

Appendix 7T

Calculations of Habitat Loss, Gain and Retained Habitats

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Calculations of Habitat loss, gain and retained habitats.

Table 7.17: habitat loss, gain and retention/enhancement within different areas of the site.

Habitat	Total habitat (ha)	Habitat loss (Ha)	% habitat loss	Habitats retained and enhanced (Ha)	% habitat retention	Habitat creation (Ha)	Habitat retention (Ha)
Habitat loss from the washery development against habitat creation and retention							
Neutral grassland / species rich grassland	1.76	1.55	88				
Acid grassland / species rich	231.94	0.54	0.23	12.01 (existing SINC)	5.17	8.47	
Marshy grassland / species rich grassland	139.98	0	0	10.05 (existing SINC)	7.18		
Ponds	8.70	0.52	6.01				
Dry heath / acid grassland	24.11	0.98	4.06				
Dense scrub	2.13	1.62	75.88				

Habitat	Total habitat (ha)	Habitat loss (Ha)	% habitat loss	Habitats retained and enhanced (Ha)	% habitat retention	Habitat creation (Ha)	Habitat retention (Ha)
Ephemeral grassland	5.30	2.83	53.48				
Mixed plantation woodland	4.18			1.98	47.37		
Sub total		8.04		24.04		8.47	
Habitat loss from the sidings against habitat creation and retention							
Mixed woodland (sidings)	4.18	0.57	13.52				
Marshy grassland (sidings)	139.97	0.84	0.60			16.91	
Ephemeral grassland (sidings)	5.30	2.46	46.42				
Sub total		3.87				16.91	
Habitat loss from the new access road (in the washery and Nant Helen site) against habitat creation and retention							
Marshy grassland (washery)	21.99	0.20	0.14				
Acid grassland (washery)	12.55	0.08	0.03				

Habitat	Total habitat (ha)	Habitat loss (Ha)	% habitat loss	Habitats retained and enhanced (Ha)	% habitat retention	Habitat creation (Ha)	Habitat retention (Ha)
Neutral grassland (washery)	1.76	0.21	11.78				
Mixed plantation woodland (washery)	4.18	0.19	4.62				
Marshy grassland (Nant Helen site)	139.37	1.13	0.81				
Acid grassland (Nant Helen site)	231.94	0.47	0.20				
Waterbodies (dissected by road)	8.70	1.86	21.38			1.86	
Sub total		4.14				1.86	
Habitat loss from the Nant Helen site (location of the tracks and associated infrastructure) against habitat creation and retention							
Acid grassland	231.94	47.25	20.37			47.25	

Habitat	Total habitat (ha)	Habitat loss (Ha)	% habitat loss	Habitats retained and enhanced (Ha)	% habitat retention	Habitat creation (Ha)	Habitat retention (Ha)
(around track)							
New woodland planting (on northern embankment)	27.11	18.96	69.94			18.96	
Sub total		66.21				66.21	
Habitat loss from landscaping (in the washery and Nant helen site)							
Marshy grassland (nant helen)	139.97	15.63	11.17				
Acid grassland (Nant helen)	231.94	2.58	1.11				
Enclosed pasture (Nant helen)	62.82	4.17	6.64				
Acid grassland (washery)	231.94	0.44	0.19				
Sub total		22.82					
Habitat creation as part of other infrastructure i.e. drainage/SuDs and landscaping							
SuDS Ponds						9.6	

Habitat	Total habitat (ha)	Habitat loss (Ha)	% habitat loss	Habitats retained and enhanced (Ha)	% habitat retention	Habitat creation (Ha)	Habitat retention (Ha)
SuDS / drainage features						39.44	
Landscaping – tree / woodland planting						23.08	
Sub total						72.12	
Habitats retained adjacent to development within red line boundary							
Conifer							2.60
Broadleaved woodland							2.51
Marshy grassland							34.74
Sub total							39.85

Table 7.18: Table detailing loss per habitat type against habitat creation and habitat retention. As with the above table, this table also doesn't include calculations for buildings and areas of hardstanding, and excludes the habitats proposed as part of the Nant Helen Restoration plan (which form part of the previous earthworks application).

