0.931	1	0.965
Intertidal sediment	Artificial littoral sand	4	0.867	2	0.931	1	0.965	1	0.965	1	0.965
Intertidal sediment	Artificial littoral muddy sand	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Intertidal sediment	Artificial littoral mixed sediments	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Intertidal sediment	Artificial littoral seagrass	20	0.490	15	0.586	10	0.700	5	0.837	2	0.931
Intertidal sediment	Artificial littoral biogenic reefs	15	0.586	10	0.700	5	0.837	3	0.899	3	0.899
Intertidal sediment	Littoral sand	4	0.867	2	0.931	1	0.965	1	0.965	1	0.965

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Intertidal sediment	Littoral muddy sand	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Intertidal hard structures	Artificial hard structures	15	0.586	10	0.700	5	0.837	2	0.931	1	0.965
Intertidal hard structures	Artificial features of hard structures	13	0.629	8	0.752	4	0.867	2	0.931	1	0.965
Intertidal hard structures	Artificial hard structures with integrated greening of grey infrastructure (IGGI)	13	0.629	8	0.752	4	0.867	2	0.931	1	0.965

Table 41 Lakes Time to target condition in years for creation of area habitat biodiversity units for all condition categories

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Lakes	Aquifer fed naturally fluctuating water bodies	30	0.343	20	0.490	15	0.586	10	0.700	1	0.965

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Lakes	High alkalinity lakes	30	0.343	20	0.490	10	0.700	7	0.779	5	0.837
Lakes	Low alkalinity lakes	30	0.343	20	0.490	10	0.700	7	0.779	5	0.837
Lakes	Marl lakes	30	0.343	20	0.490	10	0.700	7	0.779	5	0.837
Lakes	Moderate alkalinity lakes	30	0.343	20	0.490	10	0.700	7	0.779	5	0.837
Lakes	Peat lakes	30	0.343	20	0.490	10	0.700	7	0.779	5	0.837
Lakes	Ponds (priority habitat)	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Lakes	Ponds (non-priority habitat)	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Lakes	Reservoirs	10	0.700	7	0.779	5	0.837	3	0.899	1	0.965
Lakes	Temporary lakes ponds and	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
	pools (H3170)										
Lakes	Ornamental lake or pond	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965

Table 42 Rocky shore Time to target condition in years for creation of area habitat biodiversity units for all condition categories

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Rocky shore	High energy littoral rock	10	0.700	7	0.779	4	0.867	2	0.931	1	0.965
Rocky shore	High energy littoral rock - on peat, clay or chalk	30+	0.320	30+	0.320	30+	0.320	30+	0.320	30+	0.320
Rocky shore	Moderate energy littoral rock	13	0.629	8	0.752	4	0.867	2	0.931	1	0.965
Rocky shore	Moderate energy littoral rock - on peat, clay or chalk	30+	0.320	30+	0.320	30+	0.320	30+	0.320	30+	0.320

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Rocky shore	Low energy littoral rock	15	0.586	10	0.700	5	0.837	1	0.965	1	0.965
Rocky shore	Low energy littoral rock - on peat, clay or chalk	30+	0.320	30+	0.320	30+	0.320	30+	0.320	30+	0.320
Rocky shore	Features of littoral rock	13	0.629	8	0.752	4	0.867	2	0.931	1	0.965
Rocky shore	Features of littoral rock - on peat, clay or chalk	30+	0.320	30+	0.320	30+	0.320	30+	0.320	30+	0.320

Table 43 Sparsely vegetated land Time to target condition in years for creation of area habitat biodiversity units for all condition categories

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Sparsely vegetated land	Calaminarian grasslands	10	0.700	7	0.779	5	0.837	3	0.899	2	0.931
Sparsely vegetated land	Coastal sand dunes	20	0.490	15	0.586	10	0.700	7	0.779	5	0.837

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Sparsely vegetated land	Coastal vegetated shingle	20	0.490	15	0.586	10	0.700	7	0.779	5	0.837
Sparsely vegetated land	Ruderal/Ephemeral	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Sparsely vegetated land	Tall forbs	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Sparsely vegetated land	Inland rock outcrop and scree habitats	30+	0.320	25	0.410	20	0.490	15	0.586	10	0.700
Sparsely vegetated land	Limestone pavement	30+	0.320	30+	0.320	30+	0.320	30+	0.320	30+	0.320
Sparsely vegetated land	Maritime cliff and slopes	20	0.490	15	0.586	10	0.700	7	0.779	5	0.837
Sparsely vegetated land	Other inland rock and scree	20	0.490	15	0.586	10	0.700	7	0.779	5	0.837

