Biodiversity Net Gain Assesment

Dusty Clough Barn

Thornley

Preston

PR3 2TS

Introduction

This assessment has been carried out to establish the biodiversity baseline in relation to proposed development within a grassland parcel at Dusty Clough Barn. The assessment has been carried out by John Metcalfe, BSc Hons Ecology.

The proposed development is to create an access track and small agricultural/forestry building.

Habitat type has been mapped using the standard habitat mapping convention UK Habitat Classification V2 (Butcher et all, 2023) for the purposes of using the Smal Sites Statutory Biodiversity Metric.

Using the baseline survey, pre-construction ecology was measured against proposed habitat changes arising from future ecological enhancements as shown in the illustrative landscape plan.

This report presents the results of the desk based study to assess net change in biodiversity units following removal of habitat for the proposed development within the site.

Ecological Context

The site is 0.0485ha comprising grazed pasture. Figure 1 shows the site location.

Policy Context

The primary aims of Biodiversity Net Gain are to secure a measurable improvement in habitat for biodiversity, to minimise biodiversity losses and to help to restore ecological networks whilst streamlining development processes.

The National Planning Policy Framework (NPPF) makes provision for the delivers of biodiversity net gain with a requirement for 10% net gain requirement in the Environment Bill.

Methods

Introduction

The small sites biodiversity metric is designed to quantify biodiversity to improve planning, design, land management and decision making (Natural England (2024).

This assessment has been carried out as a desk exercise using the information gathered as the field survey carried out at the site and the illustrative landscape plan.

Assessment Methods

This assessment uses methods set out within the Small Sites Metric (Statutory Biodiversity Metric) User Guide (Feb 2024).

The metric uses three core measurements:

- Habitat Areas
- Length of linear terrestrial habitats
- Length of linear aquatic habitats.

Habitat area is multiplied by several factors that indicate it's quality; distinctiveness, condition, strategic location and connectivity which gives a biodiversity unit value. This can be used for future and created habitats. Additionally where habitats are to be enhanced or newly created, the risk of failure is accounted for by applying multipliers for risk factors including (difficulty, time to target condition and off site risk)

Habitats are classified using the UK Habitats Classification V2 system (Butcher et al., 2023)

Biodiversity Assessment

The baseline BNG value is calculated using the Small Sites Metric and the UK Habitats v2 methodology.

The baseline value has been calculated from a site visit undertaken on 16th August 2024. It is understood that there will be no substantive changes to habitat condition at the time the planning application is made.

It is understood that there have been no habitat features which have been purposefully degraded after January 30th 2020.

It is understood that if planning permission is granted the development would be subject to biodiversity net gain condition.

The type area and distinctiveness values are shown as Table 1.

Habitat	Area (ha)	Distinctiveness
Modified grassland	0.0485	V. Low

Table 1 Habitat Area Distinctiveness Values

There are no irreplaceable habitats on the site.

There are no High or Very High distinctiveness habitats on the site.

The UK Habs V2 survey has been used to identify relevant habitat areas, linear habitat areas and watercourse units.

These habitats have been input into the Small Sites Metric calculator and indicate a total of 0.1940 habitat units. There are no hedgerow or watercourse habitats on site. The results of the calculations are presented in the full biodiversity assessment calculation in the Excel document Small Sites Statutory Biodiversity Metric (see attached).

Post development Habitat Creation and Enhancement

Within the proposed avoidance, minimisation and rehabilitation/restoration, onsite BNG can be achieved. There is no requirement for offsite compensation.

The illustrative Landscape Plan has been used to identify 335m^2 of the existing modified grassland will be lost to the new agricultural building.

To compensate for this 150m^2 area of adjacent grassland will be enhanced to neutral grassland (g3c). 4 native species trees will be planted.

The unit value figures for the proposed enhancement have been calculated using the Statutory Biodiversity Metric and would comprise a total of 0. 4162 habitat units.

There are no changes to default values for post development habitats.

Figure 2.


g3c created habitat unit value 0.4612
g4 lost habitat unit value 0.1940
Dusty Clough Wood
Dusty
Clough Barn

Change in Biodiversity Units Calculation

Under the proposals set out in the illustrative site plan (Figure 2) there will be a net GAIN of habitat units (+ 119.24%) with a percentage gain of +114.55% as shown in Table 2

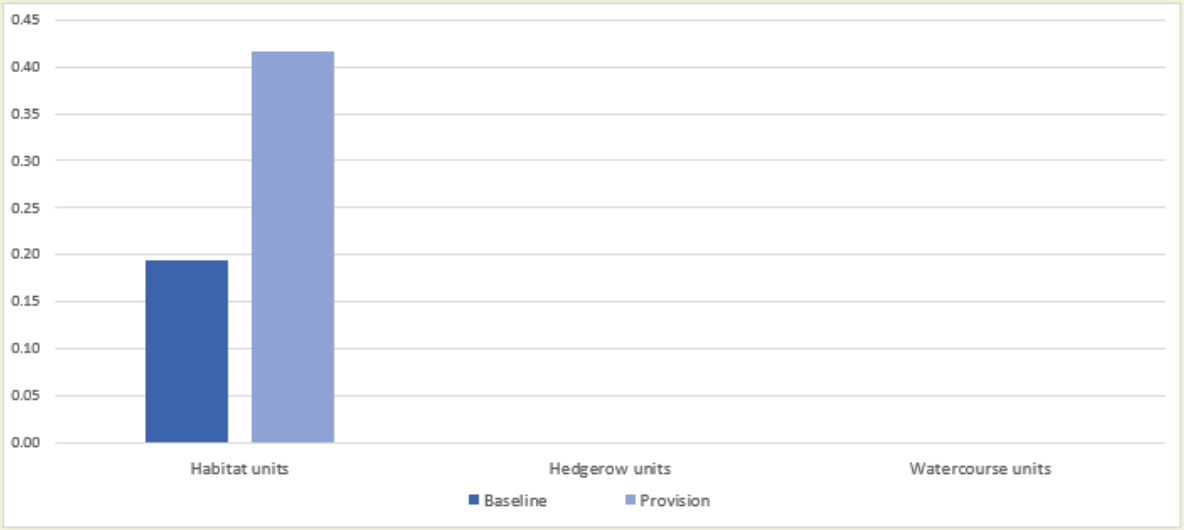
Table 2

Site Name		Dusty Clough Barn
Sheet Name		Headline Results

Headline Results

Headline		BNG Targets Met ✓
Trading Rules		Trading Rules Satisfied ✓
Next steps		Check for input errors/rule breaks present in the metric ⚠
Baseline Units	*Habitat units*	0.1940
	Hedgerow units	Zero Units Baseline
	Watercourse units	Zero Units Baseline
Post-development Units	*Habitat units*	0.4162
	Hedgerow units	0.0000
	Watercourse units	0.0000
Total net unit change	*Habitat units*	0.2222 ✓
	Hedgerow units	0.0000
	Watercourse units	0.0000
Total net % change	*Habitat units*	114.55% ✓
	Hedgerow units	% target not appropriate
	Watercourse units	% target not appropriate
Habitats units required to meet target		0.0000
Hedgerow units required to meet target		0.0000
Watercourse units required to meet target		0.0000

Chart 1 - Unit change by habitat group



References

Butcher, B., Carey, P., Edmonds, R ., Norton, L. and Treweek, J. (2023), UK Habitat Classification – Habitat Definitions V2.01 at http:// ukhab.org

Natural England Feb 2024. Smal Sites Metric (The Statutory Biodiversity Metric)

Images

Existing modified grassland

Existing modified grassland

Area north of enhanced area potential seed source for creation of neutral grassland