

LDP2 **Ceredigion**

**Replacement Local Development Plan
2018 - 2033**

HRA Appendices 2019

Contents

APPENDIX 1: International Sites' conservation objectives, vulnerabilities and condition	1
APPENDIX 2: Screening Criteria	24
APPENDIX 3: Detailed Assessment of Policies	27
APPENDIX 4: Key changes to the LDP through the HRA	37
APPENDIX 5: Other plans or projects	38
APPENDIX 6: Assessment of factors from the Natura 2000 Data Forms from the Preferred Strategy HRA Screening	56

APPENDIX 1: International Sites' conservation objectives, vulnerabilities and condition

Table 1

The LDP is an opportunity to embrace the Environment (Wales) Act 2016. The Section 6 focus on enhancing the environment has been a priority in the review of all the plans and policies. LDP policies are being amended to reflect this focus.

European sites within Ceredigion or which are outside and have been identified as being potentially vulnerable to development occurring within Ceredigion. Sites are listed with their qualifying features, the latest assessment of their respective conditions and when the assessments took place, their conservation objectives and the key factors affecting the features and whether the LDP is likely to affect that factor.

In addition, all the European Sites are at risk or already suffering the direct and indirect impacts of climate change. All the Strategic Policies, other than S06, may have an additional climate change impact, either positive or negative on all the European Sites, alone or in combination. This HRA screening includes the need for the LDP and its developing policies to ensure that they are appropriate to avoid additional impacts and contribute to reducing existing impacts. This may require a specific climate change policy.

*: Features for which the site qualifies for but which is not the primary reason for why the site has been notified.

Features highlighted in bold are SAC priority features.

** : Some features that do not occur near to Ceredigion have not been listed.

Key

√	LDP has a minimal or in-direct relationship on this factor
√√	LDP has a strong influence on this factor
X	LDP has no influence on this factor

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
Afon Teifi/ River Teifi	SAC	1. Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation	Favourable (2006)	<ul style="list-style-type: none"> The natural range of the plant communities represented within this feature should be stable or increasing in the SAC The area covered by the feature within its natural range in the SAC should be stable or increasing. The conservation status of the feature's typical species should be favourable 	Water abstraction reducing flow rates, artificially regulating flow, causing entrainment of fish and affecting water quality.	√√
	SAC	2. Brook lamprey	Unfavourable: Unclassified (Apr 05)	<ul style="list-style-type: none"> The population of the feature in the SAC is stable or increasing over the long term. 	Development on floodplain (housing and car parks) could potentially increase pollution, increase damaging flood events, reduce function of river ecosystems and on the banks could increase suspended sediment	√√
	SAC	3. River lamprey	Unfavourable: Unclassified (Apr 05)	<ul style="list-style-type: none"> The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. 	Flood defences alter important bank side habitats and prevent natural river processes.	√
	SAC*	4. Sea lamprey	Unfavourable: Unclassified (Apr 05)	<ul style="list-style-type: none"> There is, and will continue to be, a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis. 	Water pollution through disposal of sewage effluent, run-off and metal mine workings including re-opening of old mines and restoration	√√
	SAC				Fish stocking	X

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
		5. Atlantic salmon	Unfavourable: Unclassified (2007)		Fish farms	√
	SAC	6. Bullhead	Unfavourable: Unclassified (Nov 06)		Acidification and eutrophication from atmospheric deposition	√
	SAC	7. Otter	Favourable (Feb 04)	<ul style="list-style-type: none"> The population of otters in the SAC is stable or increasing over the long term and reflects the natural carrying capacity of the habitat within the SAC The natural range of otters in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future The safe movement and dispersal of individuals around the SAC is facilitated 	Modification of river systems including widening, constricting, deepening, straightening and culverts, especially engineering work that forms a physical or acoustic barrier across water courses such as dams and weirs	√√
	SAC	8. Floating water plantain	Favourable (Feb 04)	<ul style="list-style-type: none"> The floating water-plantain populations will be viable throughout their current distribution in the SAC The SAC will have sufficient suitable habitat to support floating water-plantain 	Sand and gravel quarrying activities adjacent to water course Small hydro-electric schemes Non-native invasive species Effects on water quality from forestry and abandoned metal mines	√√ √ √

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
				populations within their current distribution		
	SAC*	9. Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>	Favourable (2007)	<ul style="list-style-type: none"> The <i>Littorelletea uniflorae</i> aquatic upland lake community will be present in all five of the Teifi Pools A fully developed <i>Littorelletea</i> community will be present in Llyn Hir, including all of the component species typical of the SAC feature, as represented in the Afon Teifi SAC. For each of Llyn Teifi, Llyn Egnant, Llyn y Gorlan and Llyn Bach, the extent and species composition of the <i>Littorelletea</i> community will be stable or increasing in range 	<p>Agricultural run-off causing pollution and suspended sediment</p> <p>Recreation (including fishing, walking, gorge walking and boating) and associated tourist development</p>	<p>X</p> <p>√</p>
Cardigan Bay/ Bae Cardigan	SAC*	1. Sandbanks that are slightly covered by seawater all the time.	Unknown	<ul style="list-style-type: none"> The conservation objective for the sandbanks feature is to maintain at favourable conservation status its natural range and area 	<p>Recreation (water sports and boating)</p> <p>Pollution and suspended sediment (principally discharges but also run-off)</p>	<p>√</p> <p>√</p>

