Biodiversity Impact Assessment Summary

Derived Locally from the Defra Metric
Version 19.0 (01/04/2018)

Site name: **Land off Berry Hill Road, Adderbury**
Planning reference number: **to be copied from the BIA sheet**

Existing	Habitat Area (ha)	Hedgerow impact (km)	Connectivity Features (km)	Habitat Biodiversity Value	Hedgerow Biodiversity Value	Connectivity Biodiversity Value
Onsite Biodiversity Impact	3.88	0.00	0.00	8.69	8.88	0.00
Indirect Biodiversity Impact	0.00	0.00	0.00	0.00	0.00	0.00
Total habitat / linear features impacted	**3.88**	**0.00**	**0.00**	**8.69**	**8.88**	**0.00**
Retained / Created / Enhanced						
Onsite biodiversity retained	0.12	0.00	0.00	0.96	8.88	0.00
Onsite Creation	3.88	0.30	0.00	8.22	0.76	0.00
Biodiversity retained and enhanced	0.00	0.00	0.00	0.00	0.00	0.00
Total biodiversity retained/enhanced	**4.00**	**0.30**	**0.00**	**9.18**	**9.64**	**0.00**
Trading Down	n/a	n/a	n/a	0.00	-0.50	0.00
Biodiversity Impact	**n/a**	**n/a**	**n/a**	**0.49**	**0.26**	**0.00**

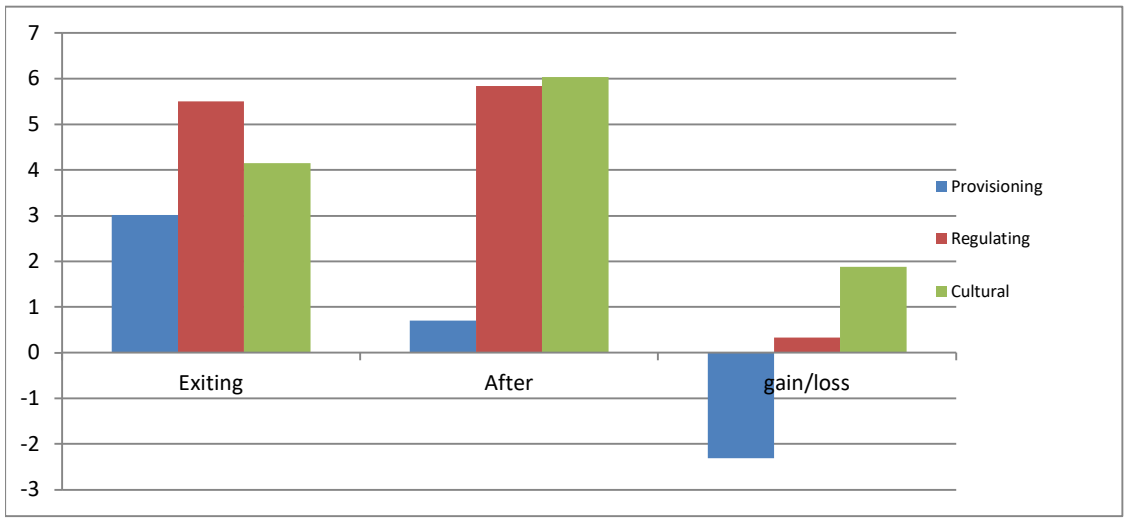
Habitat Impacts	Loss	Gain	Impact	%age losses	Compensatory Unit loss	Indicative Offset (ha)	WCC Offset units	WCC Indicative Offset Contribution
Woodland Habitat	0.16	1.02	0.86					
Grassland Habitat	7.18	6.27	-0.91					
Wetland Habitat	0.00	0.00	0.00					
Other Habitat (incl. Built Env)	0.39	0.93	0.54					
Total	7.73	8.22	0.49	0.00	0.00	0.00	0.00	**£0**
		Trading down	0.00					
			0.49					

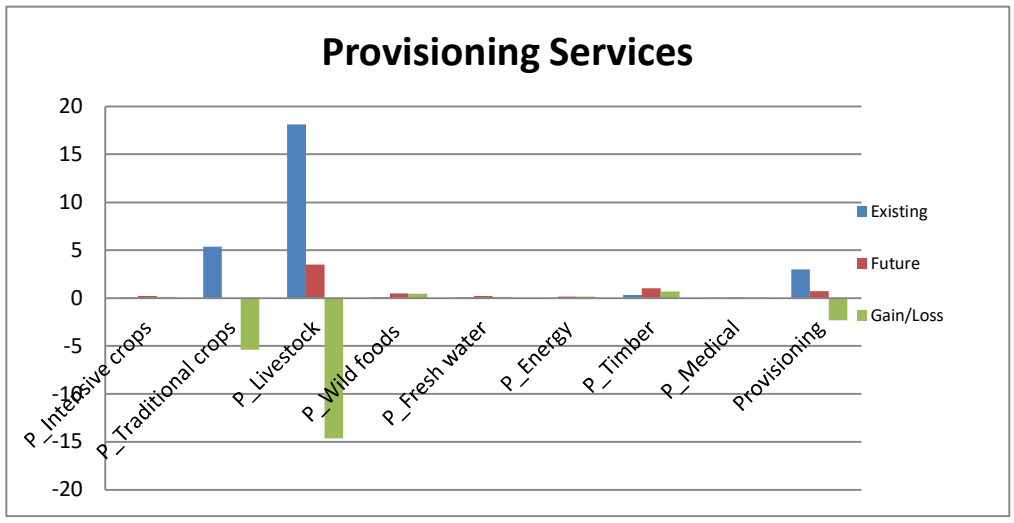
Hedgerow Impacts	Loss	Gain	Trading down	Impact	Unit loss	Indicative Offset (km)	WCC Offset units	WCC Offset Contribution
Hedgerow	0.00	0.76	-0.50	0.26				

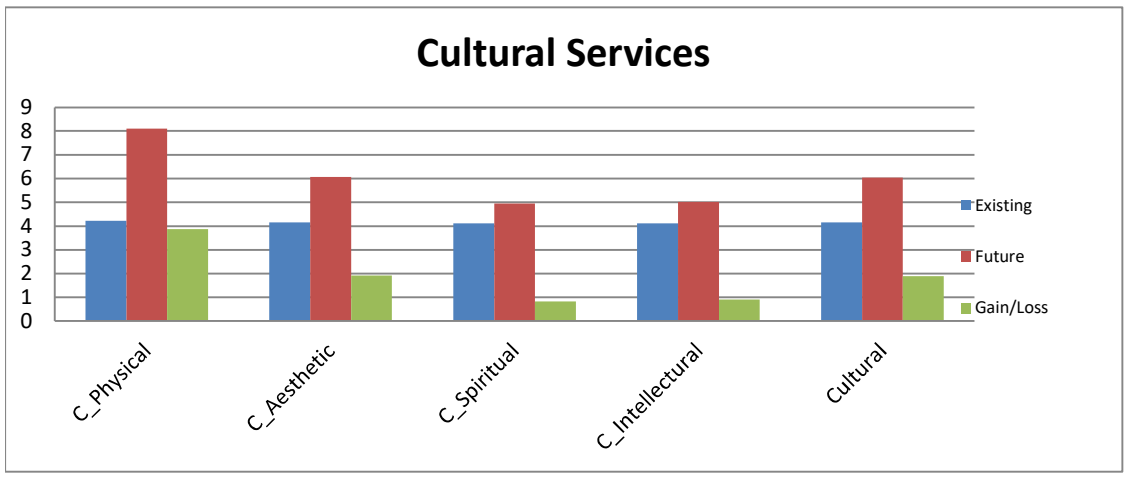
SUMMARY

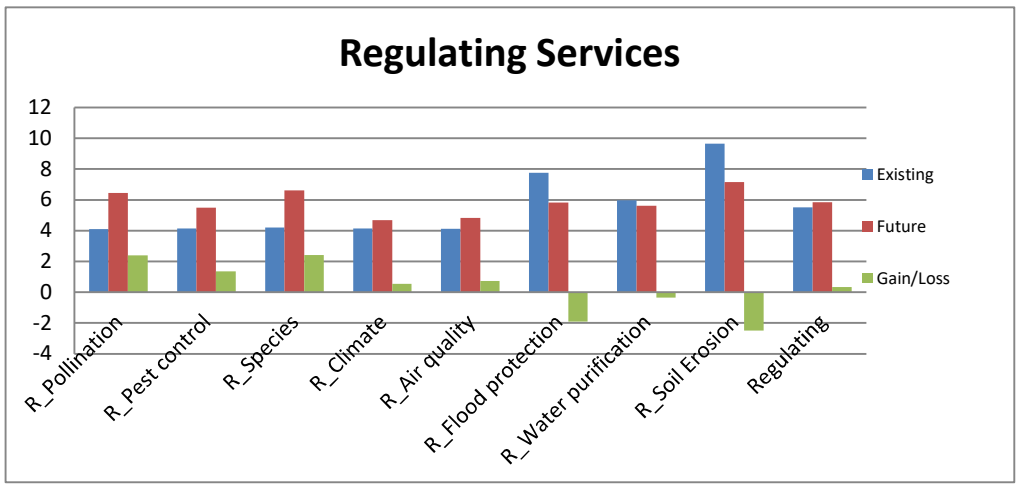
This development will result in 0.49 Habitat Biodiversity Units gain; 0.26 Hedgerow Units gain and 0 Connectivity Biodivesity Units loss

ECOSYSTEM SERVICES ANALYSIS









For any questions with regard to biodiversity impact and this development please contact Warwickshire County Council Ecological Services:
email: planningecology@warwickshire.gov.uk or telephone 01926 418060

Warwickshire, Coventry & Solihull - Habitat Impact Assessment Calculator

KEY	
	No action required
	Enter value
	Drop-down menu
	Calculation
	Automatic lookup
	Automatic Condition setting
	Result

Local Planning Authority:	Other
Site name:	Land off Berry Hill Road, Adderbury
Planning application reference number:	
Assessor:	RY
Date:	16/01/2023

Please fill in both tables
Please do not edit the formulae or structure
To condense the form for display hide vacant rows, do not delete them
If additional rows are required, or to provide feedback on the calculator please contact WCC Ecological Services 01926 418060

		Existing habitats on site Please enter all habitats within the site boundary		**Habitat distinctiveness**		**Habitat condition**		**Habitat Biodiversity Value: Habitats to be retained with no change within development**		**Habitats to be retained and enhanced within development**		**Habitats to be lost within development**		
T. Note	code	Phase 1 habitat description	*Habitat area (ha)*	*Distinctiveness*	*Score*	*Condition*	*Score*	*Area (ha)*	*Existing value*	*Area (ha)*	*Existing value*	*Area (ha)*	*Existing value*	***Comment***
		Direct Impacts and retained habitats			A		B	C	A x B x C = D	E	A x B x E = F	G	A x B x G = H	
	n/a	Built Environment: Buildings/hardstanding	0.11	none	0	Poor	1					0.11	**0.00**	Existing buildings and hardstanding.
	J4	Other: Bare ground	0.09	Low	2	Poor	1					0.09	**0.18**	Existing patches of bare ground.
	B4	Grassland: Improved grassland	3.59	Low	2	Poor	1					3.59	**7.18**	Existing grazed, improved grassland.
	C31	Other: Tall ruderal	0.07	Medium-Low	3	Poor	1					0.07	**0.21**	Existing tall ruderal.
	A3	Woodland: Scattered trees	0.14	Medium	4	Moderate	2	0.12	0.96			0.02	**0.16**	Existing scattered trees. One lost, with eight retained.
		Total	4.00				Total	0.12	0.96	0.00	0.00	3.88	7.73	J
													∑D + ∑F + ∑H	
											Site habitat biodiversity value		8.69	

Before/after impact	**Indirect Negative Impacts** Including off site habitats	K				Value of loss from indirect impacts: K x A x B = Li, Lii	Li - Lii
Before							
After							
Before							
After							
Before							
After							
Before							
After							
Before							
After							
	Total	0.00					0.00 M