Table 44 Urban Time to target condition in years for creation of area habitat biodiversity units for all condition categories

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Urban	Allotments	1	0.965	1	0.965	1	0.965	1	0.965	1	0.965
Urban	Bioswale	3	0.899	2	0.931	1	0.965	1	0.965	1	0.965
Urban	Intensive green roof	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Urban	Cemeteries and churchyards	20	0.490	17	0.546	15	0.586	12	0.652	10	0.700
Urban	Façade-bound green wall	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Urban	Ground based green wall	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Urban	Biodiverse green roof	10	0.700	8	0.752	5	0.837	3	0.899	1	0.965
Urban	Open mosaic habitats on previously developed land	10	0.700	7	0.779	4	0.867	2	0.931	0	1.000

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Urban	Rain garden	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Urban	Sustainable drainage system	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Urban	Vacant or derelict land	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965
Urban	Bare ground	5	0.837	4	0.867	3	0.899	2	0.931	1	0.965

Table 45 Wetland Time to target condition in years for creation of area habitat biodiversity units for all condition categories

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Wetland	Blanket bog	30+	0.320	30+	0.320	30+	0.320	30+	0.320	30+	0.320
Wetland	Depressions on peat substrates (H7150)	30+	0.320	30+	0.320	30	0.343	25	0.410	15	0.586
Wetland	Fens (upland and lowland)	30	0.343	25	0.410	20	0.490	15	0.586	10	0.700

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Wetland	Lowland raised bog	30+	0.320	30+	0.320	30	0.343	20	0.490	15	0.586
Wetland	Oceanic valley mire[1] (D2.1)	30+	0.320	30+	0.320	30	0.343	20	0.490	15	0.586
Wetland	Purple moor grass and rush pastures	30	0.343	25	0.410	20	0.490	15	0.586	10	0.700
Wetland	Reedbeds	12	0.652	10	0.700	7	0.779	5	0.837	3	0.899
Wetland	Transition mires and quaking bogs (H7140)	30+	0.320	30+	0.320	30	0.343	25	0.410	15	0.586

Table 46 Woodland and forest Time to target condition in years for creation of area habitat biodiversity units for all condition categories

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Woodland and forest	Felled	30+	0.320	-	N/A	-	N/A	-	N/A	-	N/A

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Woodland and forest	Lowland beech and yew woodland	30+	0.320	30+	0.320	30+	0.320	25	0.410	10	0.700
Woodland and forest	Lowland mixed deciduous woodland	30+	0.320	30+	0.320	30+	0.320	25	0.410	10	0.700
Woodland and forest	Native pine woodlands	30+	0.320	30+	0.320	30+	0.320	25	0.410	10	0.700
Woodland and forest	Other coniferous woodland	30+	0.320	30+	0.320	30	0.343	10	0.700	5	0.837
Woodland and forest	Other Scot's pine woodland	30+	0.320	30+	0.320	30+	0.320	25	0.410	10	0.700
Woodland and forest	Other woodland; broadleaved	30+	0.320	25	0.410	15	0.586	7	0.779	5	0.837
Woodland and forest	Other woodland; mixed	30+	0.320	30+	0.320	30	0.343	10	0.700	5	0.837
Woodland and forest	Upland birchwoods	30+	0.320	30	0.343	25	0.410	20	0.490	10	0.700

Broad habitat	Habitat type	Good (years)	Multiplier	Fairly Good (years)	Time to target multiplier	Moderate (years)	Time to target multiplier	Fairly Poor (years)	Time to target multiplier	Poor (years)	Time to target multiplier
Woodland and forest	Upland mixed ashwoods	30+	0.320	30+	0.320	30+	0.320	25	0.410	10	0.700
Woodland and forest	Upland oakwood	30+	0.320	30+	0.320	30+	0.320	25	0.410	10	0.700
Woodland and forest	Wet woodland	30+	0.320	30	0.343	15	0.586	10	0.700	5	0.837
Woodland and forest	Wood-pasture and parkland	30+	0.320	30+	0.320	30+	0.320	25	0.410	10	0.700