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
				covered, the structures and functions necessary for its long-term maintenance, and the conservation status of its typical species on a long-term basis.	Dredging (principally of the Teifi estuary)	X
	SAC*	2. Reefs	Unknown	<ul style="list-style-type: none"> The conservation objective for the reefs feature is to maintain at favourable conservation status its natural range and area covered, the structures and functions necessary for its long-term maintenance, and the conservation status of its typical species on a long-term basis. 	Wind Farms Artificial reefs and barrages Military testing Commercial fishing (with regard to stock numbers and damage to underwater features)	√√ √ X X
	SAC*	3. Submerged or partially submerged sea caves.	Unknown	<ul style="list-style-type: none"> The conservation objective for the sea-caves feature is to maintain at favourable conservation status its natural range and area covered, the structures and functions necessary for its long-term maintenance, and the conservation status of its typical species on a long-term basis. 	Fish farming Refuse disposal Port and Marina development moorings and associated facilities Operation and Maintenance of ports and pipelines and other infrastructure	√ √ √ √

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
	SAC	4. Bottlenose dolphin	Unknown	<ul style="list-style-type: none"> The conservation objective for the bottlenose dolphin (<i>Tursiops truncatus</i>) is to maintain at favourable conservation status its long-term population viability, natural range and the structure and function of its habitat within the site. 	Coastal squeeze including loss of sand and mud-flat as a result of new coastal development Disposal of dredged material Sewage disposal	√√ X √
	SAC*	5. Grey seal	Unknown	<ul style="list-style-type: none"> The conservation objective for the (<i>Halichoerus grypus</i>) is to maintain at favourable conservation status its long-term population viability, natural range and the structure and function of its habitat within the site. 	Shellfish management and associated access Former waste disposal sites - contaminated land Coastal engineering including coastal defence	X √ √√
	SAC*	6. Sea lamprey	Unknown	<ul style="list-style-type: none"> The conservation objective for the river lamprey (<i>Lampetra fluviatilis</i>) and sea lamprey (<i>Petromyzon marinus</i>) is to maintain at favourable conservation status their long-term population viability, natural range and the structure and function of their habitat within the site. 	Atmospheric deposition causing high levels of acidity and nutrient nitrogen	√√
	SAC*	7. River lamprey	Unknown			

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
Coed Cwm Einion	SAC	1. <i>Tilio-Acerion</i> forests of slopes, screes and ravines	Unfavourable: Declining (2002)	<ul style="list-style-type: none"> The forests extent, canopy cover within the <i>Tilio-Acerion</i> woodland, natural processes and structural development, regeneration and species composition of the <i>Tilio-Acerion</i> woodland must not fall below the lower limits and must meet the vision in order to be in favourable conservation status 	Micro-climate affected by hydro-electricity scheme	√√
					Atmospheric deposition causing high levels of acidity and nutrient nitrogen	√
					Erosion caused by recreation	√
					Pollution from run-off	√
					Grazing	X
					Development	√√
					Quarrying	X
Coedvdd a Cheunant Rheidol/Rhidol Woods & Gorge	SAC	1. Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Unfavourable: Declining (Jan 06)	<ul style="list-style-type: none"> The woods' tree canopy gap creation rate and canopy regeneration rate must be above the lower limit and must meet the vision in order for it to be in favourable condition. Invasive species, burning and grazing should not reach the upper limits 	Micro-climate affected by hydro-electricity scheme	√√
					Atmospheric deposition causing high levels of acidity and nutrient nitrogen	√
					Erosion caused by recreation	√
					Fire risk from railway	X
					Invasive species	√
					Burning	X
					Development	√√
					Quarrying	X
Grazing	X					

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
Cors Caron	SAC/Ramsar	1. Active raised bogs	Unfavourable: Recovering (Sep 04)	<ul style="list-style-type: none"> The bogs' extent, proportion of hummock / hollow vegetation, ratio of hollows within the hummock / hollow microform, presence of <i>Rhynchosporion</i> pool vegetation and habitat quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Atmospheric deposition causing high levels of acidity and nutrient nitrogen Chemical pollution e.g liming Infrastructure works Disturbance and erosion from recreation Drainage for agricultural reasons Scrubbing over Grazing Fire/burning Pollution from run-off Development on the site or within an area where it would affect the site's hydrology	√
	SAC	2. Degraded raised bogs still capable of natural regeneration	Unfavourable: Recovering (Sep 04)			X
	SAC*	3. Depressions on peat substrates of the <i>Rhynchosporion</i>	Unfavourable: Recovering (Sep 04)			√
	SAC*	4. Transition mires and quaking bogs	Unfavourable: Recovering (Sep 04)	√		
	SAC/Ramsar	5. Otter	Favourable (Feb 04)	<ul style="list-style-type: none"> See Teifi SAC 		X
	Ramsar	6. Large heath butterfly	?			√
	Ramsar	7. Rosy marsh moth	?			√√
	Ramsar	8. Water vole	?			

