

# The Biodiversity Metric 2.0 - Calculation Tool

## Start page

### Project details

Planning authority:	
Project name:	SWS - [redacted] to [redacted] - Route 2
Applicant:	Southern Water
Application type:	
Planning application reference:	
Assessor:	TP
Reviewer:	LP
Revision:	
Assessment date:	
Planning authority reviewer:	

### Cell style conventions

	Enter data
	Automatic lookup
	Result

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# The Biodiversity Metric 2.0 - Calculation Tool

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Technical data

Results

Street tree helper		
Tree size	Tree number	Area
Small		0.0000
Medium		0.0000
Large		0.0000
<b>Total</b>	<b>0.00</b>	<b>0.0000</b>

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1

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3

4

### On-site baseline

A-1  
On-site habitat

B-1  
On-site hedge

C-1  
On-Site river baseline

### On-site post development

A-2 Habitat creation

A-3 Habitat enhancement

A-4 Habitat accelerated succession

B-2 Hedgerow creation

B-3 Hedgerow enhancement

C-2 River creation

C-3 River enhancement

### Off-site baseline

D-1  
Off-site habitat

E-1  
Off-site hedge baseline

F-1  
Off-site river baseline

### Off-Site post development

D-2 Habitat creation

D-3 Habitat enhancement

D-4 Habitat accelerated succession

E-2 Hedgerow creation

E-3 Hedgerow enhancement

F-2 River creation

F-3 River enhancement

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**Headline Results**

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On-site baseline	Habitat units
	Hedgerow units
	River units
On-site post-intervention <small>(including habitat retention, creation, enhancement &amp; succession)</small>	Habitat units
	Hedgerow units
	River units
Off-site baseline	Habitat units
	Hedgerow units
	River units
Off-site post-intervention <small>(including habitat retention, creation, enhancement &amp; succession)</small>	Habitat units
	Hedgerow units
	River units
Total net unit change <small>(including all on-site &amp; off-site habitat retention/creation)</small>	Habitat units
	Hedgerow units
	River units
Total net % change <small>(including all on-site &amp; off-site habitat creation + retained habitats)</small>	Habitat units
	Hedgerow units
	River units

Summary Figures

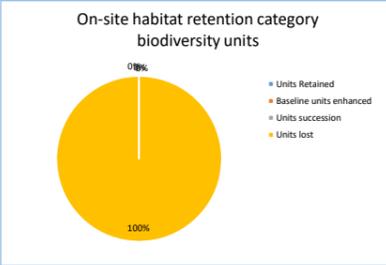
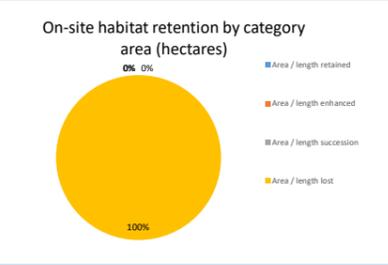
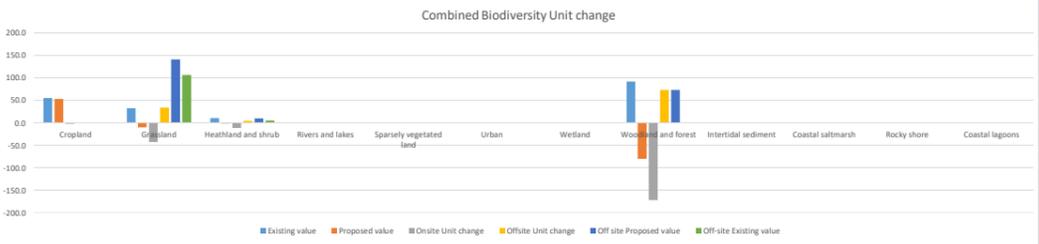
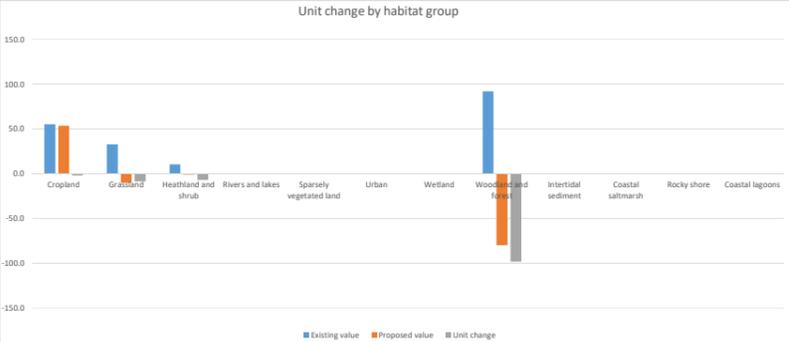
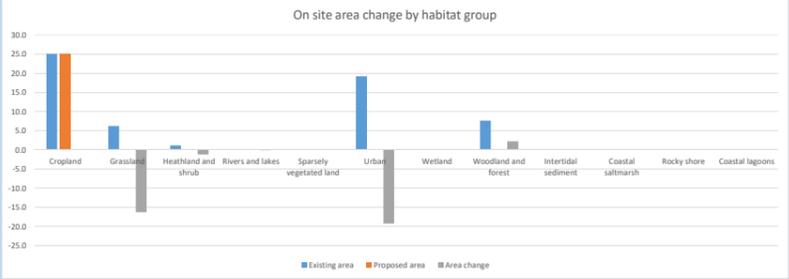
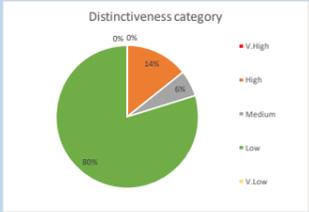
Net project biodiversity units (including all on-site & off-site habitat retention/creation)	Habitat units	
	Hedgerow units	
	River units	
Total project biodiversity % change (including all On-site & Off-site Habitat Creation + Retained Habitats)	Habitat units	
	Hedgerow units	
	River units	