Table 47 Condition category abbreviations

Condition category abbreviation	Condition category expanded
P	Poor
FP	Fairly poor
M	Moderate
FG	Fairly good
G	Good

Table 48 Time to target condition in years for enhancement to the same habitat type in better condition

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Cropland	Arable field margins cultivated annually	-	-	-	-	-	-	-	-	-	-
Cropland	Arable field margins game bird mix	-	-	-	-	-	-	-	-	-	-
Cropland	Arable field margins pollen and nectar	-	-	-	-	-	-	-	-	-	-
Cropland	Arable field margins tussocky	-	-	-	-	-	-	-	-	-	-
Cropland	Cereal crops	-	-	-	-	-	-	-	-	-	-
Cropland	Winter stubble	-	-	-	-	-	-	-	-	-	-
Cropland	Horticulture	-	-	-	-	-	-	-	-	-	-
Cropland	Intensive orchards	-	-	-	-	-	-	-	-	-	-
Cropland	Non-cereal crops	-	-	-	-	-	-	-	-	-	-
Cropland	Temporary grass and clover leys	-	-	-	-	-	-	-	-	-	-
Grassland	Traditional orchards	5	15	20	25	10	15	20	5	10	5
Grassland	Bracken	-	-	-	-	-	-	-	-	-	-
Grassland	Floodplain wetland mosaic and CFGM	8	10	12	15	2	4	7	2	4	3
Grassland	Lowland calcareous grassland	5	10	15	20	5	10	15	5	10	5

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Grassland	Lowland dry acid grassland	5	15	20	30+	8	15	25	10	20	10
Grassland	Lowland meadows	4	8	11	15	4	8	11	4	8	4
Grassland	Modified grassland	5	10	12	15	8	10	12	8	10	8
Grassland	Other lowland acid grassland	5	10	12	15	8	10	12	8	10	8
Grassland	Other neutral grassland	5	10	12	15	8	10	12	8	10	8
Grassland	Tall herb communities (H6430)	10	20	25	30	10	10	15	5	10	5
Grassland	Upland acid grassland	5	10	12	15	8	10	12	8	10	8
Grassland	Upland calcareous grassland	10	15	18	20	10	15	18	10	10	10
Grassland	Upland hay meadows	10	15	18	20	10	15	18	10	15	10
Heathland and shrub	Blackthorn scrub	1	5	7	10	3	5	3	2	3	2
Heathland and shrub	Bramble scrub	-	-	-	-	-	-	-	-	-	-
Heathland and shrub	Gorse scrub	1	5	7	10	3	5	7	2	3	2

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Heathland and shrub	Hawthorn scrub	1	5	7	10	3	5	7	2	3	2
Heathland and shrub	Hazel scrub	5	7	12	15	5	8	12	5	7	5
Heathland and shrub	Willow scrub	5	7	12	15	5	8	12	5	7	5
Heathland and shrub	Lowland heathland	5	10	15	25	5	10	20	5	15	10
Heathland and shrub	Mixed scrub	1	5	7	10	3	5	7	2	3	2
Heathland and shrub	Mountain heaths and willow scrub	20	30+	30+	30+	20	30+	30+	20	30+	20
Heathland and shrub	Rhododendron scrub	-	-	-	-	-	-	-	-	-	-
Heathland and shrub	Dunes with sea buckthorn (H2160)	5	7	10	12	5	7	10	5	7	5
Heathland and shrub	Other sea buckthorn scrub	-	-	-	-	-	-	-	-	-	-
Heathland and shrub	Upland heathland	10	20	30	30+	10	20	30	10	20	10
Lakes	Aquifer fed naturally fluctuating water bodies	5	10	15	30	5	15	25	5	20	5
Lakes	High alkalinity lakes	5	10	15	30	5	15	25	10	20	10