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
	Ramsar	9. Whooper swan	?			
	Ramsar	10. Supports a rich vegetation assemblage and possesses a surface pattern characteristic of this mire habitat type: Sphagnum pulchrum, S. sebsecundum, Atrichum tenellum, Riccia huebeneriana & Scapania paludicola	?			
Cors Fochno and Dyfi Estuary / Aber Dyfi	SAC	1. Active raised bogs	Unfavourable: No Change (Dec 07)	<ul style="list-style-type: none"> The bogs' extent and condition of active raised bog and extent and condition of depressions on peat substrates of the <i>Rhynchosporion</i> must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Flood defence schemes such as the maintenance of the Afon Leri banks affecting the function of ecosystem Disturbance/disruption of flight paths from wind farms	?
	SAC*	2. Depressions on peat substrates of the <i>Rhynchosporion</i>	Unfavourable: No Change (Dec 07)			√

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
	SAC	3. Degraded raised bogs still capable of natural regeneration	Unfavourable: No Change (Dec 07)	<ul style="list-style-type: none"> The bogs' extent and condition of degraded bog with M18/M2 raised bog vegetation must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Atmospheric deposition causing high levels of acidity and nutrient nitrogen Infrastructure works Recreation causing erosion and disturbance	✓ ✓ ✓
	SPA	4. Greenland white-fronted goose	Unfavourable: Declining (2008)	<ul style="list-style-type: none"> The Greenland white fronted geese population size, winter survival rate and proportion of juvenile geese to adult geese must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Development on the site or within an area where it would affect the site's hydrology Water chemistry - rapid, uncontrolled flooding from sea water Scrubbing over Livestock grazing Pollution from run-off	✓✓ ✓
	Ramsar	5. Estuarine Raised Bog	?			X X ✓
Cwm Doethie-Mynydd Mallaen	SAC*	1. European dry heaths	Unfavourable: Recovering (Jan 04)	<ul style="list-style-type: none"> The heaths' extent, distribution and habitat quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Pollution from run-off Burning Atmospheric deposition causing high levels of acidity and nutrient nitrogen	✓ X ✓
	SAC	2. Old sessile oak woods with <i>Ilex</i> and	Unfavourable (2006)	<ul style="list-style-type: none"> The woods' extent, canopy cover, regeneration, woodland structure, tree and 	Erosion from vehicle use, heavy trampling and track construction Grazing	✓ X

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
		<i>Blechnum</i> in the British Isles		shrub composition, dead wood and bryophytes must not fall below the lower limits and must meet the vision in order to be in favourable condition	Land loss from developments, infrastructure works and telecommunication equipment Effect on micro-climate from micro-hydro Quarrying	√√ √ X
Elenydd - Mallaen	SAC*	1. Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>	Unfavourable: Unclassified (Jul 05)	<ul style="list-style-type: none"> The waters' extent, distribution, aquatic plant community composition, plant community structure and on-native invasive species must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Wind farms (and any other structure) damaging the peat land hydrology. Burning Atmospheric deposition causing high levels of acidity and nutrient nitrogen Grazing pressure	√ X √ X
	SAC	2. Blanket bog.	Unfavourable: Declining (2002)	<ul style="list-style-type: none"> The bogs' extent, distribution and habitat quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Pollution from run-off and metal mine workings including re-opening of old mines and restoration Water extraction (Teifi pools)	√ √
	SAC*	3. European Dry heaths.	Unfavourable (Oct 04)	<ul style="list-style-type: none"> The heaths' extent, distribution and habitat quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Engineering works to Teifi pools. Off road vehicles and track construction	√√ √√

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
	SAC	4. Calaminarian grasslands of the <i>Violetalia calaminariae</i>	Unfavourable: declining (Aug 05)	<ul style="list-style-type: none"> The grasslands' extent, distribution and habitat quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Drainage from development and associated transportation</p> <p>Land loss from development including infrastructure works and telecommunications</p>	√
	SAC	5. Floating water plantain	Unfavourable (Oct 04)	<ul style="list-style-type: none"> The grasslands' distribution and regeneration must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Recreation causing disturbance</p> <p>Wind farms effect on Red Kite etc</p>	√
	SPA	6. Breeding Merlin <i>Falco columbarius</i>	Favourable: Maintained (Jun 03)	<ul style="list-style-type: none"> The merlin's population size must not fall below the lower limits and must meet the vision in order to be in favourable condition 		
	SPA	7. Breeding Red Kite <i>Milvus milvus</i>	Favourable (2007)	<ul style="list-style-type: none"> The red kite's population size, distribution and breeding success must not fall below the lower limits and must meet the vision in order to be in favourable condition 		
	SPA	8. Breeding Peregrine <i>Falco peregrinus</i>	Favourable: Maintained (2002)	<ul style="list-style-type: none"> The peregrine's population size and distribution must not fall below the lower limits 		

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
				and must meet the vision in order to be in favourable condition		
Grogwynion	SAC*	1. European dry heaths	Unfavourable: Declining (2007)	<ul style="list-style-type: none"> The shingle heath's area and quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Atmospheric deposition causing high levels of acidity and nutrient nitrogen Development including infrastructure works and telecommunications Erosion from off road vehicles and track construction and recreation Pollution from run-off Effect of hydrology, e.g. Flood defences	√
	SAC	2. Calaminarian grasslands of the <i>Violetalia calaminariae</i>	Unfavourable: Declining (2007)			√√
Pen Llyn a'r Sarnau/ Lley Penisular and the Sarnau**	SAC	1. Sandbanks that are slightly covered by seawater all the time.	?	<ul style="list-style-type: none"> The conservation objective is to achieve the favourable conservation status of the feature. To reach favourable condition: There must be no reduction in the overall extent The structure and function should remains unchanged from the vision 	Recreation (water sports and boating) Pollution and suspended sediment (principally discharges but also run-off) Dredging (principally of the Teifi estuary) Wind Farms	√
	SAC	2. Reefs	?			√
						X
						√√