	HIS = J + M
Habitat Impact Score (HIS)	**7.73**

T. Note	code	**Proposed habitats on site (Onsite mitigation)** Phase 1 habitat description	Area (ha)	**Target habitats distinctiveness** Distinctiveness	Score	**Target habitat condition** Condition	Score		**Time till target condition** Time (years)	Score	**Difficulty of creation / restoration** Difficulty	Score	***Habitat biodiversity value***	***Comment***
		Habitat Creation	N		O		P			Q		R	(N x O x P) / Q / R	
	n/a	Built Environment: Buildings/hardstanding	1.34	none	0	Poor	1		3 Years	1.1	Low	1	**0.00**	Proposed buildings and hardstanding.
	n/a	Built Environment: Gardens (lawn and planting)	0.46	Low	2	Poor	1		3 Years	1.1	Low	1	**0.84**	Proposed residential gardens.
	J14	Other: Introduced shrub	0.05	Low	2	Poor	1		3 Years	1.1	Low	1	**0.09**	Proposed introduced shrub.
	J12	Grassland: Amenity grassland	0.11	Low	2	Poor	1		3 Years	1.1	Low	1	**0.20**	Proposed amenity grassland comprising amenity turves.
	B22	Grassland: Semi-improved neutral grassland	0.16	Medium	4	Moderate	2		3 Years	1.1	Medium	1.5	**0.78**	Proposed EG10 tussock grass mixture.
	J12	Grassland: Amenity grassland	0.82	Low	2	Poor	1		3 Years	1.1	Low	1	**1.49**	Proposed EG22 strong lawn grass mixture.
	B22	Grassland: Semi-improved neutral grassland	0.19	Medium	4	Moderate	2		3 Years	1.1	Medium	1.5	**0.92**	Proposed EH1 hedgerow mixture.
	B22	Grassland: Semi-improved neutral grassland	0.37	Medium	4	Good	3		3 Years	1.1	Medium	1.5	**2.69**	Proposed EM2 standard purpose general meadow mixture.
	B22	Grassland: Semi-improved neutral grassland	0.04	Medium	4	Moderate	2		3 Years	1.1	Medium	1.5	**0.19**	Proposed EM8 meadow mixture for wetlands.
	A112	Woodland: Broad-leaved plantation	0.11	Medium	4	Moderate	2		25 years	2.4	Medium	1.5	**0.24**	Proposed native woodland and understorey planting in north of development.
	A3	Woodland: Scattered trees	0.18	Medium	4	Moderate	2		25 years	2.4	Low	1	**0.60**	Proposed scattered trees throughout development.
	A21	Woodland: Dense continuous scrub	0.05	Medium-Low	3	Moderate	2		15 years	1.7	Low	1	**0.18**	Proposed species-rich thicket mix along western boundary of development.
		Total	**3.88**											
		Habitat Enhancement						Existing value S (= F)					((NxOxP)-S)/Q/R	
B														
		Total	**0.00**											

Trading down correction value	0.00
Habitat Mitigation Score (HMS)	**8.22**
	HBIS = HMS - HIS
Habitat Biodiversity Impact Score	**0.49** Gain
Percentage of biodiversity impact loss	

	Loss	Gain	Impact
Woodland Habitat	0.16	1.02	**0.86**
Grassland Habitat	7.18	6.27	**-0.91**
Wetland Habitat	0.00	0.00	**0.00**
Other Habitat (including Built Environment)	0.39	0.93	**0.54**
Total	7.73	8.22	**0.49**
		Trading down	**0.00**
			0.49

Warwickshire, Coventry & Solihull - Hedge Impact Assessment Calculator

KEY	
	No action required
	Enter value
	Drop-down menu
	Calculation
	Automatic lookup
	Result

This sheet calculates the impacts to hedges and lines of trees in and around the site.

These units are not transferrable as compensation for either the Habitat or Connectivity Impact Assessment scores.

Please fill in both tables

Please do not edit the formulae or structure
To condense the form for display hide vacant rows, do not delete them
If additional rows are required, or to provide feedback on the calculator please contact WCC Ecological Services

T. Note	Existing Hedgerow features on site: code	Hedgerow habitat description	Feature length (km)	Hedgerow distinctiveness: Distinctiveness	Score	A1	A2	B1	B2	C1	C2	D1	D2	Condition Score	Hedgerow features to be retained with no change within development: Length (km) C	Existing value A x B x C = D	Hedgerow Biodiversity Value – Hedgerow features to be retained and enhanced within development: Length (km) E	Existing value A x B x E = F	Hedgerow features to be lost within development: Length (km) G	Existing value A x B x G = H	Comment
		Direct Impacts and retained features			A																
	n/a	Hedgea: species rich hedge with trees	0.74	High	6	Pass	Fail	Fail	Pass	Fail	Pass	Pass	Pass	2			0.74	**8.88**			Hedgerows along northern, eastern and southern boundaries.
		Total	0.74											Totals	0.00	0.00	0.74	8.88	0.00	0.00	P
																		Site Hedge Biodiversity Value		T.D + T.F + T.H	
		Indirect Negative Impacts																			
	Before/after impact		K												Value of loss from indirect impacts K x A x B = Li; Lii	Li - Lii					
	Before																				
	After																				
	Before																				
	After																				
	Before																				
	After																				
	Before																				
	After																				
	Before																				
	After																				
		Total	0.00													0.00	M			HIS = J + M	
																			Hedge Impact Score (HIS)	0.00	

T. Note	Proposed hedge features on site (Onsite mitigation): code	Phase 1 habitat description	Length (km)	Target hedge distinctiveness: Distinctiveness	Score	A1	A2	B1	B2	C1	C2	D1	D2	Condition Score		Time till target condition: Time (years)	Score	Difficulty of creation / restoration: Difficulty	Score	Linear biodiversity value	Comment
		Hedgerow Creation	N		O												Q		R	(N x O x P) / Q / R	
	n/a	Hedgea: species rich hedow	0.03	Medium	4	Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass	3		10 years	1.4	Low	1	**0.26**	Mixed native hedgerow in south-east of development
	n/a	Hedgea: non. species rich hedge	0.03	Low	2	Fail	Fail	Pass	Pass	Pass	Fail	Pass	Pass	2		5 years	1.2	Low	1	**0.10**	Sections of hornbeam hedgerow throughout development
	n/a	Hedgea: non. species rich hedow	0.24	Low	2	Fail	Fail	Pass	Pass	Fail	Fail	Pass	Pass	1		5 years	1.2	Low	1	**0.40**	Ornamental non-native hedgerow throughout development
		Total	0.30																		
		Hedgerow Enhancement													Existing value S (x P) -					((N x O x P) - S) / Q / R	
		Total	0.00	ERROR - Total length of hedgerow enhancement must equal total length of hedgerow to be enhanced along															Trading down correction value	-0.50	
																			Hedge Mitigation Score (HMS)	0.20	

	HMS = HMS - HMIS	
Hedge Biodiversity Impact Score	0.20	Gain
Percentage of linear impact loss		

KEY	
	No action required
	Action required
	Drop-down menu
	Calculation
	Automatic lookup
	Overall Gain
	Overall Loss

Warwickshire Coventry and Solihull - Connectivity Impact Assessment [optional]

KEY	
	No action required
	Enter value
	Drop-down menu
	Calculation
	Automatic lookup
	Result

Connectivity Features
This sheet gives and indication as to whether the development will enhance connectivity thorugh or around the site.

These units are not transferrable as compensation for either the Habitat or Hedgerow Impact Assessment scores.

Please fill in both tables

Please do not edit the formulae or structure
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	Existing Connectivity features on site			Connectivity distinctiveness		Connectivity condition		Connectivity Biodiversity Value: Connectivity features to be retained with no change within development		Connectivity features to be retained and enhanced within development		Connectivity features to be lost within development		
T. Note	code	Phase 1 habitat description	*Feature length (km)*	*Distinctiveness*	*Score*	*Condition*	*Score*	*Length (km)*	*Existing value*	*Length (km)*	*Existing value*	*Length (km)*	*Existing value*	***Comment***
		Direct Impacts and retained features			A		B	C	A x B x C = D	E	A x B x E = F	G	A x B x G = H	
		Total	0.00				Total	0.00	0.00	0.00	0.00	0.00	0.00	J
													∑D + ∑F + ∑H	
										Site Connectivity Biodiversity Value			0.00	

Before/after impact	Indirect Negative Impacts	K				Value of loss from indirect impacts: K x A x B = Li, Lii	Ll - Lii
Before							
After							
Before							
After							
Before							
After							
Before							
After							
Before							
After							
	Total	0.00				0.00	M

Connectivity Impact Score (CIS)	CIS = J + M **0.00**

	Proposed linear features on site (Onsite mitigation)			Target Connectivity distinctiveness		Target Connectivity condition			Time till target condition		Difficulty of creation / restoration		***Connectivity biodiversity value***	
T. Note	code	Phase 1 habitat description	*Length (km)*	*Distinctiveness*	*Score*	*Condition*	*Score*		*Time (years)*	*Score*	*Difficulty*	*Score*	(N x O x P) / Q / R	**Comment**
		Connectivity Creation	N		O		P			Q		R		
		Total	0.00											
		Connectivity Enhancement						Existing value S (= F)					((N x O x P) - S) / Q / R	
		Total	0.00								Trading down correction value		0.00	
											Connectivity Mitigation Score (CMS)		**0.00**	
													CBIS = CMS - CIS	
											Connectivity Biodiversity Impact Score		**0.00**	
											Percentage of linear impact loss			

Habitat trading down correction calculator

Existing Site

Existing habitat	Area of habitat impact	Distinctiveness	High distinctiveness habitat loss biodiversity value	Medium-High distinctiveness habitat loss biodiversity value	Medium distinctiveness habitat loss biodiversity value	Medium-Low distinctiveness habitat loss biodiversity value
Direct impacts						
Built Environment: Buildings/hardstanding	0.11	none	0.00	0.00	0.00	0.00
Other: Bare ground	0.09	Low	0.00	0.00	0.00	0.00
Grassland: Improved grassland	3.59	Low	0.00	0.00	0.00	0.00
Other: Tall ruderal	0.07	Medium-Low	0.00	0.00	0.00	0.21
Woodland: Scattered trees	0.02	Medium	0.00	0.00	0.16	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00
Indirect impacts						
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
TOTAL	3.88		0.00	0.00	0.16	0.21

Proposed Site

Proposed habitat creation	Area of habitat creation	Distinctiveness	High distinctiveness proposed biodiversity value	Medium-High distinctiveness proposed biodiversity value	Medium distinctiveness proposed biodiversity value	Medium-Low distinctiveness proposed biodiversity value
Built Environment: Buildings/hardstanding	1.34	none	0.00	0.00	0.00	0.00
Built Environment: Gardens (lawn and planting)	0.46	Low	0.00	0.00	0.00	0.00
Other: Introduced shrub	0.05	Low	0.00	0.00	0.00	0.00
Grassland: Amenity grassland	0.11	Low	0.00	0.00	0.00	0.00
Grassland: Semi-improved neutral grassland	0.16	Medium	0.00	0.00	0.78	0.00
Grassland: Amenity grassland	0.82	Low	0.00	0.00	0.00	0.00
Grassland: Semi-improved neutral grassland	0.19	Medium	0.00	0.00	0.92	0.00
Grassland: Semi-improved neutral grassland	0.37	Medium	0.00	0.00	2.69	0.00
Grassland: Semi-improved neutral grassland	0.04	Medium	0.00	0.00	0.19	0.00
Woodland: Broad-leaved plantation	0.11	Medium	0.00	0.00	0.24	0.00
Woodland: Scattered trees	0.18	Medium	0.00	0.00	0.60	0.00
Woodland: Dense continuous scrub	0.05	Medium-Low	0.00	0.00	0.00	0.18
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
Proposed habitat enhancement	Area	Distinctiveness	High	Medium-High	Medium	Medium-Low
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00
TOTAL	3.88		0.00	0.00	5.42	0.18

Trading Down Correction	High	Medium-High	Medium	Medium-Low
Value of existing habitat loss per distinctiveness	0.00	0.00	0.16	0.21
Value of created habitats per distinctiveness	0.00	0.00	5.42	0.18
Would this result in trading down habitats?	Never	No	No	No
If no, value each distinctiveness still requiring compensation	0	0	0	0
Surplus gain to be carried over to compensate loss of lower habitats (rolls over)	0	0	5.26	5.23
Trading down correction value	n/a	0	0	0

This calculator assess whether there is any down trading in habitats value. E.g. loss of high distinctiveness habitat cannot be compensated for by surpluss medium mitigation. It ca
value which enters into the primary calculator to take this into account. Such that the full level of high habitat loss compensation is required. However if additional medium gain is g
value of the high loss, this surplus is still be taken into account with on site gain.