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Lakes	Low alkalinity lakes	5	10	15	20	5	10	15	5	10	5
Lakes	Marl lakes	5	10	15	30	5	15	25	10	20	10
Lakes	Moderate alkalinity lakes	5	10	15	30	5	15	25	10	20	10
Lakes	Peat lakes	5	10	15	30	5	15	25	10	20	10
Lakes	Ponds (priority habitat)	2	4	6	8	2	4	6	2	4	2
Lakes	Ponds (non priority habitat)	2	4	6	8	2	4	6	2	4	2
Lakes	Reservoirs	5	10	15	30	5	15	25	10	20	10
Lakes	Temporary lakes ponds and pools (H3170)	2	4	6	8	2	4	6	2	4	2
Sparsely vegetated land	Calaminarian grasslands	1	3	5	8	1	4	7	2	5	3
Sparsely vegetated land	Coastal sand dunes	5	8	15	20	5	10	18	7	12	8
Sparsely vegetated land	Coastal vegetated shingle	5	8	15	20	5	10	18	7	12	8
Sparsely vegetated land	Ruderal/Ephemeral	1	2	3	5	1	2	3	1	2	1

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Sparsely vegetated land	Tall forbs	1	2	3	5	1	2	3	1	2	1
Sparsely vegetated land	Inland rock outcrop and scree habitats	10	20	25	30+	15	25	27	15	20	15
Sparsely vegetated land	Limestone pavement	5	10	15	20	5	10	15	5	10	5
Sparsely vegetated land	Maritime cliff and slopes	5	8	15	20	5	10	18	7	12	8
Sparsely vegetated land	Other inland rock and scree	5	10	15	20	5	10	15	5	10	5
Urban	Allotments	1	1	1	1	1	1	1	1	1	1
Lakes	Ornamental lake or pond	2	4	6	8	2	4	6	2	4	2
Urban	Artificial unvegetated, unsealed surface	-	-	-	-	-	-	-	-	-	-
Urban	Bioswale	1	2	2	3	1	2	3	2	2	2
Urban	Intensive green roof	1	2	3	5	1	2	3	1	2	1
Urban	Built linear features	-	-	-	-	-	-	-	-	-	-

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Urban	Cemeteries and churchyards	5	10	15	20	10	15	20	10	15	5
Urban	Developed land; sealed surface	-	-	-	-	-	-	-	-	-	-
Urban	Other green roof	-	-	-	-	-	-	-	-	-	-
Urban	Façade-bound green wall	1	2	3	5	1	2	3	1	2	1
Urban	Ground based green wall	1	2	3	5	1	2	3	1	2	1
Urban	Ground level planters	-	-	-	-	-	-	-	-	-	-
Urban	Biodiverse green roof	3	5	8	10	3	8	8	3	5	2
Urban	Introduced shrub	-	-	-	-	-	-	-	-	-	-
Urban	Open mosaic habitats on previously developed land	2	4	7	10	2	5	8	3	4	3
Urban	Rain garden	1	1	1	1	1	1	1	1	1	1
Urban	Actively worked sand pit quarry or open cast mine	-	-	-	-	-	-	-	-	-	-
Individual trees	Urban tree	8	16	24	30+	8	16	24	8	16	8

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Individual trees	Rural tree	8	16	24	30+	8	16	24	8	16	8
Urban	Sustainable drainage system	1	2	3	5	1	2	3	1	2	1
Urban	Unvegetated garden	-	-	-	-	-	-	-	-	-	-
Urban	Vacant or derelict land	1	1	1	1	1	1	1	1	1	1
Urban	Bare ground	1	1	1	1	1	1	1	1	1	1
Urban	Vegetated garden	1	2	3	5	1	2	3	1	2	1
Wetland	Blanket bog	10	20	30+	30+	10	30+	30+	30	30+	30
Wetland	Depressions on peat substrates (H7150)	10	20	25	30	10	20	25	10	20	10
Wetland	Fens (upland and lowland)	10	12	15	18	10	12	15	10	12	10
Wetland	Lowland raised bog	10	20	25	30	10	20	20	10	15	10
Wetland	Oceanic valley mire[1] (D2.1)	10	20	25	30	10	20	20	10	15	10
Wetland	Purple moor grass and rush pastures	10	10	15	20	10	15	20	10	15	10
Wetland	Reedbeds	5	7	10	12	5	7	10	5	7	5