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
	SAC*	3. Submerged or partially submerged sea caves.	?	<ul style="list-style-type: none"> The typical species must remain true to the vision 	Artificial reefs and barrages	√
					Military testing	X
	SAC	4. Estuaries	?	<ul style="list-style-type: none"> The management of activities or operations likely to damage or degrade the distribution, extent, structure, function or typical species populations of the feature, is appropriate for maintaining favourable conservation status and is secure in the long term. 	Commercial fishing (with regard to stock numbers and damage to underwater features)	X
	SAC*	5. Mudflats and Sandflats not covered by seawater at low tide.	?		Fish farming	√
					Refuse disposal	√
					Port and Marina development moorings and associated facilities	√
SAC*	6. <i>Salicornia</i> and other annuals colonizing mud and sand.	Favourable		Operation and Maintenance of ports and pipelines and other infrastructure	√	
				Coastal squeeze including loss of sand and mud-flat as a result of new coastal development	√√	
SAC*	7. Atlantic salt meadows (<i>Glaucopuccinellietalicae</i>)	Unfavourable		Disposal of dredged material	X	
				Sewage disposal	√	
SAC*	8. Bootnosed dolphin	?	<ul style="list-style-type: none"> The conservation objective is to achieve the favourable 	Shellfish management and associated access	X	

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
	SAC*	9. Grey seal	?	conservation status of the feature. To reach this the population dynamics, natural range, supporting habitat and security of the future in the long term must be as described in the vision	Former waste disposal sites - contaminated land Coastal engineering including coastal defence Atmospheric deposition causing high levels of acidity and nutrient nitrogen	√
	SAC*	10. Otter	Favourable			√√
						√√
Rhos Lawr-Cwrt	SAC	1. Marsh fritillary butterfly	Unfavourable: No change (2005)	<ul style="list-style-type: none"> The marsh fritillary's abundance and distribution of larval webs must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Atmospheric deposition causing high levels of acidity and nutrient nitrogen Loss of land, shelter belts and hedges surrounding SAC suitable to support metapopulations e.g. due to industrial and residential development Vegetation smothering	√
	SAC*	2. Slender-green feather moss	Unfavourable: Unclassified (Oct 04)	<ul style="list-style-type: none"> The moss's extent (number of populations and ground cover of individual populations) and distribution of populations must not fall below the lower limits and must meet the vision in order to be in favourable condition 		Alterations in hydrology including water abstraction and drainage Construction of roads and vehicle usage including off-roading Pollution from run-off
Rhos Talglas	SAC*	1. <i>Molinia</i> meadows on calcareous,	Unfavourable: Recovering (Aug 07)	<ul style="list-style-type: none"> The meadow's extent, habitat quality and sward 	Atmospheric deposition causing high levels of acidity and nutrient nitrogen	√

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
		peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)		structure must not fall below the lower limits and must meet the vision in order to be in favourable condition	Loss of land, shelter belts and hedges surrounding SAC suitable to support metapopulations e.g. due to Industrial and residential development Alterations in hydrology including water abstraction and drainage Construction of roads and vehicle usage including off-roading Pollution from run-off	√√
	SAC	2. Marsh fritillary	Unfavourable: Declining (Oct 02)	<ul style="list-style-type: none"> The marsh fritillary's density and distribution of larval webs must not fall below the lower limits and must meet the vision in order to be in favourable condition 		√
Afon Tywi / River Tywi	SAC	1. Twaite Shad	Unfavourable: Unclassified	<ul style="list-style-type: none"> To reach favourable condition the features must meet the overall river objectives plus: 	Agricultural run-off causing pollution and suspended sediment Water abstraction reducing flow rates, artificially regulating flow, causing entrainment and affecting water quality. Pollution and discharges including run off from contaminated land, agricultural pollution and chemical	X
	SAC*	2. Bullhead	Unfavourable: Unclassified (2004)	<ul style="list-style-type: none"> The population of the feature in the SAC is stable or increasing over the long term. 		√
	SAC*	3. Sea lamprey	Unfavourable: Unclassified (2004)	<ul style="list-style-type: none"> The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. 		√

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
	SAC*	4. Brook lamprey	Unfavourable: Unclassified (2004)	<ul style="list-style-type: none"> There is, and will probably continue to be, a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis. 	Temperature effects from hypoluminol release at Llyn Brianne Development on floodplain (housing and car parks) will increase pollution, increase damaging flood events, reduce the ability of natural processes in the river and on the banks could increase suspended sediment	X
	SAC*	5. River lamprey	Unfavourable: Unclassified (2004)			√
	SAC*	6. Allis Shad	Unfavourable: Unclassified			
	SAC	7. Otter	Favourable (2004)	<ul style="list-style-type: none"> The population of otters in the SAC is stable or increasing over the long term and reflects the natural carrying capacity of the habitat within the SAC The natural range of otters in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. The safe movement and dispersal of individuals around the SAC is facilitated by the provision, where 	Flood defences alter important bank side habitats and prevent natural river processes. Recreation (including fishing, walking and gorge walking) and associated tourist development Fish stocking Fish farms Acidification and eutrophication from atmospheric pollution	√√ √ X √ √