CAUTION - Destruction of habitats of high distinctiveness, e.g. lowland meadow or ancient woodland, may be against local policy. Has the mitigation
hierarchy been followed, can impact to these habitats be avoided?
Any unavoidable loss of habitats of high distinctiveness must be replaced like-for like.

Hedgerow trading down correction calculator

Existing Site

Existing Hedgerow features	length of loss (km)	Distinctiveness	High distinctiveness Hedgerow loss biodiversity value	Medium-High distinctiveness Hedgerow loss biodiversity value	Medium distinctiveness Hedgerow loss biodiversity value	Medium-Low distinctiveness Hedgerow loss biodiversity value	Low distinctiveness Hedgerow loss biodiversity value
Direct impacts							
Hedges: species rich hedge with trees	0.74	High		0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
Indirect impacts							
-	-		0.00	0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00	0.00
TOTAL	0.74		0.00	0.00	0.00	0.00	0.00

Proposed Site

Proposed hedgerow creation	Length of feature (km)	Distinctiveness	High distinctiveness proposed Hedgerow biodiversity value	Medium-High distinctiveness proposed Hedgerow biodiversity value	Medium distinctiveness proposed Hedgerow biodiversity value	Medium-Low distinctiveness proposed Hedgerow biodiversity value	Low distinctiveness proposed Hedgerow biodiversity value
Hedges: species rich hedge	0.03	Medium	0.00	0.00	0.26	0.00	0.00
Hedges: non_species rich hedge	0.03	Low	0.00	0.00	0.00	0.00	0.10
Hedges: non_species rich hedge	0.24	Low	0.00	0.00	0.00	0.00	0.40
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
Proposed hedgerow enhancement	Length	Distinctiveness	High	Medium-High	Medium	Medium-Low	Low
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
TOTAL	0.30		0.00	0.00	0.26	0.00	0.50

Hedgerow trading down correction	High	Medium-High	Medium	Medium-Low	Low	
Value of existing habitat loss per distinctiveness	0.00	0.00	0.00	0.00	0.00	
Value of created habitats per distinctiveness	0.00	0.00	0.26	0.00	0.50	
Would this result in trading down habitats?	Never	No	No	No	Yes	
If no, value each distinctiveness still requiring compensation	0	0	0	0	0	
Surplus gain to be carried over to compensate loss of lower habitats (rolls over)	0	0	0.26	0.26	n/a	Total
Trading down correction value	n/a	0	0	0	-0.50	**-0.50**

This calculator assess whether there is any down trading in Hedgerow habitats. E.g. loss of high distinctiveness habitat and surplus creation of medium or low habitats. It calculates a correction value which enters into the primary calculator to take this into account. Such that the full level of high habitat loss compensation is required. However if additional medium gain is generated above the value of the high loss, this surplus is still be taken into account with on site gain.

CAUTION - Destruction of each habitat of medium distinctiveness and above should be mitigated for with creation/restoration of a similar habitat. Trading up of habitat type is encouraged.

Linear trading down correction calculator

Existing Site

Existing linear features	length of loss (km)	Distinctiveness	High distinctiveness linear loss biodiversity value	Medium-High distinctiveness linear loss biodiversity value	Medium distinctiveness linear loss biodiversity value	Medium-Low distinctiveness linear loss biodiversity value	Low distinctiveness linear loss biodiversity value
Direct impacts							
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
-			0.00	0.00	0.00	0.00	0.00
Indirect impacts							
-	-		0.00	0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00	0.00
-	-		0.00	0.00	0.00	0.00	0.00
TOTAL	0.00		0.00	0.00	0.00	0.00	0.00

Proposed Site

Proposed linear creation	Length of feature (km)	Distinctiveness	High distinctiveness proposed linear biodiversity value	Medium-High distinctiveness proposed linear biodiversity value	Medium distinctiveness proposed linear biodiversity value	Medium-Low distinctiveness proposed linear biodiversity value	Low distinctiveness proposed linear biodiversity value
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
Proposed linear enhancement	Length	Distinctiveness	High	Medium-High	Medium	Medium-Low	Low
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
-	0.00		0.00	0.00	0.00	0.00	0.00
TOTAL	0.00		0.00	0.00	0.00	0.00	0.00

Linear trading down correction	High	Medium-High	Medium	Medium-Low	Low	
Value of existing habitat loss per distinctiveness	0.00	0.00	0.00	0.00	0.00	
Value of created habitats per distinctiveness	0.00	0.00	0.00	0.00	0.00	
Would this result in trading down habitats?	Never	No	No	No	No	
If no, value each distinctiveness still requiring compensation	0	0	0	0	0.00	
Surplus gain to be carried over to compensate loss of lower habitats (rolls over)	0	0	0	0	n/a	Total
Trading down correction value	n/a	0	0	0	0	**0.00**

This calculator assess whether there is any down trading in linear habitats. E.g. loss of high distinctiveness habitat and surplus creation of medium or low habitats. It calculates a correction value which enters into the primary calculator to take this into account. Such that the full level of high habitat loss compensation is required. However if additional medium gain is generated above the value of the high loss, this surplus is still be taken into account with on site gain.

CAUTION - Destruction of each habitat of medium distinctiveness and above should be mitigated for with creation/restoration of a similar habitat. Trading up of habitat type is encouraged.