Habitats affected (excluding buildings and hardstanding)	Total extent of habitat within red line boundary of GCRE	Habitat loss (Ha)	Habitat creation (ha)	Habitat retention and enhancement (Ha)	Habitats retained and protected (Ha) – not subject to any management as a result of the development	Description of changes to habitat
Marshy grassland	139.97	0.84 + 0.196 0.2 + 1.13 + 15.63 = 17.80	16.91	10.05 (existing SINC's)	34.74	Small areas of marshy grassland will be lost from the sidings and the Nant Helen site as a result of GCRE infrastructure and the access road. A small area of marshy grassland will also be lost as a result of landscaping planting required for GCRE. There will be no loss of marshy grassland from the washery site, and these areas will be retained and subject to management to enhance their value for nature conservation.

Acid grassland	231.94	$0.54+0.08+0.47+47.25$ $+2.58 +0.44 = \mathbf{51.33}$	$8.47+ 47.25 = \mathbf{55.72}$	12.01 (existing SINC)		Small areas of acid grassland will be lost from the washery and sidings and the Nant Helen site as a result of the GCRE infrastructure. A small area of acid grassland will also be lost as a result of landscaping planting required for GCRE. There will be larger area of acid grassland lost from the Nant Helen site at the locations of the tracks, where there will be newly establishing grassland on the recently formed earthworks. An area of existing acid grassland which forms the Onllwyn coal washery SINC will be retained and subject to long term management to enhance its value for nature conservation. New acid grassland will establish on the embankments and cuttings of the tracks within the Nant Helen site replacing lost acid grassland which forms part of the landscaping for the Nant Helen earthworks application.
Neutral grassland	1.76	$1.55+0.21=1.76$				A small area of neutral grassland which occur around the periphery of the washery buildings will be lost as a result of GCRE infrastructure: buildings and access road.

Dry heath / acid grassland	24.11	0.98				A small area of dry heath / acid grassland will be lost from the Washery.
Enclosed pasture	62.82	4.17				A small area of enclosed pasture will be lost as a result of landscaping planting required for GCRE.
Mixed woodland	4.18	$0.57 + 0.19 = \mathbf{0.76}$		1.98		A small area of mixed woodland (semi-natural and plantation) will be lost from the washery and the sidings as a result of GCRE infrastructure including the access road. A small area of plantation which is retained in the washery will be subject to management to enhance its value for nature conservation.
Broadleaved woodland⁶⁶	27.11	18.96	$23.08 + 18.96 = \mathbf{42.04}$		2.51	New planting proposed as part of the Nant Helen earthworks habitat creation and enhancement will be lost where it is located on the northern track. There will be new broadleaved woodland creation as part of landscaping that is required for GCRE.
Conifer	2.60				2.60	An area of conifer plantation will be retained north of the track.
scrub	2.13	1.62				A small area of scrub will be lost from the washery site.

⁶⁶ including new planting lost from Nant Helen habitat creation and enhancement plan, and new landscaping comprising broadleaved woodland planting.

Ephemeral vegetation	5.30	2.83+2.46= 5.30				A small area of ephemeral vegetation will be lost from the washery site.
Waterbodies / wetland features	8.70	1.86	1.86+9.6+39.44= 50.90			Three ponds location within the smaller GCRE track will be disturbed/lost as a result of the access track but will be relocated east of the track. There are a large number of waterbodies and wetland features such as ditches/swales that will be created for GCRE as part of the SuDS design.
Total	505.56	104.54	165.57	24.04	39.85	
	The above total excludes buildings and hardstanding which will be lost from the site. In addition there are other habitats within the GCRE boundary which form part of the Nant helen restoration, and are unaffected by the GCRE works (for example peat-mire habitat)		Habitats created are greater than habitats lost since pond creation is within adjacent Nant helen land.		These retained habitats will not be subject to enhancement measures but are included as are within the GCRE boundary, and also not within the Nant Helen restoration land.	

	and are therefore unaccounted for here.					
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