

Appendix 7V

Table of Broad Ecosystems and Effects on Ecosystem Resilience

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Table 7.20 resilience assessment of the existing ecosystems along with indication of how the scheme may change this resilience (increase +/- decrease -).

Ecosystem	Diversity	Extent / size	Condition	Connectivity	Expected Future Change Drivers / Risks for broad habitats
Grassland and heathland	Species rich grassland comprising acid, neutral and marshy grassland which also occur in a mosaic with heathland provide value for invertebrates, fungi, foraging bats and birds. Areas around the washery will be retained and enhanced, including SINC's, and new habitats will be created on the embankment slopes, and in other areas adjacent to the development which will be managed in the long term to enhance their diversity.	71.87 ha lost (17.8 marshy grassland +51.33 acid grassland+1.76 neutral grassland +0.98 acid grass/dry heath), 72.63 ha (16.91 marshy grassland +55.72 acid grassland) created and 22.06 ha retained / managed (including retained SINC's). Additionally, acid grassland will likely establish with heathland. Expected increase as a result of the final design (+)	Retained and newly created habitats to be managed to enhance condition. Expected increase as a result of the final design (+) subject to long term management	Unlikely to be affected by the scheme. No change as a result of the final design (0).	Over population / over use, non-native invasive species, pollution, habitat change, inadequate management

	Expected increase as a result of the final design (+)				
Enclosed pasture	Enclosed pasture is likely to have limited value for wildlife, and is proposed as part of the nant helen habitat restoration plan is required for grazing livestock. A small proportion of this will be lost as a result of the development. No change as a result of the final design (0).	4.17 ha lost. Species rich grassland will be created within the site weih will also support heathland, and as such it is considered to also compensate for the loss of enclosed pasture. No change as a result of the final design (0).	Retained enclosed pasture will be subject to grazing by livestock, subject to grazing agreements. No change as a result of the final design (0).	Unlikely to be affected by the scheme. No change as a result of the final design (0).	Over population / over use, non-native invasive species, pollution, habitat change, inadequate management
Waterbodies (including drainage)	Waterbodies support a range of vascular plants including some notable species, in addition to breeding birds, invertebrates,	1.86 ha lost and 50.90 ha created Expected increase as a result of the final design (+)	Retained and newly created habitats to be managed to enhance condition Expected increase as a	Potential fragmentation of proposed ponds as a result of the road, although new ponds will be re-sited immediately east.	Over population / over use, non-native invasive species, pollution, habitat change, inadequate management

	amphibians and foraging bats. A number of waterbodies will be retained, and a number of new waterbodies will be created including a significant proportion as a result of site drainage (ditches, lagoons and swales) which will be designed to accommodate biodiversity. Three waterbodies which will be affected the by the new road will be re-sited immediately east of the original proposed location. Expected increase as a result of the final design (+)		result of the final design (+) subject to long term management	Unlikely to be affected by the scheme. No change as a result of the final design (0).	
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Ephemeral grassland		5.30 ha lost, although areas of ephemeral grassland likely to be created as part of newly establishing grassland – detailed above. No change as a result of the final design (0).	Retained and newly created habitats to be managed to enhance condition. Expected increase as a result of the final design (+) subject to long term management	Unlikely to be affected by the scheme. No change as a result of the final design (0).	Over population / over use, non-native invasive species, pollution, habitat change, inadequate management
Broadleaved woodland and scrub	A very small area of broadleaved trees / scrub will be lost. New tree / woodland planting as a result of the landscaping will create additional habitat for breeding birds, foraging and potentially roosting bats, in addition to some invertebrates. Expected increase as a	20.58 ha lost and 42.04 ha created. Expected increase as a result of the final design (+)	Retained and newly created habitats to be managed to enhance condition. Expected increase as a result of the final design (+) subject to long term management	Unlikely to be affected by the scheme. No change as a result of the final design (0).	Over population / over use, non-native invasive species, pollution, habitat change, inadequate management

	result of the final design (+)				
Plantation woodland	Mixed and conifer plantation occurs within the site. Plantation woodland offers limited opportunities for wildlife. A small area will be lost but retained habitats within the site will be enhanced through management. Expected increase as a result of the final design (+)	3.36 ha lost (0.76 mixed +2.60 conifer), and 1.98 ha mixed plantation retained and enhanced. No change as a result of the final design (0).	Retained and newly created habitats to be managed to enhance condition Expected increase as a result of the final design (+)	Unlikely to be affected by the scheme. No change as a result of the final design (0).	
Watercourses	The Afon Dulais and its tributaries provide habitat for otter foraging / commuting. A culvert/culverts will be installed over the tributary of the Afon Dulais, although	Small section of Afon Dulai tributary to be re-aligned and a new culvert to be installed. These will follow best practice design and construction guidance.	Unlikely to be affected by the scheme; providing habitat condition maintained during reconstruction.	Unlikely to be affected by the scheme; providing connectivity for wildlife maintained during reconstruction.	Over population / over use, non-native invasive species, pollution, habitat change, inadequate management

	this will follow best practice design and allow continued passage by otter. A section of one of the tributaries will be re-aligned, although providing this is similar to the conditions of the existing habitat there should be no effects. No change as a result of the final design (0).	The extent of these habitats will not be affected. No change as a result of the final design (0).	No change as a result of the final design (0).	No change as a result of the final design (0).	
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