Phase 1 Habitat Type	Phase 1 Habitat Codes	Distinctiveness		Difficulty of creation		Preset Time to Target Condition (Moderate)	Preset Time to Target Condition (Good)	Difficulty of restoration		Preset Time to Target Condition (Moderate)	Preset Time to Target Condition (Good)	UK Priority Habitat /Habitat of Principal Importance	LBAP Priority Habitat	NVC	Habitat Definition	Notes	Condition Assessment	Habitat creation/restotation timescales
Built Environment: Buildings/hardstanding	n/a	none	0	Low	1	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Not a priority habitat				Classify as poor condition	
Built Environment: Gardens (lawn and planting)	n/a	Low	1	Low	1	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Not a priority habitat				Classify as poor condition	0-5 years
Woodland: Broad-leaved semi-natural woodland	A111	High	6	n/a	-	n/a	n/a	Low	1	W_in_P	W_in_P	Lowland mixed deciduous woodland	Woodland	W8,W10, W16	Include all stands which do not obviously originate from planting. Both ancient and more recent stands are included. Woodland where more than 30% is planted should be classified as plantation. However, mature plantations (more than about 120 years old) of locally native species where there are semi-natural woodland ground flora and shrub communities should be classified as semi-natural (NCC, 1990). See Phase 1 Survey Handbook for definition of woodland types included in semi-natural category		Use FEP T08 condition assessment	Planted native woodlands will be about 120 years old before they can be considered semi-natural and should be composed of locally native species and have semi-natural woodland ground flora and shrub communities (Phase 1 Survey Handbook, NCC 1990) therefore cannot be created on timescales used in BIA. Timescales for the restoration of existing semi-natural woodland will depend on reasons for unfavourable condition. Timescales for restoration will depend on reasons for unfavourable condition (see condition assessment) and management required to improve condition.
Woodland: Broad-leaved plantation	A112	Medium	4	Medium	1.5	32+ years	n/a	Low	1	W_in_P	W_in_P	Not a priority habitat	Not a priority habitat	Some forms of W8, W10, W16 or non NVC	Obviously planted woodland with no more than 10% of the canopy made up of conifer trees (NCC, 1990). See Phase 1 Survey Handbook for exceptions. The category includes recent stands (i.e less than about 120 years) planted with locally native trees. The phase 1 handbook does not define a minimum size but the National Inventory of Woodland and Trees defines woodland as having a minimum area of 0.5ha and a minimum width of 20m.		Use T08 even though this habitat does not meet strict FEP definition for use with T08.	It is likely to take more than 100 years before the planted woodlands approach good condition e.g. with an age and structural diversity including canopy, understory and field layer that supports plants, insect, mammal and bird species typical of native woodlands. For these reasons, aim for moderate condition in 32+ years. The minimum woodland size for Countryside Stewardship woodland creation grants is 0.5 hectares and must have a mimimum width of 20 metres.
Woodland: Coniferous semi-natural woodland	A121	Medium	4	n/a	-	n/a	n/a	Low	1	n/a	n/a	Native pine woodlands (Scotland only). Yew stands are inclued in the lowland beech and yew woodland plan and upland mixed	n/a	W13, W18		This woodland type s not found in Warwickshire	Use T08 even though this habitat does not meet strict FEP definition for use with T08.	n/a
Woodland: Coniferous plantation	A122	Low	2	Medium	1.5	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Not a priority habitat	Some forms of W10, W16 or non NVC	Obviously planted woodland with no more than 10% of the canopy made up of broadleaved trees (NCC, 1990). See Phase 1 Survey Handbook for exceptions. Typical trees species include larch (*Larix* spp), pine (*Pinus* spp) and spruce (*Picea* spp)		Classify as poor condition	n/a
Woodland: Mixed semi-natural woodland	A131	Medium	4	n/a	-	n/a	n/a	Low	1	W_in_P	W_in_P	Lowland mixed deciduous woodland	Woodland		Woods that do not obviously originate from planting (see Phase 1 Survey Handbook for exceptions) with a canopy made up of between ten and ninety percent of either broadleaved and coniferous trees (NCC, 1990).		Use FEP T08 condition assessment	
Woodland: Mixed plantation	A132	Low	2	Medium	1.5	32+years	n/a	Low	1	W_in_P	W_in_P	Not a priority habitat	Not a priority habitat		Obviuosly planted with 10-90% of either broadleaved or conifer trees in the canopy (NCC, 1990). See Phase 1 Survey Handbook for exceptions.		Use T08 even though this habitat does not meet strict FEP definition for use with T08.	It is likely to take more than 100 years before the planted woodlands approach good condition e.g. with an age and structural diversity including canopy, understory and field layer that supports plants, insect, mammal and bird species typical of native woodlands. Target condition should be moderate in 32+ years.
Woodland: Wet woodland	n/a	High	6	Medium	1.5	32+years	n/a	Medium	1.5	W_in_P	W_in_P	Wet woodland	Woodland	W1 - W7	Wet woodlands are found on poorly drained or seasonally wet soils. They are commonly found on floodplains, alongside rivers and stream, on fens and in damper areas of other woodland types. Alder, birch and willows are usually the dominant tree species.	Wet woodland is scarce in the County.	Use FEP T08 condition assessment	
Woodland: Dense continuous scrub	A21	Medium-Low	3	Low	1	10 years	15 years	Low	1	W_in_P	W_in_P	Not a priority habitat	Not a priority habitat	W21-24	A block of scrub is dominated by the shrub species less than five metres tall. It may have a few scattered trees but there will be no recognisable canopy. To be dense or continuous, the scrub cover must be thirty percent or more. This includes stands of bramble, dog Rose and gorse (*Ulex europaeus*) and also stands of mature hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*) or grey willow (Salix cinerea) even if they are greater than 5m tall. (NCC, 1990).	Scrub is often part of mosaic with other habitats. Its conservation value can be variable, and is often seen as of low value due to low botanical species diversity. However, it can be of high value in its own right as well as providing suitable habitat for some of the county's important species of invertebrates, mammals and birds.	Use condition assessment V05 for scrub, even if the scrub does not meet the FEP definition of high environmental value scrub.	Scrub of high conservation value contains a range of shrub species (at least 3) with mixed age structure, has a complex vertical and horizontal structure i.e. variation in physical structure, age range and spacing, has many clearings and glades giving a high boundary/area ratio, a well developed edge with ungrazed tall herbs, and supports a range of rare/local invertebrates. Scrub typically matures in 15 years (RSPB), so it should be possible to create good quality scrub in 15 years with suitable management e.g. rotational cutting that achieves the above conditions.
Woodland: Scattered scrub	A22	Medium	4	Low	1	10 years	15 years	Low	1	W_in_P	W_in_P	Not a priority habitat	Not a priority habitat	W21-24	As above but scrub cover is less than thirty percent.	Scattered scrub occurs in association with other semi-natural habitats, frequently occurring as a mosaic with grassland or early uccessional communities, and often having occasional scattered trees. The presence of scattered scrub can add to a sites ecological interest. Where scrub is part of a habitat mosaic, for example with grassland, the habitat with the higher distinctiveness score should automatically be entered in the BIA.	Use condition assessment V05 for scrub, even if the scrub does not meet the FEP definition of high environmental value scrub.	Scrub of high conservation value contains a range of shrub species (at least 3) with mixed age structure, has a complex vertical and horizontal structure i.e. variation in physical structure, age range and spacing, has many clearings and glades giving a high boundary/area ratio, a well developed edge with ungrazed tall herbs, and supports a range of rare/local invertebrates. Scrub typically matures in 15 years (RSPB), so it should be possible to create good quality scrub in 15 years with suitable management e.g. rotational cutting that achieves the above conditions.
Woodland: Scattered trees	A3	Medium	4	Low	1	32+ years	n/a	Low	1	W_in_P	W_in_P	Not a priority habitat	Not a priority habitat		Habitat that is neither woodland or scrub, but have trees present. Tree cover must be less than thirty percent. However, most examples of planted trees over amenity grassland should be included in this category even where tree cover exceeds 30%	The area calculation should be the whole land parcel on which the scrub/trees are planted and not just the cover the individual trees/shrubs. Where a parcel of land has more than one habitat e.g. scatterd trees on grassland, the habitat with the higher distinctiveness score should be entered	No FEP condition assessment. See next column for important attributes.	The ecological value of scattered trees will depend on the tree species (species such as oak, birch, hawthorn and willows are most valuable), age (large, mature trees have higher value), location (the proximity of other habitats that add habitat, species and structural diversity), the presence of features such as decay, loose bark, dense ivy cover etc. It takes decades for these features to develop.
Woodland: Broad-leaved parkland	A31	High	6	Medium	1.5	n/a	n/a	Low	1	W_in_P	W_in_P	Wood-pasture and parkland	Old parkland & veteran trees	Range of NVC types	This category is for Wood Pasture and Parkland Priority Habitat/Habitat of Principle Importance only. Wood-pasture and parkland is not defined by any particular type(s) of vegetation, NVC types, or Phase 1 habitat types. Instead they are mosaic habitats valued for their trees, especially veteran and ancient trees, and the plants and animals that they support (LBAP).	This habitat is typical of large estates with a history of traditional management e.g. grazing by cattle or deer, but can also be found in cemeteries and churchyards. Such sites can often be important due to the presence of large numbers of mature trees and can also have historic, cultural and landscape	Use FEP T03 condition assessment	Timecales for restoration will depend on reasons for current condition and management required to improve condition. Reasons for unfavourable condition may include e.g. loss of old trees (disease, root damage, soil compaction, felling) lack of replacement trees, lack of standing and fallen deadwood (removed for safety reasons, over-tidying), inappropriate management e.g. intensive grazing levels.
Woodland: Coniferous parkland	A32	Medium	4	Medium	1.5	n/a	n/a	Low	1	W_in_P	W_in_P	Not a priority habitat	n/a		Parklands with introduced exotic trees such as cedar (Cedrus spp).			
Woodland: Recently felled woodland	A4	Low	2	n/a	-	n/a	n/a	n/a	-	n/a	n/a	Not a priority habitat	Not a priority habitat		Only include areas where future land use is uncertain, e.g., if it is not clear whether they are to be replanted		Classify as poor condition	n/a
Woodland: Orchard	A5	High	6	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P	Traditional orchard	Orchards	Range of NVC types	This category is for Traditional Orchards Priority Habitat/Habitats of Principal Importance only. Intensively managed orchards are not included. Tradition orchards are defined as groups of fruit and nut trees planted on vigorous rootstocks at low densities in permanent grassland and managed in a low intensity way. The minumum size of a traditional orchard is defined as at least five trees with crown edges less than 20m apart. Orchards are a mosaic habitat containing fruit trees, deadwood, pasture or meadow, scrub, hedgerows, ponds etc. Prime examples support a diversity of vascular plants, bryophytes, lichens, fungi, vertebrates and invertebrates including BAP species, nationally rare and scarce species.		Use FEP T15 or PTES (Peoples Trust for Endangered Species) condition assessment (see PTES/NE Project Report NECR077)	The PTES condition assessment has 3 condition categories: excellent (established, mixed ages of tree, grazed, standing and fallen deadwood), good/fair (includes newly planted or young orchards that are mown, they lack good deadwood habitat and the mature trees that can provide it naturally), poor (gappy, no new trees, scrubbed over, trees damaged). Newly planted orchards can therefore be in moderate (i.e PTES good/fair) condition in 5-10 years provided assocatied habitats e.g. wildflower grassland, hedges, scrub, deadwood logpiles etc are incorporated. It will take a lot longer to achieve good condition i.e. trees of varying age, standing and fallen deadwood etc. See PTES website and Natural Englands Technical information notes (TIN12 to 21) for advice on planting, species and varities, wildlife, location, rootstocks etc), also Countryside Stewardship. Creation of traditional orchards option BE5
Grassland: Unimproved acidic grassland	B11	High	6	Medium	1.5	n/a	n/a	Low	1	W_in_P	W_in_P	Lowland dry acid grassland	Acid grassland	U1-U4	Lowland acid grassland typically occurs on nutrient poor, free-draining soils of low pH (<5.5). Acid grasslands are characteristically species poor with typical species that include fine-leaved grasses such as common bent, sheep's fescue, mat-grass and wavy hair-grass and forbs such as heath bedstraw, tormentil and sheep's sorrel. Although species-poor compared to other semi-natural grasslands, it contains important communities with species that are rare in the region.	Lowland acid grasslands are very rare in Warwickshire sub region. The HBA (2012) recorded a total resource of 72.7ha (2.4ha unimproved and 70.3ha semi-improved). It is mainly associated with heathland, woodland or post-industrial sites. They are largely confined to the acid glacial soils in the north of the County on the Midlands Plateau Natural Area where they persist as fragments	Use FEP G05 condition assessment	Unimproved grasslands cannot be recreated, at least not on timesacles used in the BIA metric. It is possible to create BAP quality grasslands that resemble old unimproved grasslands but these classified as semi-improved - see below.
Grassland: Semi-improved acidic grassland	B12	Medium-High	5	Medium	1.5	15 years	W_in_P	Low	1	W_in_P	W_in_P	Lowland dry acid grassland	Acid Grassland	U1-U4	Improvement reduces the acid character of the grassland and semi-improved acid grasslands will contain a mesotrophic species element (such as white clover, yarrow, common mouse-ear, perennial rye-grass, Yorkshire fog) but in practice, it can be difficult to separate unimproved and semi-improved grasslands.	See above	Use FEP G05 condition assessment	A review of agri-environment schemes (5 sites) found it is possible to create/restore lowland dry acid grassland PH within 10-20 years. One site created (20 years ago) on a field of free draining sand has a well established U1c grassland in good condition. The 4 restored sites were in moderate (3 sites) or good (1 site) condition over timescales of 10-20 years by reinstatement of management e.g. grazing, tree/shrub clearance. See attached guidance for
Grassland: Unimproved neutral grassland	B21	High	6	Medium	1.5	n/a	n/a	Low	1	W_in_P	W_in_P	Lowland meadow	Neutral grassland	MG4, MG5, MG8	Unimproved neutral grasslands are found on neutral clays and alluvial soils which have not been subject to alteration through the use of fertilizers, slurry and herbicides. They are the product of a long history of traditional management such as hay making (meadows) or low intensity grazing (pastures) over many decades. Species diversity is often high (but where neglected can be rank) and can include rare or scarce plants such as green-winged orchid, dyer's greenweed, pepper saxifrage and adder's tongue fern. They also support a diverse fauna, especially invertebrate species.	True unimproved grassland is now very rare in the sub region. The HBA recorded 174ha in 2017. SSSIs account for 73ha (40%) of this total. Outside of SSSIs remnant unimproved grasslands are generally small and highly fragmented, found on nature reserves, small 'hobby' farms, churchyards, traditional orchards, woodland rides, churchyards, as fragments of remnant old grassland that have escaped intensification e.g. within or on the edge of urban areas. Many of these are designated as Local Wildlife Sites.	Use FEP G06 condition assessment	Studies (see attached guidance) give timescale trajectories of many decades for the recreation of unimproved neutral grassland. It is possible to create grasslands that superficially resemble species-rich grasslands (see below) but these will not have the natural vegetation patterns, full range of plant species and undisturbed soil fuana and flora of unimproved grasslands.
Grassland: Semi-improved neutral grassland	B22	Medium	4	Medium	1.5	15 years	W_in_P	Low	1	15 years	W_in_P	Lowland meadow	Neutral grassland	MG1, MG6, MG4, MG5	Semi-improved neutral grasslands have been subject to some form of agricultural improvement such as fertilizer application, use of herbicide, intensive grazing or drainage but are typically not subject to regular reseeding (improved grasslands). Semi-improved grasslands cover a very broad range of grassland quality from almost unimproved (species-rich) to species-poor semi-improved grassland that is just slightly more species-rich than agriculturally improved grassland.	Species-rich semi-improved grassland is more widespread in the sub region than unimproved grassland but still scarce. Species diversity will be lower than unimproved grasslands but still of high botanical diversity supporting grassland communities that resemble MG5 or MG4 grassland with species such as common knapweed, lady's bedstraw, yellow rattle, common bird's-foot-trefoil, meadow vetchling, oxeye daisy and great burnet but often at lower frequencies than seen in unimproved meadows. Rarer species associated with true unimproved grasslands will also tend to be	Use FEP G06 condition assessment	Evidence from agri-environment schemes (Wilson et al - see attached guidance) show that it is possible to create/restore lowland meadow PH of moderate to good quality typically in 8-15 years. Careful site selection (e.g. low soil nutrient levels) and suitable management (e.g. cutting and grazing) are important. Low frequency of positive indicator species was the primary reason for grasslands failing to achieve good status. It is possible therefore to create/restore lowland meadow PH to good condition in 10 years on high potential sites (see FEP manual Keys 1 and 2c). On low potential sites, moderate condition in 15 years is a more realistic target.
Grassland: Unimproved calcareous grassland	B31	High	6	Medium	1.5	n/a	n/a	Low	1	W_in_P	W_in_P	Lowland calcareous grassland	Calcareous grassland	CG2, CG5	Calcareous grassland supports a range of plant communities in which lime-tolerant (calcicolous) plants are characteristic. Typical forb species include common centuary, yellow-wort, kidney vetch and dwarf thistle and grasses such as sheep's fescue, tor-Grass, upright brome, crested hair-grass and meadow oat-grass.	Calcareous grassland is very rare in the sub-region, largely confined to the south and east of Warwickshire within the Cotswolds and Feldon areas (and with limited areas in the south of the Arden). The majority has a relatively recent origin, falling within old or partially worked quarries, where disturbance has ceased some time ago. Further more important examples occur in cuttings. A little exists within agricultural settings (often on steeper ground that has been left out of improvement schemes) and along some road verges and railway or canal cuttings (Warwickshire LBAP). The latest figures from Habitat Biodiversity Audit (HBA, 2012) give the total area of calcareous grassland in Warwickshire, Coventry and Solihull to be 118 ha (35ha unimproved and 83ha semi-improved). A large part of this resource is included within designated sites (SSSIs and LWS).	Use FEP G04 condition assessment	Studies suggest timescale trajectories of 60-100 years for the restoration of ancient calcareous grasslands (see attached guidance).
Grassland: Semi-improved calcareous grassland	B32	Medium-High	5	Medium	1.5	15 years	W_in_P	Low	1	15 years	W_in_P	Lowland calcareous grassland	Calcareous grassland	CG2, CG5	Semi-improved calcareous grasslands that have been improved by the addition of some fertiliser will contain some mesotrophic species such as white clover, yarrow, Yorkshire fog, cock's-foot and crested dog's-tail		Use FEP G04 condition assessment	A review of agri-environment schemes (Wilson et al) found it is possible to create/restore lowland calcareous grassland PH in 8-15 years. However, low soil nutrient levels and suitable grazing management are important. Of 15 sites studied, 10 were in good condition and 5 were in moderate condition.
Grassland: Poor semi-improved grassland	B6	Medium-Low	3	Medium	1.5	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Not a priority habitat	Some examples of MG6	This consists of semi-improved grassland which is more improved, poorer in species diversity, and more resembles species-poor neutral grassland irrespective of the underlying soil type. However, it is noticeably less improved and more species rich than improved grassland (NCC, 1990). Typical species including Yorkshire fog, meadow foxtail, cock's-foot, red fescue, ribwort plantain and meadow buttercup.		Classify as poor condition	n/a
Grassland: Improved grassland	B4	Low	2	n/a	-	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Not a priority habitat	MG6a, MG7	Improved grasslands are dominated by a limited range of grasses, particularly perennial rye-grass and have a very low forb diversity characteristically dominated by white clover.	It is the commonest grassland type in the County.	Classify as poor condition	n/a
Grassland: Marsh / Marshy grassland	B5	High	6	High	3	15 years	W_in_P	Medium	1.5	W_in_P	W_in_P	Coastal and floodplain grazing marsh Purple moor-grass and rush pasture Lowland meadow		MG8-10, MG12, M22-28	This is a diffuse category covering certain Molinia grasslands, grasslands with a high proportion of Juncus species, Carex species or Filipendula ulmaria, and wet meadows and pastures supporting communities of species such as Caltha palustris or Valeriana species, where broadleaved herbs predominate over grasses.		Use FEP G07 condition assessment	A review of agri-environment schemes (by Wilson et al - see attached guidance) looked at three wet grassland schemes - one creation, two restoration. One site created on arable land (previously a fen) by raising water levels and natural regeneration from seedbank, was purple moor grass & ruch pasture PH in moderate condition after 12 years. The restored sites (scrub clearance and/or grazing) had achieved good condition after 2 & 11 years.
Grassland: Dry heath / Acidic grassland mosaic	D5	High	6	Medium	1.5	W_in_P	W_in_P	Medium	1.5	W_in_P	W_in_P	Lowland heathland Lowland dry acid grassland	Lowland heathland		This represents a common mixture of dry heath and acid grassland.Lowland heathland is typified by the presence of low growing shrubs such as heather (*Calluna vulgaris*), dwarf gorse (*Ulex minor*) and cross-leaved heath (*Erica tetralix*).	Heathland is very rare in the County. The HBA (2012) has recorded 7.76ha of dry heath/acid grassland mosaic. They are mainly associated with common land and woodland on the acid glacial soils in the north of the county.	Use FEP M03 & G05	
Grassland: Set-aside / Arable field margins	J113	High	6	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P	Arable field margins	Arable field margins		Arable field margins are herbaceous strips or blocks around arable fields that are managed specifically to provide benefits for wildlife (see UK BAP, 2008 for definition of margin types that are included and those that are excluded). They are valued for supporting scarce/rare arable plants as well as invertebrates and nesting and feeding birds.		Use FEP species features, including SP02 uncommon vascular plants.	
Grassland: Amenity grassland	J12	Low	2	Low	1	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Not a priority habitat	Various grassland forms but mostly MG6, MG7	This comprises intensively managed and regularly mown grasslands, typical of lawns, playing fields, golf course fairways and many urban 'savannah' parks, in which perennial rye grass, with or without white clover, often predominates. The sward composition will depend on the original seed mixture used and on the age of the community. Herbs such as daisy, greater plantain and dandelion may be present. If the amenity grassland has a sward rich in herbs, it may be possible to classify it as semi-improved acidic, neutral or calcareous grassland, as appropriate. In such cases, the area concerned should be mapped as the specific grassland type and its amenity use target noted (NCC, 1990).		Classify as poor condition	n/a
Wetland: Standing water	G1	High	6	Medium	1.5	W_in_P	W_in_P	Medium	1.5	W_in_P	W_in_P	Ponds	Ponds		Standing water includes lakes, reservoirs, pools, flooded gravel pits, ponds, water-filled ditches and canals.	Typical floating and submerged plant species include Duckweed (Lemna spp.), Canadian pondweed (Elodea canadensis), Hornwort (Ceratophyllum spp.), amphibious bistort (Persicaria amphibia) and yellow water-lily (Nuphar lutea). Standing water bodies are important for a vast range of plants and animals, including several protected species such as great crested newt.	Use FEP W07 condition assessment	Ponds colonise rapidly with plants, invertebrates and ampibians and can take just a few years to be of high wildlife value. However, the value of ponds is affected by the water quality (e.g. elevated nutrient levels), pollution risk e.g. road-runoff, presence of stream inflows, location (ponds in urban and arable areas tend to be of poorer quality). Good quality ponds tend to occur in close proximity to other ponds or wetland habitats and where they are buffered by semi-natural habitat. These factors should be taken into account when deciding on target condition.
Wetland: Running water	G2	High	6	Medium	1.5	W_in_P	W_in_P	Medium	1.5	W_in_P	W_in_P	Rivers & streams	Rivers & streams		Running water comprises rivers and streams (but not canals, which are classed as Standing Water).	The habitat quality of watercourses can vary widely, with many adversely affected by human activities, such as channel straightening and pollution. However there are also many that have significant wildlife value, providing habitat for a range of plants and animals including protected species such water vole and otter.	No FEP condition assessment. See next colu	Good quality watercourses will have a divesity of natural channel features typical of lowland watercourses. These include a variety of flow patterns (riffles, runs, glides, pools and marginal dead water), a variety of channel features (side bars, point bars, silt deposits and islands), meanders and associated erosion/deposition features and natural variation of bankside habitats.
Wetland: Reedbed	F1	High	6	low	1	W_in_P	W_in_P	low	1	W_in_P	W_in_P	Reedbeds	Reedbeds		Reed beds are wetlands dominated by, but not necessarily composed purely of, stands of the common reed (Phragmites australis). They can include areas of reed which are both wet and dry at their base but usually the water table is at or above ground level for much of the year (LBAP). Usually part of a mosaic with open water and ditches, wet grassland, wet woodland etc. They usually require management e.g. grazing, cutting, scrub control to maintain a mosaic of vegetation at different stages of growth.	Reed beds are not common or extensive in the sub-region, being mainly associated with sand and gravel extraction within certain river valleys (e.g. the Tame and Avon), some water-filled limestone quarries, a few mining subsidence pools and formal lakes in country house estates, and occasionally as narrow fringes of reed along rivers, canals and ditches. There are dozens of small reed beds, though large ones are few in number and probably only account for 25-30ha.	Use FEP W08 condition assessment	Newly created reed bed can establish very rapidly ie within a few growing seasons (RSPB). However, reedbed habitat quality can vary greatly depending on size, degree of wetness and dryness, scrub cover, soil type, water quality and management. These factors should be taken into account when making decisions about target condition.
Wetland: Sphagnum Bog	E11	High	6	Very High	10	n/a	n/a	High	3	n/a	n/a	Blanket bog Lowland raised bog	n/a	M1-3, M17-20		Habitat not found in Warwickshire	n/a	n/a
Wetland: Acid/neutral flush	E21	High	6	High	3	W_in_P	W_in_P	Medium	1.5	W_in_P	W_in_P	Lowlansd fens	Fen & swamp		These typically support species-poor vegetation consisting of a Sphagnum carpet overlain by Carex or Juncus species. Characteristic moss species include Sphagnum recurvum, S. palustre and S. auriculatum. Overlying vegetation may consist of small Carex species (Carex echinata, C. nigra or C cura), Carex rostrata, Juncus acutiflorus, J. effusus, J. squarrosus, or Eriophorum angustifolium	Extremely rare in the County e.g. Coleshill and Bannerly Pools SSSI	Use FEP W04 condition assessment	n/a
Wetland: Basin Mire	E32	High	6	High	3	n/a	n/a	Medium	1.5	n/a	n/a	Lowland fens	n/a	Various mire communities	Basin mire is a topogenous fen, fed by ground water or streams. It develops in a waterlogged basin and does not contain much open water. The vegetation may be dominated by Sphagnum species, together with Carex rostrata and ericoids, or by tall swamp plants such as Phragmites australis, Schoenoplectus (Scirpus) lacustris and Typha species.	Habitat not found in Warwickshire	n/a	n/a
Wetland: Swamp	F1	High	6	High	3	W_in_P	W_in_P	Medium	1.5	W_in_P	W_in_P	Lowland fens	Fen & swamp		Swamp contains tall emergent vegetation typical of the transition between open water and exposed land. Swamps are generally in standing water for a large part of the year. Swamp vegetation includes both mixed and single-species stands include reedmace (Typha spp.), common reed (Phragmites australis), reed canary-grass (Phalaris arundinacea), reed sweet-grass (Glyceria maxima) and tall sedge species (Carex spp.).	The Phase 1 category includes reedbed (see above) as well as fen and swamp.	Use FEP W04 condition assessment	
Wetland: Inundation vegetation	F22	High	6	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P	Not a priority habitat	Fen & swamp	MG11, MG13, OV28-36	Inundation vegetation covers areas that are periodically inundated. The species community is generally open and inherently unstable. Typical species present may include the following: knot grass (Polygonum) species, bulbous rush (Juncus bulbosus), beggartick and bur-marigold (Bidens) species, creeping bent grass (Agrostis stolonifera), marsh foxtail (Alopecurus geniculatus), as well as many ruderal species (NCC, 1990).			
Other: Arable	J11	Low	2	n/a	-	n/a	n/a	n/a	-	n/a	n/a	Not a priority habitat	Not a priority habitat		This includes arable cropland, horticultural land (for example nurseries, vegetable plots, flower beds), freshly-ploughed land and recently reseeded grassland, such as rye grass and ryeclover leys, often managed for silage (NCC, 1990).		Classify as poor condition	0-5 years
Other: Continuous bracken	C11	Low	2	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P	Not a priority habitat	Not a priority habitat	W25	Areas dominated by Pteridium aquilinum (NCC, 1990).		Bracken should be classed as poor condition unless it meets the FEP definition of high environmental value bracken in which case its condition should be assessed against	
Other: Tall ruderal	C31	Medium-Low	3	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P	Not a priority habitat	Not a priority habitat	OV24-27	This category comprises stands of tall perennial or biennial dicotyledons, usually more than 25cm high, of species such as rosebay willowherb and common nettle (NCC, 1990). It is often found as a habitat-edge community and in urban areas is frequently found on post industrial sites/waste ground.		Classify as poor condition, unless it meets the criteria LWS selection.	
Other: Non-ruderal	C32	Medium	4	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P	Not a priority habitat	Not a priority habitat		Non-wooded stands of species such as Oreopteris limbosperma, Athyrium felix-femina, Dryopteris species or Luzula sylvatica should be included in this category (NCC, 1990).		Classify as poor condition	
Other: Ephemeral/short perennial	J13	Low	2	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P	Not a priority habitat	Not a priority habitat		Short, patchy plant associations typical of derelict urban sites, quarries and railway ballast. The vegetation typically lacks a clear dominant species, but consists of a mixture of low-growing plants, often less than 25 cm high, such as greater plantain, creeping buttercup, white clover, black medick, coltsfoot, oxeye daisy and ragwort species, or of taller species such as Sisymbrium or Melilot species (NCC, 1990).		Classify as poor condition	
Other: Allotments	J112	Low	2	Low	1	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Allotments		All alloments included		Classify as poor condition	
Other: Quarry	I21	Low	2	Low	1	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Quarries & gravel pits		Excavations such as gravel, sand or chalk pits and stone quarries should be included in this category		Classify as poor condition	n/a
Other: Spoil	I22	Low	2	Low	1	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Not a priority habitat		Includes abandoned industrial areas and tips of waste material such as coal mine spoil and slag		Classify as poor condition	n/a
Other: Refuse tip	I24	Low	2	Low	1	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Not a priority habitat		Rubbish tips, worked landfill sites		Classify as poor condition	n/a
Other: Introduced shrub	J14	Low	2	Low	1	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Not a priority habitat		This is vegetation dominated by shrub species that are not locally native, whether planted or selfsown. Common introduced shrubs include species of box, dog wood, laurel, privet, Rhododendron and snowberry. Formal beds of shrubs such as of Hypericum calycinum, Cotoneaster, heaths and dwarf conifers should be included here.		Classify as poor condition	0-5 years
Other: Bare ground	J4	Low	2	Low	1	n/a	n/a	Low	1	n/a	n/a	Not a priority habitat	Not a priority habitat					n/a
Other: Vertical face (correction factor)	n/a	none	0	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Other: Living Wall	n/a	Medium-Low	3	Medium	1.5	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Other: Living roof - Extensive	n/a	Low	2	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Other: Living roof - Semi-intensive	n/a	Medium-Low	3	Medium	1.5	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Other: Living roof - Intensive	n/a	Low	2	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Other: Living roof - Brown	n/a	Medium-Low	3	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Other: Living roof - Mosaic	n/a	Medium	4	Medium	1.5	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Linear features																		
Hedges: Intact hedge	J21	Medium	4	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Hedges: Native species rich intact hedge	J211	High	6	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Hedges: Hedge with trees	J23	Medium-High	5	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Hedges: Native species rich hedge with trees	J231	High	6	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Hedges: Defunct hedge	J22	Low	2	n/a	-	W_in_P	W_in_P	n/a	-	W_in_P	W_in_P							
Hedges: Linear scrub	A21	Medium	4	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Hedges: Linear trees	A3	Medium	4	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Hedges: Introduced shrub	J14	Low	2	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Ditches: Standing water	G1	High	6	Medium	2	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Ditches: Running water	G2	High	6	Medium	2	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Ditches: Dry ditch	J26	Low	2	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Boundaries: Fence	J24	None	0	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Boundaries: Wall	J25	Low	2	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Boundaries: Dry stone wall	J25	Medium	4	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Other: Inland cliff	I1	Medium	4	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Other: Earth bank	J28	Low	2	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							
Other: Living wall	n/a	Low	2	Low	1	W_in_P	W_in_P	Low	1	W_in_P	W_in_P							