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Wetland	Transition mires and quaking bogs (H7140)	10	20	25	30	10	20	20	10	15	10
Woodland and forest	Felled	-	-	-	-	-	-	-	-	-	-
Woodland and forest	Lowland beech and yew woodland	25	30+	30+	30+	30+	30+	30+	30+	30+	30+
Woodland and forest	Lowland mixed deciduous woodland	10	20	25	30+	10	20	25	10	20	10
Woodland and forest	Native pine woodlands	10	15	20	30+	15	20	25	10	15	10
Woodland and forest	Other coniferous woodland	5	25	30+	30+	20	30+	30+	30+	30+	30+
Woodland and forest	Other Scot's pine woodland	10	15	20	30+	15	20	25	10	15	10
Woodland and forest	Other woodland; broadleaved	5	10	15	20	5	10	15	5	10	5
Woodland and forest	Other woodland; mixed	5	10	15	20	5	10	15	5	10	5
Woodland and forest	Upland birchwoods	10	15	20	30+	15	20	25	10	15	10
Woodland and forest	Upland mixed ashwoods	10	15	20	30+	15	20	25	10	15	10

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Woodland and forest	Upland oakwood	25	30+	30+	30+	30+	30+	30+	30+	30+	30+
Woodland and forest	Wet woodland	5	10	25	30+	5	20	30+	15	30+	30
Woodland and forest	Wood-pasture and parkland	25	30+	30+	30+	30+	30+	30+	30+	30+	30+
Coastal lagoons	Coastal lagoons	1	4	8	12	3	7	11	4	8	4
Rocky shore	High energy littoral rock	2	4	6	10	2	4	8	2	6	4
Rocky shore	High energy littoral rock - on peat, clay or chalk	2	4	6	10	2	4	8	2	6	4
Rocky shore	Moderate energy littoral rock	2	4	6	11	2	4	9	2	7	5
Rocky shore	Moderate energy littoral rock - on peat, clay or chalk	2	4	6	11	2	4	9	2	7	5
Rocky shore	Low energy littoral rock	2	4	6	12	2	4	10	2	8	6
Rocky shore	Low energy littoral rock - on peat, clay or chalk	2	4	6	12	2	4	10	2	8	6
Rocky shore	Features of littoral rock	2	4	6	11	2	4	9	2	7	5

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Rocky shore	Features of littoral rock - on peat, clay or chalk	2	4	6	11	2	4	9	2	7	5
Intertidal sediment	Littoral coarse sediment	1	2	3	4	1	2	3	1	2	1
Intertidal sediment	Littoral mud	2	4	6	8	2	4	6	2	4	2
Intertidal sediment	Littoral mixed sediments	1	2	3	4	1	2	3	1	2	1
Coastal saltmarsh	Saltmarshes and saline reedbeds	2	6	10	20	4	8	18	4	14	10
Coastal saltmarsh	Artificial saltmarshes and saline reedbeds	2	6	10	20	4	8	18	4	14	10
Intertidal sediment	Littoral seagrass	3	13	23	30+	10	20	30	10	20	10
Intertidal sediment	Littoral seagrass on peat, clay or chalk	3	13	23	30+	10	20	30	10	20	10
Intertidal sediment	Littoral biogenic reefs - Mussels	2	4	7	10	2	3	8	3	6	3
Intertidal sediment	Littoral biogenic reefs - Sabellaria	2	4	7	10	2	3	8	3	6	3
Intertidal sediment	Features of littoral sediment	1	2	3	5	1	2	4	1	3	2

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Intertidal sediment	Artificial littoral coarse sediment	1	2	3	4	1	2	3	1	2	1
Intertidal sediment	Artificial littoral mud	2	4	6	8	2	4	6	2	4	2
Intertidal sediment	Artificial littoral sand	2	3	4	6	1	2	4	1	3	2
Intertidal sediment	Artificial littoral muddy sand	2	4	6	8	2	4	6	2	4	2
Intertidal sediment	Artificial littoral mixed sediments	1	2	3	4	1	2	3	1	2	1
Intertidal sediment	Artificial littoral seagrass	3	13	23	30+	10	20	30	10	20	10
Intertidal sediment	Artificial littoral biogenic reefs	2	4	7	10	2	3	8	3	6	3
Intertidal sediment	Littoral sand	2	3	4	6	1	2	4	1	3	2
Intertidal sediment	Littoral muddy sand	2	4	6	8	2	4	6	2	4	2
Intertidal hard structures	Artificial hard structures	2	4	6	12	2	4	10	2	8	6
Intertidal hard structures	Artificial features of hard structures	2	4	6	11	2	4	9	2	7	5