On-site habitat retention and enhancement

	Habitats	Hedgerows	Rivers
Total site area / length			
Total site units			
Area / length retained			
Units Retained			
Area / length enhanced			
Baseline units enhanced			
Area / length succession			
Units succession			
Area / length lost			
Units lost			

lost by distinctiveness I

Category	Area lost (hectares)	Area lost (%)
V.High		
High		
Medium		
Low		
V.Low		



On-site	Baseline		Post development on site			Onsite Change
	Existing area	Existing value	Proposed area	Proposed value	Area change	Onsite Unit change
Habitat group						
Cropland						
Grassland						
Heathland and shrub						
Rivers and lakes						
Sparsely vegetated land						
Urban						
Wetland						
Woodland and forest						
Intertidal sediment						
Coastal saltmarsh						
Rocky shore						
Coastal lagoons						

Overall Change	
Area change	Unit change

Off-site	Baseline		Post development Off-site		Off-site Change	
	Existing area	Off-site Existing value	Proposed area	Off site Proposed value	Area change	Offsite Unit change
Habitat group						
Cropland						
Grassland						
Heathland and shrub						
Rivers and lakes						
Sparsely vegetated land						
Urban						
Wetland						
Woodland and forest						
Intertidal sediment						
Coastal saltmarsh						
Rocky shore						
Coastal lagoons						

Combined	Baseline		Combined Post development		Combined change	
	Existing area	Existing value	Proposed area	Proposed value	Proposed area	Proposed value
Habitat group						
Cropland						
Grassland						
Heathland and shrub						
Rivers and lakes						
Sparsely vegetated land						
Urban						
Wetland						
Woodland and forest						
Intertidal sediment						
Coastal saltmarsh						
Rocky shore						
Coastal lagoons						