Habitats for creation	Habitats for restoration
Phase 1 Habitat Descriptions	Phase 1 Habitat Descriptions
Built Environment: Buildings/hardstanding	Woodland: Broad-leaved semi-natural woodland
Built Environment: Gardens (lawn and planting)	Woodland: Broad-leaved plantation
Woodland: Broad-leaved plantation	Woodland: Coniferous semi-natural woodland
Woodland: Coniferous plantation	Woodland: Coniferous plantation
Woodland: Mixed plantation	Woodland: Mixed semi-natural woodland
Woodland: Wet woodland	Woodland: Mixed plantation
Woodland: Dense continuous scrub	Woodland: Wet woodland
Woodland: Scattered scrub	Woodland: Dense continuous scrub
Woodland: Scattered trees	Woodland: Scattered scrub
Woodland: Coniferous parkland	Woodland: Scattered trees
Woodland: Orchard	Woodland: Broad-leaved parkland
Grassland: Semi-improved acidic grassland	Woodland: Coniferous parkland
Grassland: Semi-improved neutral grassland	Woodland: Orchard
Grassland: Semi-improved calcareous grassland	Grassland: Unimproved acidic grassland
Grassland: Marsh / Marshy grassland	Grassland: Semi-improved acidic grassland
Grassland: Dry heath / Acidic grassland mosaic	Grassland: Unimproved neutral grassland
Grassland: Set-aside / Arable field margins	Grassland: Semi-improved neutral grassland
Grassland: Amenity grassland	Grassland: Unimproved calcareous grassland
Wetland: Standing water	Grassland: Semi-improved calcareous grassland
Wetland: Running water	Grassland: Marsh / Marshy grassland
Wetland: Reedbed	Grassland: Dry heath / Acidic grassland mosaic
Wetland: Sphagnum Bog	Grassland: Set-aside / Arable field margins
Wetland: Acid/neutral flush	Wetland: Standing water
Wetland: Basin Mire	Wetland: Running water
Wetland: Swamp	Wetland: Reedbed
Wetland: Inundation vegetation	Wetland: Sphagnum Bog
Other: Continuous bracken	Wetland: Acid/neutral flush
Other: Tall ruderal	Wetland: Basin Mire
Other: Non-ruderal	Wetland: Swamp
Other: Ephemeral/short perennial	Wetland: Inundation vegetation
Other: Allotments	Other: Continuous bracken
Other: Quarry	Other: Tall ruderal
Other: Spoil	Other: Non-ruderal
Other: Refuse tip	Other: Ephemeral/short perennial
Other: Introduced shrub	Other: Allotments
Other: Bare ground	Other: Bare ground
Other: Living Wall	Other: Living roof - Extensive
Other: Living roof - Extensive	Other: Living roof - Semi-intensive
Other: Living roof - Semi-intensive	Other: Living roof - Intensive
Other: Living roof - Intensive	Other: Living roof - Brown
Other: Living roof - Brown	Other: Living roof Mosaic
Other: Living roof Mosaic	Other: Living Wall