Broad habitat	Habitat type	P-FP	P-M	P-FG	P-G	FP-M	FP-FG	FP-G	M-FG	M-G	FG-G
Intertidal hard structures	Artificial hard structures with integrated greening of grey infrastructure (IGGI)	2	4	6	11	2	4	9	2	7	5
Watercourse footprint	Watercourse footprint	-	-	-	-	-	-	-	-	-	-

48 Time to target condition of enhancement from habitats with standard condition - 'condition assessment N/A' to other habitat types and other condition types

Broad habitat	Habitat type	Fairly Poor	Moderate	Fairly Good	Good
Heathland and shrub	Blackthorn scrub	1	5	7	10
Heathland and shrub	Bramble scrub	-	-	-	-
Heathland and shrub	Gorse scrub	1	5	7	10
Heathland and shrub	Hawthorn scrub	1	5	7	10
Heathland and shrub	Hazel scrub	5	7	12	15
Heathland and shrub	Willow scrub	5	7	12	15
Heathland and shrub	Lowland heathland	5	10	15	25

Broad habitat	Habitat type	Fairly Poor	Moderate	Fairly Good	Good
Heathland and shrub	Mixed scrub	1	5	7	10
Heathland and shrub	Mountain heaths and willow scrub	20	30+	30+	30+
Heathland and shrub	Rhododendron scrub	-	-	-	-
Heathland and shrub	Dunes with sea buckthorn (H2160)	5	7	10	12
Heathland and shrub	Other sea buckthorn scrub	-	-	-	-
Heathland and shrub	Upland heathland	-	-	-	-

Annex 2 HBUs data

2.1. HBUs distinctiveness information

Table 49 HBU Creation and enhancement technical difficulty

Hedgerow habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Technical difficulty creation category	Technical difficulty creation score	Technical difficulty enhancement category	Technical difficulty enhancement score
Species-rich native hedgerow with trees - associated with bank or ditch	V.High	8	Same habitat required	Low	1	Low	1
Species-rich native hedgerow with trees	High	6	Like for like or better	Low	1	Low	1
Species-rich native hedgerow - associated with bank or ditch	High	6	Like for like or better	Low	1	Low	1
Native hedgerow with trees - associated with bank or ditch	High	6	Like for like or better	Low	1	Low	1
Species-rich native hedgerow	Medium	4	Same distinctiveness or better habitat required	Low	1	Low	1

Hedgerow habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Technical difficulty creation category	Technical difficulty creation score	Technical difficulty enhancement category	Technical difficulty enhancement score
Native hedgerow - associated with bank or ditch	Medium	4	Same distinctiveness or better habitat required	Low	1	Low	1
Native hedgerow with trees	Medium	4	Same distinctiveness or better habitat required	Low	1	Low	1
Ecologically valuable line of trees	Medium	4	Same distinctiveness or better habitat required	Low	1	Low	1
Ecologically valuable line of trees - associated with bank or ditch	Medium	4	Same distinctiveness or better habitat required	Low	1	Low	1
Native hedgerow	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1
Line of trees	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1
Line of trees - associated with bank or ditch	Low	2	Same distinctiveness or better habitat required	Low	1	Low	1

Hedgerow habitat type	Distinctiveness category	Distinctiveness score	Trading Rule	Technical difficulty creation category	Technical difficulty creation score	Technical difficulty enhancement category	Technical difficulty enhancement score
Non-native and ornamental hedgerow	V.Low	1	Same distinctiveness or better habitat required	Low	1	Low	1

2.2. HBUs condition information

Table 50 Time to target condition in years for habitat creation

Hedgerow habitat description	Poor	Time to target multiplier	Moderate	Time to target multiplier	Good	Time to target multiplier
Species-rich native hedgerow with trees - associated with bank or ditch	1	0.965	10	0.700	20	0.490
Species-rich native hedgerow with trees	1	0.965	10	0.700	20	0.490
Species-rich native hedgerow - associated with bank or ditch	1	0.965	5	0.837	12	0.652
Native hedgerow with trees - associated with bank or ditch	1	0.965	10	0.700	20	0.490
Species-rich native hedgerow	1	0.965	5	0.837	12	0.652
Native hedgerow - associated with bank or ditch	1	0.965	5	0.837	12	0.652