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
				necessary, of suitable riparian habitat, and underpasses, ledges, fencing etc at road bridges and other artificial barriers.	Sand and gravel quarrying activities adjacent to water course Small hydro-electric schemes Inappropriate engineering works, canalisation and impoundment works, especially those that form a physical or acoustic barrier across water courses such as dams and weirs Modification of river systems including widening, constricting, deepening, straightening and culverts	√ √ √ √
River Wye / Afon Gwy	SAC	Water courses of plain to montane levels with the <i>Ranuncullion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	Unfavourable: Unclassified (Feb 2008)	<ul style="list-style-type: none"> The natural range of the plant communities represented within this feature should be stable or increasing in the SAC The area covered by the feature within its natural range in the SAC should be stable or increasing. 	Revetment on active alluvial river banks using stone, concrete or waste materials. Addition and release of excessive quantities of fine sediment.	√ √ √
	SAC*					√

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
		Transition mires and quaking bogs	Unfavourable: Unclassified (Feb 2008)	<ul style="list-style-type: none"> The conservation status of the feature's typical species should be favourable 	Modification of existing features such as weirs, bridge sills and acoustic barriers	
	SAC	Twaite Shad	Unfavourable: Unclassified (Feb 2008)	<ul style="list-style-type: none"> The population of the feature in the SAC is stable or increasing over the long term. 	Fishing and fish stocking	√
	SAC	Sea lamprey	Favourable: Unclassified (Feb 2008)	<ul style="list-style-type: none"> The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. 	Development on floodplain (housing and car parks) will increase pollution, increase damaging flood events, reduce the ability of natural processes in the river and on the banks could increase suspended sediment	√√
	SAC	Brook lamprey	Unfavourable: Unclassified (Feb 2008)	<ul style="list-style-type: none"> There is, and will continue to be, a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis. 		
	SAC	River lamprey	Unfavourable: Unclassified (Feb 2008)		Flood defences alter important bank side habitats and prevent natural river processes.	√√
	SAC	Atlantic salmon	Unfavourable: Unclassified (Feb 2008)		Pollution and discharges including run off from contaminated land, agricultural and chemical pollution	√
	SAC	Bullhead	Unfavourable: Unclassified (Feb 2008)		Recreation (including fishing, walking and gorge walking) and associated tourist development	√
	SAC*	Allis shad	Unfavourable: Unclassified (Feb 2008)		Acidification and eutrophication from atmospheric pollution	√

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
	SAC	White-clawed (Atlantic stream) Crayfish	Unfavourable:Declining (Feb 2008)		Sand and gravel quarrying activities adjacent to water course Small hydro-electric schemes	√ √
	SAC	Otter	Unfavourable (Feb 2008)	<ul style="list-style-type: none"> The population of otters in the SAC is stable or increasing over the long term and reflects the natural carrying capacity of the habitat within the SAC The natural range of otters in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future The safe movement and dispersal of individuals around the SAC is facilitated 	Inappropriate engineering works, canalisation and impoundment works, especially those that form a physical or acoustic barrier across water courses such as dams and weirs Modification of river systems including widening, constricting, deepening, straightening and culverts Water abstraction reducing flow rates, artificially regulating flow, causing entrainment and affecting water quality.	√ √
North Pembrokeshire Woodlands / Coedydd Gogledd Sir Benfro	SAC	Barbastelle bats	Favourable (Dec 2007)	<ul style="list-style-type: none"> No loss of ancient semi-natural stands No effect on natural processes and structural development 	Loss of habitat for flight lines	√

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
				<ul style="list-style-type: none"> No loss of regenerating potential No loss of open water No increase in disturbance No loss of roosting sites 		
Meirionnydd Oakwoods and Bat Sites / Coedydd Derw a Safleoedd Ystlumod Meirion	SAC	Lesser Horseshoe bats	Unfavourable: unclassified (2006)	<ul style="list-style-type: none"> Population maintained at its current size and encouraged where possible to increase There are sufficient breeding roosts of appropriate quality. The other types of roosts should also be maintained Foraging or feeding habitat in the SAC and surrounding countryside, including grasslands and some gardens, is of appropriate quality, extent and connectivity across the range. 	Loss of habitat for flight lines	√
West Wales Marine	SAC (Feb 2019)	Harbour Porpoise	Unknown (2016)	<ul style="list-style-type: none"> Maintain site integrity 	<p>Recreation (water sports and boating)</p> <p>Pollution and suspended sediment (principally discharges but also run-off)</p>	<p>√</p> <p>√</p>

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
					Dredging Wind Farms Artificial reefs and barrages Military testing Commercial fishing (with regard to stock numbers and damage to underwater features) Fish farming Refuse disposal Port and Marina development moorings and associated facilities Operation and Maintenance of ports and pipelines and other infrastructure Coastal squeeze including loss of sand and mud-flat as a result of new coastal development	X √√ √ X X √ √ √ √ √√

Site	Designation	Feature	Condition (Date of assessment)	Conservation Objectives	Vulnerabilities/Factors for all or some of the features	Likely affect of LDP
					Disposal of dredged material Sewage disposal Shellfish management and associated access Former waste disposal sites - contaminated land Coastal engineering including coastal defence Atmospheric deposition causing high levels of acidity and nutrient nitrogen	X ✓ X ✓ ✓✓ ✓✓

APPENDIX 2: Screening Criteria

Screening Criteria

The LDP policies were assessed using the screening criteria below in Table 1. The criteria is an adaptation of the criteria in Tyldesly 2010.