**A-1 Site Habitat Baseline**

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Ref	Habitats and areas		Habitat distinctiveness		Habitat condition		Ecological connectivity			Strategic significance			Suggested action to address habitat losses	Ecological baseline Total habitat units	Retention category biodiversity value							Bespoke compensation agreed for unacceptable losses	Comments	
	Broad Habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance			Strategic position multiplier	Area retained	Area enhanced	Area succession	Baseline units retained	Baseline units enhanced	Baseline units succession		Area lost	Units lost
1	Cropland	Cropland - Cereal crops		Low	2	N/A - Agricultural	1	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness or better habitat required				0.00	0.00	0.00				
2	Grassland	Grassland - Other neutral grassland		Medium	4	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same broad habitat or a higher distinctiveness habitat required				0.00	0.00	0.00				
3	Grassland	Grassland - Modified grassland		Low	2	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness or better habitat required				0.00	0.00	0.00				
4	Heathland and shrub	Heathland and shrub - Mixed scrub		Medium	4	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same broad habitat or a higher distinctiveness habitat required				0.00	0.00	0.00				
5	Heathland and shrub	Heathland and shrub - Mixed scrub		Medium	4	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same broad habitat or a higher distinctiveness habitat required				0.00	0.00	0.00				
6	Lakes	Lakes - Ponds (Non- Priority Habitat)		High	6	Moderate	2	Medium	Moderately connected habitat	1.1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same habitat required				0.00	0.00	0.00				
7	Heathland and shrub	Heathland and shrub - Mixed scrub		Medium	4	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same broad habitat or a higher distinctiveness habitat required				0.00	0.00	0.00				
8	Heathland and shrub	Heathland and shrub - Mixed scrub		Medium	4	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same broad habitat or a higher distinctiveness habitat required				0.00	0.00	0.00				
9	Urban	Urban - Developed land; sealed surface		V.Low	0	N/A - Other	0	N/A	Assessment not appropriate	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Compensation Not Required				0.00	0.00	0.00				
10	Urban	Urban - Built linear features		V.Low	0	N/A - Other	0	N/A	Assessment not appropriate	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Compensation Not Required				0.00	0.00	0.00				
11	Woodland and forest	Woodland and forest - Lowland mixed deciduous woodland		High	6	Moderate	2	Medium	Moderately connected habitat	1.1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same habitat required				0.00	0.00	0.00				
12	Woodland and forest	Woodland and forest - Other coniferous woodland		Low	2	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness or better habitat required				0.00	0.00	0.00				

## A-2 Site Habitat Creation

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Post development/ post intervention habitats																		
Proposed habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Ecological connectivity			Strategic significance			Temporal multiplier		Difficulty multipliers		Habitat units delivered	Comments	
						Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier	Time to target condition/years	Time to target multiplier	Difficulty of creation category	Difficulty of creation multiplier		Assessor comments	Reviewer comments
Cropland - Cereal crops		Low	2	N/A - Agricultural	1	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	1	0.965	Low	1			
Grassland - Other neutral grassland		Medium	4	moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	10	0.700	Low	1			
Grassland - Modified grassland		Low	2	moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	10	0.700	Low	1			
Heathland and shrub - Mixed scrub		Medium	4	moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	3	0.899	Low	1			
Heathland and shrub - Mixed scrub		Medium	4	moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	3	0.899	Low	1			
Lakes - Ponds (Non- Priority Habitat)		High	6	moderate	2	medium	Moderately connected habitat	1.1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	3	0.899	Low	1			
Heathland and shrub - Mixed scrub		Medium	4	moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	3	0.899	Low	1			
Heathland and shrub - Mixed scrub		Medium	4	moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	3	0.899	Low	1			
Urban - Developed land; sealed surface		V.Low	0	N/A - Other	0	N/A	Assessment not appropriate	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	0	1.000	Low	1			
Urban - Built linear features		V.Low	0	N/A - Other	0	N/A	Assessment not appropriate	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	0	1.000	Low	1			
Woodland and forest - Lowland mixed deciduous woodland		High	6	moderate	2	medium	Moderately connected habitat	1.1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	32+	0.320	High	0.33			
Woodland and forest - Other coniferous woodland		Low	2	moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	25	0.410	Low	1			

**B-1 Site Hedge Baseline**

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Baseline ref	UK Habitats - existing habitats			Habitat distinctiveness		Habitat condition		Ecological connectivity			Strategic significance			Ecological baseline Total hedgerow units	Retention category biodiversity value						Comments	
	Hedge number	Hedgerow type	length KM	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier		Suggested action to address habitat losses	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	Assessor comments
1		Native Species Rich Hedgerow		Medium	4	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Like for like or better			0	0				
2		Native Species Rich Hedgerow with trees		Medium	4	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Like for like or better			0	0				

## B-2 Site Hedge Creation

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		Multipliers																
		Spatial quality									Temporal multiplier			Difficulty of creation multiplier	Hedge units delivered	Comments		
Baseline ref	New hedge number	Proposed habitats		Habitat distinctiveness		Habitat condition		Ecological connectivity			Strategic significance					Time to target condition/years	Time to target multiplier	Assessor comments
		Habitat type	Length km	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier					
1		Native Species Rich Hedgerow		Medium	4	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	5	0.837	0.67		
2		Native Species Rich Hedgerow with trees		Medium	4	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	10	0.700	0.67		

