

Appendix 7T

Table of broad ecosystems and effects on ecosystem resilience

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T1 Table of broad ecosystems and effects on ecosystem resilience

Table 7.14: 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	<p>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.</p> <p>Areas around the washery will be retained and enhanced, including SINC, and new habitats will be created on the embankment slopes, and in other areas</p>	<p>88.44 ha lost, 88.48 ha created and 34 ha retained / managed (including retained SINC).</p> <p>Expected increase as a result of the final design (+)</p>	<p>Retained and newly created habitats to be managed to enhance condition</p> <p>Expected increase as a result of the final design (+) subject to long term management</p>	<p>Unlikely to be affected by the scheme.</p> <p>No change as a result of the final design (0).</p>	<p>Over population / over use, non-native invasive species, pollution, habitat change, inadequate management</p>

Ecosystem	Diversity	Extent / size	Condition	Connectivity	Expected Future Change Drivers / Risks for broad habitats
	<p>adjacent to the development which will be managed in the long term to enhance their diversity.</p> <p>Expected increase as a result of the final design (+)</p>				
<p>Waterbodies (including drainage)</p>	<p>Waterbodies support a range of vascular plants including some notable species, in addition to breeding birds, invertebrates, amphibians and foraging bats.</p> <p>A number of waterbodies will be retained, and a number of new waterbodies will be created including a significant</p>	<p>2.4 ha lost and 53.26 ha created</p> <p>Expected increase as a result of the final design (+)</p>		<p>Potential fragmentation of proposed ponds as a result of the road, although new ponds will be re-sited immediately east.</p> <p>Unlikely to be affected by the scheme.</p> <p>No change as a result of the final design (0).</p>	

Ecosystem	Diversity	Extent / size	Condition	Connectivity	Expected Future Change Drivers / Risks for broad habitats
	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 (+)				
Ephemeral grassland		4.25 ha lost, although areas of ephemeral grassland likely to be created as part of newly establishing grassland – detailed above.		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

Ecosystem	Diversity	Extent / size	Condition	Connectivity	Expected Future Change Drivers / Risks for broad habitats
		<p>No change as a result of the final design (0).</p>			
<p>Broadleaved woodland and scrub</p>	<p>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.</p> <p>Expected increase as a result of the final design (+)</p>	<p>1.7 ha lost and 23.08 created</p> <p>Expected increase as a result of the final design (+)</p>	<p>Retained and newly created habitats to be managed to enhance condition</p> <p>Expected increase as a result of the final design (+) subject to long term management</p>	<p>Unlikely to be affected by the scheme.</p> <p>No change as a result of the final design (0).</p>	<p>Over population / over use, non-native invasive species, pollution, habitat change, inadequate management</p>
<p>Plantation woodland</p>	<p>Plantation woodland offers limited opportunities for wildlife. A small area will be lost</p>	<p>1.52 ha lost, and 1.98 ha retained and enhanced.</p>	<p>Retained and newly created habitats to be managed to enhance condition</p>	<p>Unlikely to be affected by the scheme.</p>	

Ecosystem	Diversity	Extent / size	Condition	Connectivity	Expected Future Change Drivers / Risks for broad habitats
	<p>but a larger area retained within the site will be enhanced through management.</p> <p>Expected increase as a result of the final design (+)</p>	<p>Expected increase as a result of the final design (+)</p>	<p>Expected increase as a result of the final design (+) subject to long term management</p>	<p>No change as a result of the final design (0).</p>	
<p>Watercourses</p>	<p>The Afon Dulais and its tributaries provide habitat for otter foraging / commuting.</p> <p>A culvert will be installed over the tributary of the Afon Dulais, although this will follow best practice design and allow continued passage by otter.</p> <p>A small section of one of the tributaries will be</p>	<p>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.</p> <p>The extent of these habitats will not be affected.</p> <p>No change as a result of the final design (0).</p>	<p>Unlikely to be affected by the scheme; providing habitat condition maintained during reconstruction.</p> <p>No change as a result of the final design (0).</p>	<p>Unlikely to be affected by the scheme; providing connectivity for wildlife maintained during reconstruction.</p> <p>No change as a result of the final design (0).</p>	<p>Over population / over use, non-native invasive species, pollution, habitat change, inadequate management</p>

Ecosystem	Diversity	Extent / size	Condition	Connectivity	Expected Future Change Drivers / Risks for broad habitats
	<p>re-aligned, although providing this is similar to the conditions of the existing habitat there should be no effects.</p> <p>No change as a result of the final design (0).</p>				