The assessments can be found in Appendices 3 and 4.

Table 1. Screening criteria

Criteria category	Rationale
Category A: No negative effect	
A1	Will not itself lead to development e.g. because they relate to design or other qualitative criteria for development, or they are not a land use planning policy, or they relate to a type of development that could not have any conceivable effect on a European site.
A2	Intended to protect the natural environment, including biodiversity.
A3	Intended to conserve or enhance the natural, built or historic environment, where the enhancement measures are not likely to have a negative effect on a European Site.
A4	Positively steer development away from European Sites and associated sensitive areas.
A5	General policy statements or policies which only express general intentions or political aspirations
Category B: No significant Effect	
B1	Could have an effect but would not be likely to have a significant (negative) effect on a European site (alone or in combination with other plans or projects) or the effects are trivial or 'de-minimis', even combined with other effects.
B2	Could have an effect but the effects are trivial or 'de-minimis' , even combined with other effects.
Category C: Likely significant effect alone	
C1	Could directly effect a European Site because it provides for or steers a quantity or type of development onto a European site or adjacent to it.

C2	Could indirectly affect a European site e.g. because it provides for or steers a quantity or type of development that may be very close to it or ecologically, hydrologically or physically connected to it or it may increase disturbance as a result of increased recreational pressures.
C3	Proposals for a magnitude of development that, no matter where it is located, the development would be likely to have a significant effect on a European Site.
C4	Proposals for developments or infrastructure projects that could block options or alternatives for the provision of other development or projects in the future, which will be required in the public interest, that may lead to adverse effects on European sites, which would be otherwise avoided.
C5	Would be vulnerable to failure under the Habitats Regulations at the project assessment stage; to include them in the plan would be regarded by the EC as 'faulty planning'.
C6	May have an adverse effect on a European site, which might try to pass the tests of Habitats Regulations at the project stage by arguing that the plan provides imperative reasons of overriding public interest to justify its consent despite negative assessment.
Category D: Likely significant effects in-combination	
D1	Alone would not be likely to have significant effects but if its effects are combined with the effects of other policies or proposals provided for or coordinated by the Local Development Plan (internally) the cumulative effects would be likely to be significant.
D2	Alone would not likely to have significant effects but if their effects are combined with the effects of other plans and projects and possibly the effects of other developments provided for in the Local Development Plan as well, the combined effects are likely to be significant.
D3	Are, or could be, part of a programme or sequence of development delivered over a period, where the implementation of the early stages would not have a significant effect on European sites, but which would dictate the nature, scale, duration, location, timing of the whole project, the later stages of which could have adverse effects on such sites.
Category E: Lower Tier Assessment	
E1	Would not have an effect as no development could occur through policy itself because it is implemented through other/later policies in the Local Development Plan Deposit Document itself, which are more detailed and therefore more appropriate to assess for their effects on European sites and sensitive areas. These kinds of policies may be found in Preferred Strategies where a broad quantum of development may be specified as being delivered through a more specific policy in a later chapter.
E2	Makes provision for a type of development, generally, (and may indicate a broad scale and / or one or more broad locations e.g. a particular part of the plan area), so a likelihood of a significant effect cannot be ruled out, but the more precise scale and / or detailed location of the development is to be selected following consideration of options in a later, more specific, lower tier plan or project , subject to Habitats Regulations Appraisal.
Category F: Depending on implementation	

F	<p>Depends entirely on how they are implemented in due course, for example, through the development management process. There is a theoretical possibility that if implemented in one or more particular ways, the policy could possibly have a significant effect on a European site, and is not merely a general statement of policy.</p> <p>It is reasonable to assume that a proposal would not be implemented in a way that is contrary to national planning policy. If the proposal were likely to have a significant effect it would be subject to Reg 61 at the project stage.</p> <p>In these specific circumstances, where there is uncertainty about the way in which aspects of a plan may be implemented, it may be appropriate for policies to contain restrictions or caveats in order to exclude support for potentially damaging proposals, without reiterating the requirements of the statutory protection regime.</p>
---	--

APPENDIX 3: Detailed Assessment of Policies

The LDP Strategic policies are being assessed using the screening criteria in Appendix 2.

It should be noted that all the European Sites are at risk or already suffering the direct and indirect impacts of climate change. All the Strategic Policies, other than S06, may have an additional climate change impact, either positive or negative on all the European Sites, alone or in combination. This HRA screening includes the need for the LDP and its developing policies to ensure that they are appropriate to avoid additional impacts and contribute to reducing existing impacts. This may require a specific climate change policy.