D-1 Off Site Habitat Baseline

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Baseline ref	Habitats and areas			Habitat distinctiveness		Habitat condition		Ecological connectivity			Strategic significance			Suggested action to address habitat losses	Ecological baseline Total habitat units	Retention category biodiversity value							Bespoke compensation agreed for unacceptable losses	Comments	
	Broad habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier			Area retained	Area enhanced	Area succession	Baseline units retained	Baseline units enhanced	Baseline units succession	Area lost		Units lost	Assessor comments
1	Grassland	Grassland - Modified grassland		Low	2	Poor	1	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness or better habitat required		11.5		0	25.30	0.00					
2	Grassland	Grassland - Other neutral grassland		Medium	4	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same broad habitat or a higher distinctiveness habitat required		1.5		0	13.20	0.00					
3	Grassland	Grassland - Modified grassland		Low	2	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness or better habitat required		5.5		0	24.20	0.00					
4	Heathland and shrub	Heathland and shrub - Mixed scrub		Medium	4	Poor	1	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same broad habitat or a higher distinctiveness habitat required		1.2		0	5.28	0.00					
5	Lakes	Lakes - Ponds (Non- Priority Habitat)		High	6	Poor	1	Medium	Moderately connected habitat	1.1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same habitat required		0.01		0	0.07	0.00					
6	Grassland	Grassland - Modified grassland		Low	2	Moderate	2	Low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness or better habitat required			10	0	0.00	44.00					

**D-3 Off Site Habitat Enhancement**

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Baseline habitats		Post development/ post intervention habitats										Comments			
Baseline ref	Baseline habitat	Proposed habitat (Pre-Populated but can be overridden)	Distinctiveness change	Condition change	Area ha	Distinctiveness	Condition	Ecological connectivity score	Strategic significance	Temporal multiplier	Difficulty of enhancement category	Spatial risk category	Habitat units delivered	Assessor comments	Reviewer comments
1	Grassland - Modified grassland	Grassland - Other neutral grassland	Low - Medium	Lower Distinctiveness Habitat - Moderate		Medium	Moderate	Low	Location ecologically desirable but not in local strategy	10	Low	Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss			
2	Grassland - Other neutral grassland	Grassland - Lowland meadows	Medium - V.High	Lower Distinctiveness Habitat - Moderate		V.High	Moderate	Medium	Location ecologically desirable but not in local strategy	10	Medium	Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss			
3	Grassland - Modified grassland	Grassland - Other neutral grassland	Low - Medium	Lower Distinctiveness Habitat - Moderate		Medium	Moderate	Low	Location ecologically desirable but not in local strategy	10	Low	Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss			
4	Heathland and shrub - Mixed scrub	Heathland and shrub - Mixed scrub	Medium - Medium	Poor - Moderate		Medium	Moderate	Low	Location ecologically desirable but not in local strategy	5	Low	Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss			
5	Lakes - Ponds (Non- Priority Habitat)	Lakes - Ponds (Non- Priority Habitat)	High - High	Poor - Moderate		High	Moderate	Medium	Location ecologically desirable but not in local strategy	2	Low	Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss			

**D-4 Off Site Habitat Succession**

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Baseline habitats		Proposed habitat	Change in distinctiveness and condition		Post development/ post intervention habitats								Habitat units delivered	Comments	
Baseline ref	Baseline habitat		Distinctiveness change	Condition change	Area ha	Distinctiveness	Condition	Ecological connectivity	Strategic significance	Temporal multiplier	Difficulty multipliers	Spatial risk multiplier		Assessor comments	Reviewer comments
							Ecological connectivity score			Time to target condition/years	Difficulty of creation category	Spatial risk category			
6	Grassland - Modified grassland	Woodland and forest - Lowland mixed deciduous woodland	Low - High	Lower Distinctiveness Habitat - Moderate		High	Moderate	Medium	Location ecologically desirable but not in local strategy	32+	High	Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss			

**E-2 Off Site Hedge Creation**

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Baseline ref	New hedge number	Proposed habitats		Distinctiveness	Score	Condition	Score	Ecological connectivity			Strategic significance			Spatial risk multiplier		Temporal multiplier		Difficulty multiplier		Hedge units delivered	Comments	
		Habitat type	Length km					Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier	Spatial risk category	Spatial risk multiplier	Time to target condition/years	Time to target multiplier	Difficulty of creation category	Difficulty of creation multiplier		Assessor comments	Reviewer comments
1		Native Species Rich Hedgerow		Medium	4	Moderate	2	low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss	1	5	0.837	Medium	0.67			
2		Native Species Rich Hedgerow with trees		Medium	4	Moderate	2	low	Unconnected habitat	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss	1	10	0.700	Medium	0.67			