Linear	Linear
Hedges: Intact hedge	Hedges: Intact hedge
Hedges: Native species rich intact hedge	Hedges: Native species rich intact hedge
Hedges: Hedge with trees	Hedges: Hedge with trees
Hedges: Native species rich hedge with trees	Hedges: Native species rich hedge with trees
Hedges: Linear scrub	Hedges: Linear scrub
Hedges: Linear trees	Hedges: Linear trees
Hedges: Introduced shrub	Ditches: Standing water
Ditches: Standing water	Ditches: Running water
Ditches: Running water	Ditches: Dry ditch
Ditches: Dry ditch	Boundaries: Dry stone wall
Boundaries: Fence	Other: Inland cliff
Boundaries: Wall	Other: Earth bank
Boundaries: Dry stone wall	Other: Living wall
Other: Inland cliff	
Other: Earth bank	
Other: Green wall	

Distinctiveness	
High	6
Medium-High	5
Medium	4
Medium-Low	3
Low	2
none	0

Condition	
Good	3
Moderate	2
Poor	1

Time	
3 years	1.1
5 years	1.2
10 years	1.4
15 years	1.7
20 years	2
25 years	2.4
30 years	2.8
32+ years	3

Difficulty	
Very high	10
High	3
Medium	1.5
Low	1
n/a	0

VALUE

					Woodland					Grassland					Wetland					Other (including Built Gardens)					Built Environment					
			4.00	7.73																										
		Distinctiveness	Area	Value	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	
n/a	Built Environment: Buildings/hardstanding	none	0.11	0.00																										
J4	Other: Bare ground	Low	0.09	0.18																				0.18						
B4	Grassland: Improved grassland	Low	3.59	7.18										7.18																
C31	Other: Tall ruderal	Medium-Low	0.07	0.21																			0.21							
A3	Woodland: Scattered trees	Medium	0.14	0.16			0.16																							
		0	0.00																											
		0	0.00																											
		0	0.00																											
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		0	0.00																											
		0	0.00																											
		0	0.00																											
					0.00	**0.00**	**0.16**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**7.18**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.21**	**0.18**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	7.73

Indirect Impacts				High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low
0		0.00																									
0	0	0.00																									
0	0	0.00																									
0	0	0.00																									
0	0	0.00																									
				0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

				Woodland					Grassland					Wetland					Other					Built Environment				
Creation	Distinctiveness	Area	Value	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low
Built Environment: Buildings/hardstanding	none	1.34	0.00																									
Built Environment: Gardens (lawn and planting)	Low	0.46	0.84																									0.84
Other: Introduced shrub	Low	0.05	0.09																				0.09					
Grassland: Amenity grassland	Low	0.11	0.20										0.20															
Grassland: Semi-improved neutral grassland	Medium	0.16	0.78								0.78																	
Grassland: Amenity grassland	Low	0.82	1.49										1.49															
Grassland: Semi-improved neutral grassland	Medium	0.19	0.92								0.92																	
Grassland: Semi-improved neutral grassland	Medium	0.37	2.69								2.69																	
Grassland: Semi-improved neutral grassland	Medium	0.04	0.19								0.19																	
Woodland: Broad-leaved plantation	Medium	0.11	0.24			0.24																						
Woodland: Scattered trees	Medium	0.18	0.60			0.60																						
Woodland: Dense continuous scrub	Medium-Low	0.05	0.18				0.18																					
0		0.00																										
0		0.00																										
0		0.00																										
				0.00	**0.00**	**0.84**	**0.18**	**0.00**	**0.00**	**0.00**	**4.58**	**0.00**	**1.69**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.09**	**0.00**	**0.00**	**0.00**	**0.00**	**0.84**

				Woodland					Grassland					Wetland					Other					Built Environmment				
Enhnacement	Distinctivenes	Area	Value	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low	High	Medium-High	Medium	Medium-Low	Low
0		0.00																										
0		0.00																										
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				0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

	Loss	Gain		%		
Offset Requirements	7.73	8.22	0.49	-1.21		
Woodland	0.16	1.02	0.86		175.51%	13.57
Grassland	7.18	6.27	-0.91	75.21%	-185.71%	-14.36
Wetland	0.00	0.00	0.00		0.00%	0.00
Other	0.39	0.09	-0.30	24.79%	-61.22%	-4.73
Built Environment	0.00	0.84	0.84			

		Distinctiveness	Area	Value	P_Intensive crops	P_Traditional crops	P_Livestock	P_Wild foods	P_Fresh water	P_Energy	P_Timber	P_Medical	Provisioning	R_Pollination	R_Pest control	R_Species	R_Climate	R_Air quality	R_Flood protection	R_Water purification	R_Soil Erosion	Regulating	C_Physical	C_Aesthetic	C_Spiritual	C_Intellectual	Cultural
			4.00	7.73																							
n/a	Built Environment: Buildings/hardstanding	none	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
J4	Other: Bare ground	Low	0.09	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B4	Grassland: Improved grassland	Low	3.59	7.18	0.00	5.39	17.95	0.00	0.00	0.00	0.00	0.00	2.92	3.59	3.59	3.59	3.59	3.59	7.18	5.39	8.98	4.94	3.59	3.59	3.59	3.59	3.59
C31	Other: Tall ruderal	Medium-Low	0.07	0.21	0.00	0.00	0.11	0.04	0.04	0.00	0.00	0.04	0.03	0.35	0.28	0.28	0.21	0.18	0.14	0.18	0.21	0.23	0.11	0.14	0.11	0.18	0.13
A3	Woodland: Scattered trees	Medium	0.14	0.16	0.07	0.00	0.07	0.04	0.07	0.00	0.32	0.00	0.07	0.14	0.28	0.32	0.35	0.35	0.42	0.42	0.46	0.34	0.53	0.42	0.42	0.35	0.43
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					0.07	5.39	18.13	0.08	0.11	0.00	0.32	0.04	3.01	4.08	4.15	4.19	4.15	4.12	7.74	5.98	9.65	5.51	4.23	4.15	4.12	4.12	4.15