Table 1. Assessment of policies

Plan Proposal: Vision, Objectives Strategic / Supporting Policy	Effects before consideration of design features included in LU and DM polices to avoid damage to features?	Current mitigation	Can the element be changed at this stage to avoid likely sig. effect (LSE)	Effects after the consideration of assessment of other policies	Is an appropriate assessment required?
Vision	<p>Effect Category: E1</p> <p>Potential International sites affected: N/A</p> <p>Lower Tier Assessment: Implemented through later policies below where issues will be addressed</p>	N/A	N/A	N/A	No
Objectives	<p>Effect Category: E1</p> <p>Potential International sites affected: N/A</p> <p>Lower Tier Assessment: Implemented through later policies below where issues will be addressed.</p>	N/A	N/A	N/A	No
Strategy					

Plan Proposal: Vision, Objectives Strategic / Supporting Policy	Effects before consideration of design features included in LU and DM polices to avoid damage to features?	Current mitigation	Can the element be changed at this stage to avoid likely sig. effect (LSE)	Effects after the consideration of assessment of other policies	Is an appropriate assessment required?
S01: Sustainable Growth ¹	<p>This policy sets the scene with regard to how the Strategy will be met through focusing growth. It also deals with the level and distribution of growth, including housing and employment.</p> <p>Effect Category: A3/E1/B/C2/E2/F</p> <p>Potential International sites affected: All</p> <p>No negative effect: End of policy intends to protect the natural environment.</p> <p>Implemented through other policies: Criteria will be implemented through Policies S02- S04. Whether allocated and windfall employment is dealt with in policies S02-S04 and LU policies. Other types of development are dealt with in S02-S04 and LU policies.</p> <p>No likely significant negative effect, alone or in-combination: Magnitude of housing growth lower than in LDP1 should similarly I have a 'de-minimis' effect</p> <p>Likely significant negative effect in-directly: There is a potential issue that the magnitude of growth, will have a knock on effect aspects such as the water quality of International Sites, particularly the Afon Teifi SAC. Furthermore, the policy steers development to some USCs and</p>	<p>National Policies in PPW and TAN 5.</p> <p>LU and DM policies to be reviewed and assessed when written</p> <p>However, as steers development towards areas where, depending on how it is implemented, may still have an effect on habitat loss, effect on hydrology, effect on micro-climate, disturbance and local atmospheric deposition, therefore need to ensure there is no presumption of development</p>	<p>Yes</p> <p>Introduce a caveat / free standing policy on European Sites and climate change</p>	<p>Effect Category: A/B</p> <p>Potential International sites affected: All</p> <p>No negative effect: End of policy intends to protect the natural environment.</p> <p>No negative effect or no likely significant negative effect, alone or in-combination: Probably no effect or no significant negative effect, alone or in-combination on sites as effects will be 'de-minimis' or not significant in-combination, other than climate change impacts.</p> <p>Potential effects: Habitat loss Impact on water availability Effect on hydrology Effect on micro-climate Decrease in water quality Disturbance Local atmospheric deposition Effects on natural processes Spreading or introduction of non-native invasive species</p>	<p>not if a caveat / free standing policy on European Sites and climate change</p>

Plan Proposal: Vision, Objectives Strategic / Supporting Policy	Effects before consideration of design features included in LU and DM polices to avoid damage to features?	Current mitigation	Can the element be changed at this stage to avoid likely sig. effect (LSE)	Effects after the consideration of assessment of other policies	Is an appropriate assessment required?
	<p>RSCs where there have been identified issues with sewage infrastructure. If these are not dealt with there could be a significant effect.</p> <p>In the USCs, Llandysul and Llwynceilyn in particular have limited capacity in their WwTW and there are localised sewerage issues at Aberystwyth, Llandysul and Tregaron, so this could increase pressure on these issues.</p> <p>In the RSCs, Felin Fach, Llanarth, Llanon, Llanrhystud, Penrhyncoch, Pontrhydfendigaid and Y Borth all have limited capacity in their WwTW and there are localised sewerage issues at Aberporth, Bow Street, Ceinewydd, FelinFach, Llanarth, Penrhyncoch, Pontrhydfendigaid and Y Borth so this could increase pressure on these issues.</p> <p>In addition, the magnitude of growth could have a likely significant effect from the likely increase of air pollution from traffic</p> <p>Depends on implementation: The policy steers development of housing, employment, retail and other sectors to the USCs and RSCs mainly. This could be steering development to where it could have an effect. Although most of the housing and part of the employment and retail will be delivered through allocations. There are opportunities for development on non-allocated sites, therefore depending on how this is implemented, it could have a significant negative effect.</p>				