Hedgerow habitat description	Poor	Time to target multiplier	Moderate	Time to target multiplier	Good	Time to target multiplier
Native hedgerow with trees	1	0.965	10	0.700	20	0.490
Ecologically valuable line of trees	5	0.837	20	0.490	30+	0.320
Ecologically valuable line of trees - associated with bank or ditch	5	0.837	20	0.490	30+	0.320
Native hedgerow	1	0.965	5	0.837	12	0.652
Line of trees	5	0.837	20	0.490	30+	0.320
Line of trees - associated with bank or ditch	5	0.837	20	0.490	30+	0.320
Non-native and ornamental hedgerow	1	0.965	-	N/A	-	N/A

Table 51 HBU Time to target condition in years for habitat enhancement by condition

Hedgerow habitat description	Poor to Moderate	Time to target multiplier	Poor to Good	Time to target multiplier	Moderate to Good	Time to target multiplier
Species-rich native hedgerow with trees - associated with bank or ditch	6	0.808	10	0.700	4	0.867
Species-rich native hedgerow with trees	6	0.808	10	0.700	4	0.867
Species-rich native hedgerow - associated with bank or ditch	3	0.899	5	0.837	2	0.931

Hedgerow habitat description	Poor to Moderate	Time to target multiplier	Poor to Good	Time to target multiplier	Moderate to Good	Time to target multiplier
Native hedgerow with trees - associated with bank or ditch	6	0.808	10	0.700	4	0.867
Species-rich native hedgerow	3	0.899	5	0.837	2	0.931
Native hedgerow - associated with bank or ditch	3	0.899	5	0.837	2	0.931
Native hedgerow with trees	6	0.808	10	0.700	4	0.867
Ecologically valuable line of trees	20	0.490	30	0.343	10	0.700
Ecologically valuable line of trees - associated with bank or ditch	20	0.490	30	0.343	10	0.700
Native hedgerow	3	0.899	5	0.837	2	0.931
Line of trees	20	0.490	30	0.343	10	0.700
Line of trees - associated with bank or ditch	20	0.490	30	0.343	10	0.700
Non-native and ornamental hedgerow	-	N/A	-	N/A	-	N/A

Table 52 HBU Time to target condition in years for hedgerow habitat enhanced by distinctiveness

Hedgerow habitat description	Species-rich native hedgerow with trees - associated with bank or ditch	Species-rich native hedgerow with trees	Species-rich native hedgerow - associated with bank or ditch	Native hedgerow with trees - associated with bank or ditch	Species-rich native hedgerow	Native hedgerow - associated with bank or ditch	Native hedgerow with trees
Species-rich native hedgerow with trees - associated with bank or ditch	N/A – same habitat	-	-	-	-	-	-
Species-rich native hedgerow with trees	5	N/A – same habitat	-	-	-	-	-
Species-rich native hedgerow - associated with bank or ditch	10	-	N/A – same habitat	-	-	-	-
Native hedgerow with trees - associated with bank or ditch	5	-	-	N/A – same habitat	-	-	-
Species-rich native hedgerow	10	10	5	-	N/A – same habitat	-	-
Native hedgerow - associated with bank or ditch	10	-	5	10	-	N/A – same habitat	-

Hedgerow habitat description	Species-rich native hedgerow with trees - associated with bank or ditch	Species-rich native hedgerow with trees	Species-rich native hedgerow - associated with bank or ditch	Native hedgerow with trees - associated with bank or ditch	Species-rich native hedgerow	Native hedgerow - associated with bank or ditch	Native hedgerow with trees
Native hedgerow with trees	5	5	5	5	-	-	N/A – same habitat
Ecologically valuable line of trees	12	12	-	12	-	-	-
Ecologically valuable line of trees - associated with bank or ditch	12	-	-	12	-	-	-
Native hedgerow	10	10	5	10	5	6	10
Line of trees	12	12	-	12	-	-	12
Line of trees - associated with bank or ditch	12	-	-	12	-	-	12
Non-native and ornamental hedgerow	-	-	-	-	-	-	-

Annex 3 WBUs data

3.1. WBUs habitat interventions

How the intervention impacts the natural function of the watercourse should be considered when deciding which intervention to choose. Use the definitions and descriptions in Table 54 to determine if retention, creation or enhancement is applicable to the scheme, and how to determine if a watercourse is lost at baseline.