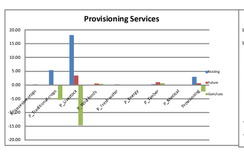
Indirect Impacts				P_Intensi	P_Traditic	P_Livesto	P_Wild fo	P_Fresh v	P_Energy	P_Timber	P_Medica	Provisioning	R_Pollination	R_Pest contr	R_Species	R_Climate	R_Air quality	R_Flood prot	R_Water pur	R_Soil Erosic	Regulating	C_Physical	C_Aesthetic	C_Spiritual	C_Intellectu	Cultural
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

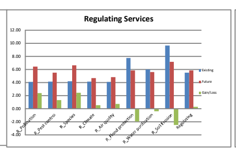
	Creation	Distinctiveness	Area	Value	P_Intensi	P_Traditic	P_Livesto	P_Wild fo	P_Fresh v	P_Energy	P_Timber	P_Medica	Provisioning	R_Pollination	R_Pest contr	R_Species	R_Climate	R_Air quality	R_Flood prot	R_Water pur	R_Soil Erosic	Regulating	C_Physical	C_Aesthetic	C_Spiritual	C_Intellectu	Cultural
n/a	Built Environment: Buildings/hardstanding	none	1.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n/a	Built Environment: Gardens (lawn and planting)	Low	0.46	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.46	0.69	0.23	0.46	0.46	0.23	0.46	0.46	1.38	0.92	0.69	0.46	0.86
J14	Other: Introduced shrub	Low	0.05	0.09	0.00	0.00	0.08	0.03	0.03	0.00	0.00	0.03	0.02	0.25	0.20	0.20	0.15	0.13	0.10	0.13	0.15	0.16	0.08	0.10	0.08	0.13	0.09
J12	Grassland: Amenity grassland	Low	0.11	0.20	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.01	0.11	0.11	0.11	0.11	0.11	0.22	0.22	0.28	0.16	0.28	0.11	0.11	0.06	0.14
B22	Grassland: Semi-improved neutral grassland	Medium	0.16	0.78	0.00	0.00	0.48	0.08	0.00	0.00	0.00	0.00	0.07	0.80	0.64	0.80	0.48	0.48	0.48	0.48	0.64	0.60	0.64	0.64	0.48	0.64	0.60
J12	Grassland: Amenity grassland	Low	0.82	1.49	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.10	0.82	0.82	0.82	0.82	0.82	1.64	1.64	2.05	1.18	2.05	0.82	0.82	0.41	1.03
B22	Grassland: Semi-improved neutral grassland	Medium	0.19	0.92	0.00	0.00	0.57	0.10	0.00	0.00	0.00	0.00	0.08	0.95	0.76	0.95	0.57	0.57	0.57	0.57	0.76	0.71	0.76	0.76	0.57	0.76	0.71
B22	Grassland: Semi-improved neutral grassland	Medium	0.37	2.69	0.00	0.00	1.11	0.19	0.00	0.00	0.00	0.00	0.16	1.85	1.48	1.85	1.11	1.11	1.11	1.11	1.48	1.39	1.48	1.48	1.11	1.48	1.39
B22	Grassland: Semi-improved neutral grassland	Medium	0.04	0.19	0.00	0.00	0.12	0.02	0.00	0.00	0.00	0.00	0.02	0.20	0.16	0.20	0.12	0.12	0.12	0.12	0.16	0.15	0.16	0.16	0.12	0.16	0.15
A112	Woodland: Broad-leaved plantation	Medium	0.11	0.24	0.11	0.00	0.00	0.06	0.11	0.00	0.50	0.00	0.10	0.39	0.33	0.39	0.44	0.44	0.44	0.44	0.44	0.41	0.50	0.44	0.33	0.33	0.40
A3	Woodland: Scattered trees	Medium	0.18	0.60	0.09	0.00	0.09	0.05	0.09	0.00	0.41	0.00	0.09	0.18	0.36	0.41	0.45	0.45	0.54	0.54	0.59	0.44	0.68	0.54	0.54	0.45	0.55
A21	Woodland: Dense continuous scrub	Medium-Low	0.05	0.18	0.00	0.00	0.13	0.00	0.00	0.15	0.10	0.03	0.05	0.23	0.18	0.20	0.20	0.15	0.15	0.15	0.15	0.18	0.10	0.10	0.10	0.15	0.11
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					0.20	0.00	3.50	0.51	0.23	0.15	1.01	0.05	0.71	6.46	5.50	6.62	4.68	4.84	5.83	5.63	7.16	5.84	8.10	6.07	4.95	5.02	6.03

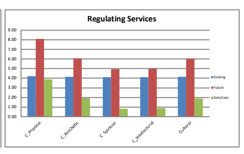
Enhancement	Distinctiveness	Value		P_Intensi	P_Traditic	P_Livesto	P_Wild fo	P_Fresh v	P_Energy	P_Timber	P_Medica	Provisioning	R_Pollination	R_Pest contr	R_Species	R_Climate	R_Air quality	R_Flood prot	R_Water pur	R_Soil Erosic	Regulating	C_Physical	C_Aesthetic	C_Spiritual	C_Intellectu	Cultural
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Ecosystem Service	Exiting	After	gain/loss	P_Intensi	P_Traditic	P_Livesto	P_Wild fo	P_Fresh v	P_Energy	P_Timber	P_Medica	Provisioning	R_Pollination	R_Pest contr	R_Species	R_Climate	R_Air quality	R_Flood prot	R_Water pur	R_Soil Erosic	Regulating	C_Physical	C_Aesthetic	C_Spiritual	C_Intellectu	Cultural
Provisioning	3.01	0.71	-2.31	0.07	5.39	18.13	0.08	0.11	0.00	0.32	0.04	3.01	4.08	4.15	4.19	4.15	4.12	7.74	5.98	9.65	5.51	4.23	4.15	4.12	4.12	4.15
Regulating	5.51	5.84	0.33	0.20	0.00	3.50	0.51	0.23	0.15	1.01	0.05	0.71	6.46	5.50	6.62	4.68	4.84	5.83	5.63	7.16	5.84	8.10	6.07	4.95	5.02	6.03
Cultural	4.15	6.03	1.88	0.13	-5.39	-14.63	0.44	0.12	0.15	0.69	0.02	-2.31	2.38	1.35	2.43	0.53	0.72	-1.91	-0.35	-2.49	0.33	3.87	1.92	0.83	0.91	1.88

HABCODE	DESCRIPTION	INFERENCE	Physical	Aesthetic	Spiritual	Intellectual	Pollination	Pest control	Species	Climate	Air quality	Flood protection	Water purification	Soil Erosion	Intensive crops	Traditional crops	Livestock	Wild foods	Fresh water	Energy	Timber	Medical	Provisioning	Regulating	Cultural	Food
A111	Woodland: Broad-leaved semi-natural woodland	Median Stakeholder value	5	5	5	4.5	5	4	5	5	5	4.5	4	5	0	0	0.5	0	1	0	4	0	1.1	4.7	4.9	0.2
A112	Woodland: Broad-leaved plantation	Median Stakeholder value	4.5	4	3	3	3.5	3	3.5	4	4	4	4	4	0	1	0	0.5	1	0	4.5	0	1.3	3.8	3.6	0.3
A121	Woodland: Coniferous semi-natural woodland	Set to mean of Semi-natural BL (A111) & coniferous plantation (A122)	3	2.5	1.5	3	2	2	2	2.5	3	3	2.5	3.5	0	0	0.5	0.5	0.5	4	5	0	1.2	2.6	2.5	0.2
A122	Woodland: Coniferous plantation	Median Stakeholder value	2	2	2	3	4.5	3.5	4	4	3	3	3	3	0	0	2.5	0	0	3	2	0.5	0.9	3.5	2.3	0.8
A131	Woodland: Mixed semi-natural woodland	Set to average (A111 + A121)	4.5	4.4	4.1	4.1	4.3	3.5	4.3	4.4	4.5	4.1	3.6	4.6	0	0	0.5	0.1	0.9	1	4.3	0	1.1	4.2	4.3	0.2
A132	Woodland: Mixed plantation	Set to average (A112 + A122)	3.8	3.3	2.3	3	2.8	2.5	2.8	3.3	3.5	3.5	3.3	3.8	0	0.5	0.3	0.5	0.8	2	4.8	0	1.3	3.2	3.1	0.3
A21	Woodland: Dense continuous scrub	Median Stakeholder value	2	2	2	3	4.5	3.5	4	4	3	3	3	3	0	0	2.5	0	0	3	2	0.5	0.9	3.5	2.3	0.8
A22	Woodland: Scattered scrub	Set to A22	2	2	2	3	4.5	3.5	4	4	3	3	3	3	0	0	2.5	0	0	3	2	0.5	0.9	3.5	2.3	0.8
A31	Woodland: Broad-leaved parkland	Set to J12 for cultural: average (J12 + A112) for others (J12 = amenity; A112 = broadleaf plantation)	3.8	3	3	2.5	1	2	2.3	2.5	2.5	3	3	3.3	0	0.5	0.5	0.3	0.5	0	2.3	0	0.8	2.4	3.1	0.3
A3	Woodland: Scattered trees	same as A31	3.8	3	3	2.5	1	2	2.3	2.5	2.5	3	3	3.3	0	0.5	0.5	0.3	0.5	0	2.3	0	0.8	2.4	3.1	0.3
A32	Woodland: Coniferous parkland	Set to J12 for cultural: average (J12 + A122) for others (J12 = amenity; A122 = Conifer plantation)	2.8	1.8	1.3	1.8	1	1.5	1.5	1.8	2	2.5	2.3	3	0	0	0.8	0.3	0.3	2	2.5	0	0.7	1.9	1.9	0.3
A4	Woodland: Recently felled woodland	Set to J4 (bare ground) with reduced habitat (3-->1) and soil-related variables set to those ofA132 (mixed plantation)	1	1	0	0.5	1	1	1	0	0	1	3.3	0	0	0	0	0	0.8	0	0	0	0.2	0.9	0.6	0
A5	Woodland: Orchard	Set to A112 with modified food provision (A112 = BL plantation)	4.5	4	3	3	3.5	3	3.5	4	4	4	4	4	0	3	0	0.5	1	0	4.5	0	1.7	3.8	3.6	1
A6	Woodland: Wet woodland	CT Added	5	4	2	2	2.5	2.5	5	5	4	5	5	5	0	2	1	1	2	3	2	1	1.4	4.3	3.3	0
B11	Grassland: Unimproved acidic grassland	Median Stakeholder value	3.5	4.5	3	4	5	4	5	3	3	3	3	4	0	0	3	0.5	0	0	0	0.5	0.6	3.8	3.8	1
B12	Grassland: Semi-improved acidic grassland	Set to B11	3.5	4.5	3	4	5	4	5	3	3	3	3	4	0	0	3	0.5	0	0	0	0.5	0.6	3.8	3.8	1
B21	Grassland: Unimproved neutral grassland	Median Stakeholder value	4	4	3	4	5	4	5	3	3	3	3	4	0	0	3	0.5	0	0	0	0	0.6	3.8	3.8	1
B22	Grassland: Semi-improved neutral grassland	Set to B21	4	4	3	4	5	4	5	3	3	3	3	4	0	0	3	0.5	0	0	0	0	0.6	3.8	3.8	1
B31	Grassland: Unimproved calcareous grassland	Median Stakeholder value	3.5	4.5	3	4	5	4	5	3	3	3	2.5	4	0	0	3	0.5	0	0	0	0	0.6	3.7	3.8	1
B32	Grassland: Semi-improved calcareous grassland	Set to B31	3.5	4.5	3	4	5	4	5	3	3	3	2.5	4	0	0	3	0.5	0	0	0	0	0.6	3.7	3.8	1
B4	Grassland: Improved grassland	Median Stakeholder value	1	1	1	1	1	1	1	1	1	2	1.5	2.5	1.5	0	5	0	0	0	0	0	1.3	1.4	1	2.2
B5	Grassland: Marsh / Marshy grassland	Median Stakeholder value	3	4	3	4	5	3.5	5	3	3	4	4	4	0	0	3.5	0.5	1	0	0	0.5	0.9	3.9	3.5	1.2
B6	Grassland: Poor semi-improved grassland	Set to mean of B4 and B22 (IG and Neutral grassland)	2.5	2.5	2	2.5	3	2.5	3	2	2	2.5	2.3	3.3	0.8	0	4	0.3	0	0	0	0	1	2.6	2.4	1.6
C11	Other: Continuous bracken	Set to C31	1.5	2	1.5	2.5	5	4	4	3	2.5	2	2.5	3	0	0	1.5	0.5	0.5	0	0	0.5	0.4	3.3	1.9	0.5
C31	Other: Tall ruderal	Median Stakeholder value	1.5	2	1.5	2.5	5	4	4	3	2.5	2	2.5	3	0	0	1.5	0.5	0.5	0	0	0.5	0.4	3.3	1.9	0.5
C32	Other: Non-ruderal	Set to C31	1.5	2	1.5	2.5	5	4	4	3	2.5	2	2.5	3	0	0	1.5	0.5	0.5	0	0	0.5	0.4	3.3	1.9	0.5
D5	Grassland: Dry heath / Acidic grassland mosaic	Median Stakeholder value	3	4.5	4	4	5	3.5	5	3.5	3	3	3	3.5	0	0	2.5	0.5	0	0	0	0.5	0.5	3.7	3.9	0.8
E11	Wetland: Sphagnum Bog	Set to B5 with some expert modification (Pam) to reflect differences	2	4	3	4	4	3.5	5	3.5	3	4	4	4	0	0	1.5	0.5	1.5	0	0	0.5	0.6	3.9	3.3	0.5
E21	Wetland: Acid/neutral flush	Set to B5 with some expert modification (Pam) to reflect differences	2	4	3	4	4	3.5	5	3.5	3	4	4	4	0	0	1.5	0.5	1	0	0	0.5	0.5	3.9	3.3	0.5
E32	Wetland: Basin Mire	Set to B5 with some expert modification (Pam) to reflect differences	2	4	3	4	4	3.5	5	3.5	3	4	4	4	0	0	1.5	0.5	1.5	0	0	0.5	0.6	3.9	3.3	0.5
F1	Wetland: Swamp	Set to B5 with some expert modification (Pam) to reflect differences	2	4	3	4	4	3.5	5	3.5	3	4	4	4	0	0	1.5	0.5	1.5	0	0	0.5	0.6	3.9	3.3	0.5
F22	Wetland: Inundation vegetation	Set to B5 with some expert modification (Pam) to reflect differences	2	4	3	4	4	3.5	5	3.5	3	4	4	4	0	0	1.5	0.5	1	0	0	0.5	0.5	3.9	3.3	0.5
G1	Wetland: Standing water	Median Stakeholder value	4	5	5	4	2.5	2	5	2.5	2	2.5	3.5	0.5	0	0	1	1.5	5	0	0	0.5	1.2	2.6	4.5	0.3
G2	Wetland: Running water	Set to G1 (sthanding water)	4	5	5	4	2.5	2	5	2.5	2	2.5	3.5	0.5	0	0	1	1.5	5	0	0	0.5	1.2	2.6	4.5	0.3
I21	Other: Quarry	Set to J4 (bare ground)	1	1	0	0.5	1	1	3	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.9	0.6	0
I22	Other: Spoil	Set to J4 (bare ground)	1	1	0	0.5	1	1	3	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.9	0.6	0
I24	Other: Refuse tip	Set to J4 (bare ground)	1	1	0	0.5	1	1	3	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.9	0.6	0
J11	Other: Arable	Median Stakeholder value	1	1	0.5	1	1	1	0.5	1.5	1	1	1	1	5	4	1	0	0	0	0	1	2	1	0.9	3.3
J112	Other: Allotments	Set to J12 (amenity) with increased food provision, reduced arable and more intellectual /spiritual interactions	2	1	2	2	1	1	1	1	1	2	2	2.5	0	4	0	0	0	0	0	0	0.8	1.4	1.8	1.3
J113	Grassland: Set-aside / Arable field margins	CT Added	1	1	1	1	5	5	4	4	2.5	3	4	4	0	1	1	1	0	1	0	0	0.4	3.9	1	0
J12	Grassland: Amenity grassland	Median Stakeholder value	2.5	1	1	0.5	1	1	1	1	1	2	2	2.5	0	0	1	0	0	0	0	0	0.2	1.4	1.3	0.3
J13	Other: Ephemeral/short perennial	set to C31 (tall ruderal)	1.5	2	1.5	2.5	5	4	4	3	2.5	2	2.5	3	0	0	1.5	0.5	0.5	0	0	0.5	0.4	3.3	1.9	0.5
J14	Other: Introduced shrub	set to C31 (tall ruderal)	1.5	2	1.5	2.5	5	4	4	3	2.5	2	2.5	3	0	0	1.5	0.5	0.5	0	0	0.5	0.4	3.3	1.9	0.5
J4	Other: Bare ground	Median Stakeholder value	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
URB	Built Environment: Buildings/hardstanding	Median Stakeholder value	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B51	Wetland: Reedbed	Set to B5 - WCC set	3	4	3	4	5	3.5	5	3	3	4	4	4	0	0	3.5	0.5	1	0	0	0.5	0.9	3.9	3.5	1.2
n/a	Built Environment: Gardens (lawn and planting)	- WCC set	3	2	1.5	1	1.5	1	1.5	0.5	1	1	0.5	1	0	0	0	0	0	0	0	0	0	1.9	1	0
n/a	Other: Vertical face (correction factor)	- WCC set																								0
n/a	Other: Living Wall	same as garden - WCC set	3	2	1.5	1	1.5	1	1.5	0.5	1	1	0.5	1	0	0	0	0	0	0	0	0				0
n/a	Other: Living roof - Extensive	same as garden - WCC set	3	2	1.5	1	1.5	1	1.5	0.5	1	1	0.5	1	0	0	0	0	0	0	0	0				0
n/a	Other: Living roof - Semi-intensive	same as garden - WCC set	3	2	1.5	1	1.5	1	1.5	0.5	1	1	0.5	1	0	0	0	0	0	0	0	0				0
n/a	Other: Living roof - Intensive	same as garden - WCC set	3	2	1.5	1	1.5	1	1.5	0.5	1	1	0.5	1	0	0	0	0	0	0	0	0				0
n/a	Other: Living roof - Brown	same as garden WCC set	3	2	1.5	1	1.5	1	1.5	0.5	1	1	0.5	1	0	0	0	0	0	0	0	0				0
n/a	Other: Living roof - Mosaic	same as garden - WCC set	3	2	1.5	1	1.5	1	1.5	0.5	1	1	0.5	1	0	0	0	0	0	0	0	0				0







Index Link	3.61%	1.752242
Insurance Fund	10.00%	
Management Cost	20.00%	

Woodland

Biodiversity Impact Score	Primary habitat required in offset	Target habitat distinctiveness		Target habitat condition		Time till target condition		Difficulty of creation		Non-strategic area	Hectares of habitat required
		Distinctiveness	*Score*	*Condition*	*Score*	*Time (years)*	*Score*	*Difficulty*	*Score*		
0.00	Woodland: Broad-leaved semi-natural woodland	High	6	Moderate	2	30	2.8	Medium	1.5	2	**0.00**

Provider Agreement Set-up costs	Average Woodland creation cost per ha	Woodland maintenance cost per ha for 30 years	30 yrs Maintenance Cost plus inflation at	Estimated cost of offset	Insurance Contribution (index linked)	Management Cost (index linked)	Total Cost of Offset Contribution
H	I	£184 x 30 = J	J x 1.75 = K	H + I + K = L	M	N	L + M + N
£7,000	£1,584	£5,520	3.61%		10%	20%	
£0	£0.00	£0.00	£0.00	**£0.00**	£0.00	£0.00	**£0.00**
					Cost per ha of habitat created		£0.00
						Cost per unit	£0.00

Grassland

Biodiversity Impact Score	Primary habitat required in offset	Target habitat distinctiveness		Target habitat condition		Time till target condition		Difficulty of creation		Non-strategic area	Hectares of habitat required
		Distinctiveness	*Score*	*Condition*	*Score*	*Time (years)*	*Score*	*Difficulty*	*Score*		
0.00	Grassland: Semi-improved neutral grassland	Medium	4	Good	3	25	2.4	Medium	1.5	2	**0.00**

Provider Agreement Set-up costs	Average Meadow creation cost per ha	Meadow maintenance cost per ha for 30 years	30 yrs Maintenance Cost plus inflation at	Estimated cost of offset	Insurance Contribution (index linked)	Management Cost (index linked)	Total Cost of Offset Contribution
H	I	£227 x 30 = J	J x 1.75 = K	H + I + K = L	M	N	L + M + N
£7,000	£1,686	£6,810	3.61%		10%	20%	
£0	£0.00	£0.00	£0.00	**£0.00**	£0.00	£0.00	**£0.00**
					Cost per ha of habitat created		£0.00
						Cost per unit	£0.00

Pond Cluster size	4

	m2	ha	Plus grassland (x2)
Average HS2 pond	167	0.017	0.034
Stoneleigh otter	200	0.02	
Burton Green	100	0.01	
Burton Green	100	0.01	
Finham Brook ponds	300	0.03	
Finham Brook ponds	200	0.02	
Finham Brook ponds	100	0.01	

Werland

Biodiversity Impact Score	Primary habitat required in offset	Target habitat distinctiveness		Target habitat condition		Time till target condition		Difficulty of creation		Strategic area	Hectares of habitat required
		Distinctiveness	*Score*	*Condition*	*Score*	*Time (years)*	*Score*	*Difficulty*	*Score*		
0.00	Wetland: Standing Water	High	6	Moderate	2	10	1.4	Medium	1.5	2	**0.00**

Number of Ponds to be created	Number of Pond clusters to be created	Provider Agreement Set-up costs	Average Pond creation cost per pond	Pond maintenance cost per pond for 30 years	30 yrs Maintenance Cost plus inflation at	Estimated cost of offset	Insurance Contribution (index linked)	Management Cost (index linked)	Total Cost of Offset Contribution
H	I	J	K	£70 x 30 = L	L x 1.75 = M	I + J + L = N	O	P	N + O + P
L / 0.017ha (av. Pond size)		£7000 per pond cluster	£1,212	£2,100	3.61%		10%	20%	
0	0.00	£0	£0.00	£0.00	£0.00	**£0.00**	£0.00	£0.00	**£0.00**
							Cost per pond cluster created		£0.00
								Cost per unit	£0.00

Hedgerow

Biodiversity Impact Score	Primary habitat required in offset	Target habitat distinctiveness		Target habitat condition		Time till target condition		Difficulty of creation		Strategic Area	Km of habitat required
		Distinctiveness	*Score*	*Condition*	*Score*	*Time (years)*	*Score*	*Difficulty*	*Score*		
0.00	species rich hedge with trees	Medium-high	5	Good	3	20	2	Low	1	1	**0.00**
											0.00 metres

Provider Agreement Set-up costs	Average Hedgerow creation cost per km	Hedgerow maintenance cost per km for 30 years	30 yrs Maintenance Cost plus inflation at	Estimated cost of offset	Insurance Contribution (index linked)	Management Cost (index linked)	Total Cost of Offset Contribution
H	I	£7270 x 30 = J	J x 1.75 = K	H + I + K = L	M	N	L + M + N
£7,000	£9,400	£218,100	3.61%		10%	20%	
£0	£0.00	£0.00	£0.00	**£0.00**	£0.00	£0.00	**£0.00**
	£9.40 per metre	£7.27 per metre			Cost per ha of habitat created		£0.00
						Cost per unit	£0.00