An illustrative example of enhancement is provided in Table 54.

Table 53 Definitions of creation and enhancements for watercourse unit module

Intervention	Definition	Intervention examples	Baseline loss	Assessment notes
Retention	No interventions on the watercourse	Do nothing	No	Biodiversity Net Gain requirements still apply
Enhancement	Interventions which promote natural function, processes and the development of natural habitats.	Examples include: removing culverts restoring natural alignment enhancing the riparian zone removal of encroachment features removal of tidal structures and restoration of tidal processes	No Record increases in condition, distinctiveness, or length as an enhancement of the baseline.	Where meanders, channels or braiding, a longer length can be recorded as enhanced
Creation	Interventions to watercourses that do not promote natural functions and processes, or the development of natural habitats	Examples include: installing culverts trapezoidal channels channel straightening physical modification altering natural alignment increases in encroachment	Yes Record decreases in the condition, length or distinctiveness of natural rivers as a loss of the impacted section within the baseline.	Post-intervention lengths should be recorded within the creation tab. Creation in advance may be set to 10+ if there are increases in encroachment with no other impacts
Creation	Installation of a new length of canal or ditch	Not applicable	Not applicable	Applies to canals and ditches only
Loss	Loss of canal, ditch or culvert	Permanent loss only.	Yes	

3.2. WBUs distinctiveness information

Table 54 Difficulty of creation and enhancement for watercourses

Watercourse type	Distinctiveness category	Distinctiveness score	Trading Rule	Technical difficulty creation category	Technical difficulty creation score	Technical difficulty enhancement category	Technical difficulty enhancement score
Priority Habitat	Very high	8	Same habitat required - bespoke compensation option	High	0.33	Medium	0.67
Other Rivers and Streams	High	6	Same habitat required	High	0.33	Medium	0.67
Ditches	Medium	4	Same habitat required	Medium	0.67	Low	1
Canals	Medium	4	Same habitat required	Medium	0.67	Low	1
Culvert	Low	2	Better distinctiveness habitat required	Medium	0.67	N/A	-

3.3. WBUs condition information

Watercourse habitats can be all condition categories in the pre-development, pre-habitat intervention and post-development, post habitat intervention calculation except culverts. The condition category for culverts is set at ‘poor’ (score 1) in the pre-development and post-development.

Table 55 WBU Target time to target condition for creation for all habitats (except culverts)

Watercourse type	Poor	Time to target multiplier	Fairly poor	Time to target multiplier	Moderate	Time to target multiplier	Fairly good	Time to target multiplier	Good	Time to target multiplier
All	1	0.965	2	0.931	5	0.837	8	0.752	10	0.700
Culverts	1	0.965	-	None	-	None	-	None	-	None

Table 56 WBU Target time to target condition for enhancement (change in distinctiveness) for all habitats (except culverts)

Habitat intervention	Years to target condition for all habitats
Enhancement through distinctiveness	10

Table 57 WBU Enhancement – proposed condition, time to target and multiplier

Baseline Condition	Poor	Multiplier	Fairly Poor	Multiplier	Moderate	Multiplier	Fairly Good	Multiplier	Good	Multiplier
Poor	1	0.965	2	0.931	4	0.867	6	0.808	8	0.752
Fairly Poor	N/A	-	1	0.965	2	0.931	4	0.867	6	0.808
Moderate	N/A	-	N/A	-	1	0.965	2	0.931	4	0.867
Fairly Good	N/A	-	N/A	-	N/A	-	1	0.965	2	0.931
Good	N/A	-	N/A	-	N/A	-	N/A	-	1	0.965

Annex 4 Individual trees size equivalent

Table 58 Individual trees – area equivalent based on diameter at breast height

Size class	Diameter at breast height (cm)	Root Protection Area radius (m)	Area equivalent (ha)
Small	greater than 7.5cm and less than or equal to 30cm	3.6	0.0041
Medium	greater than 30cm and less than or equal to 60cm	7.2	0.0163
Large	greater than 60cm and less than or equal to 90cm	10.8	0.0366
Very large	greater than 90cm	15.6	0.0765

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