Plan Proposal: Vision, Objectives Strategic / Supporting Policy	Effects before consideration of design features included in LU and DM polices to avoid damage to features?	Current mitigation	Can the element be changed at this stage to avoid likely sig. effect (LSE)	Effects after the consideration of assessment of other policies	Is an appropriate assessment required?
	<p>Lower Tier Assessment: Allocations will be assessed separately.</p> <p>Potential effects:</p> <ul style="list-style-type: none"> Habitat loss Impact on water availability Effect on hydrology Effect on micro-climate Decrease in water quality Disturbance Local atmospheric deposition Effects on natural processes Spreading or introduction of non-native invasive species 				
S02: Development in Urban Service Centres (USCs) ²	<p>Policy dictates the role of development within USCs</p> <p>Effect Category: A1/C2/E2/F</p> <p>Potential International sites affected: Cardigan Bay SAC, Afon Teifi SAC, Pen Llyn a'r Sarnau SAC, Cors Caron SAC and Cors Caron Ramsar, West Wales Marine SAC</p> <p>No negative effect: of the policy will not itself lead to development as it relates to qualitative criteria. Although criteria relates to development in a particular location, it is relating to the expectations for development in that location, not encouraging or allocating it.</p>	<p>National Policies in PPW and TAN 5.</p> <p>LDP Policies S01, LU and DM policies to be reviewed and assessed</p> <p>However, as steers development towards areas where, depending on how it is implemented, may still have an effect on habitat loss, effect on</p>	<p>Yes</p> <p>Introduce a caveat / free standing policy on European Sites and climate change</p>	<p>Effect Category: A/B</p> <p>Potential International sites affected: Cardigan Bay SAC, Afon Teifi SAC, Pen Llyn a'r Sarnau SAC, Cors Caron SAC and Cors Caron Ramsar, West Wales Marine SAC</p> <p>No negative effect: the policy will not itself lead to development as it relates to qualitative criteria. Although criteria relates to development in a particular location, it is relating to the expectations for development in that location, not encouraging or allocating it.</p> <p>No effect or no likely significant negative effect, alone or in-combination:</p>	<p>not if a caveat / free standing policy on European Sites and climate change</p>

Plan Proposal: Vision, Objectives Strategic / Supporting Policy	Effects before consideration of design features included in LU and DM polices to avoid damage to features?	Current mitigation	Can the element be changed at this stage to avoid likely sig. effect (LSE)	Effects after the consideration of assessment of other policies	Is an appropriate assessment required?
	<p>Likely significant negative effect: The policy steers development within the boundary of USCs where there is identified issues with sewage infrastructure. If these are not dealt with there could be a significant effect</p> <p>Llandysul and Llwynceilyn in particular have limited capacity in their WwTW and there are localised sewerage issues at Aberystwyth, Llandysul and Tregaron, so this could increase pressure on these issues</p> <p>Depends on implementation: The policy steers windfall development to the USCs. This could be steering development to where it could have an effect. Although most of the housing and part of the employment and retail will be delivered through allocations. There are opportunities for development on non-allocated sites within the USCs, therefore depending on how this is implemented, it could have a significant negative effect</p> <p>Lower Tier Assessment: Allocations are assessed separately.</p> <p>Potential effects: Habitat loss Impact on water availability Effect on hydrology Effect on micro-climate Decrease in water quality</p>	<p>hydrology, effect on micro-climate, disturbance and local atmospheric deposition, therefore need to ensure there is no presumption of development</p>		<p>LU, DM, Candidate Sites and Incombination Assessment to be carried out at next stage.</p> <p>Potential effects: Habitat loss Impact on water availability Effect on hydrology Effect on micro-climate Decrease in water quality Disturbance Local atmospheric deposition Effects on natural processes Spreading or introduction of non-native invasive species Climate change</p>	

Plan Proposal: Vision, Objectives Strategic / Supporting Policy	Effects before consideration of design features included in LU and DM polices to avoid damage to features?	Current mitigation	Can the element be changed at this stage to avoid likely sig. effect (LSE)	Effects after the consideration of assessment of other policies	Is an appropriate assessment required?
	Disturbance Local atmospheric deposition Effects on natural processes Spreading or introduction of non-native invasive species Climate change				
S03: Development in Rural Service Centres (RSCs) ³	<p>Policy dictates the role of development in the RSCs</p> <p>Effect Category: C2/E2/F</p> <p>Potential International sites affected: Cardigan Bay SAC, Afon Teifi SAC, Pen Llyn a'r Sarnau SAC, Dyfi SPA, Cors Fochno SAC, Cors Fochno and Dyfi Ramsar, Cors Caron SAC, Cors Caron Ramsar and Coed a Cheunant Rheidol SAC, West Wales Marine SAC.</p> <p>Likely significant negative effect: The policy steers development within the boundary of and adjacent to RSCs</p> <p>Depends on implementation: The policy steers development of housing, employment, retail and other sectors to the RSCs. This could be steering development to where it could have an effect. Although most of the housing and part of the employment and retail will be delivered through allocations. There are opportunities for</p>	<p>National Policies in PPW and TAN 5.</p> <p>LU and DM policies to be reviewed and assessed when written</p> <p>However, as steers development towards areas where, depending on how it is implemented, may still have an effect on habitat loss, effect on hydrology, effect on micro-climate, disturbance and local atmospheric deposition, therefore need to ensure there is no presumption of development</p>	<p>Yes</p> <p>Introduce a caveat / free standing policy on European Sites and climate change</p>	<p>Effect Category: B</p> <p>Potential International sites affected: Cardigan Bay SAC, Afon Teifi SAC, Pen Llyn a'r Sarnau SAC, Dyfi SPA, Cors Fochno SAC, Cors Fochno and Dyfi Ramsar, Cors Caron SAC, Cors Caron Ramsar and Coed a Cheunant Rheidol SAC and West Wales Marine SAC</p> <p>No effect or no likely significant negative effect, alone or in-combination: LU, DM, Candidate Sites and Incombination Assessment to be carried out at next stage. Potential effects: Habitat loss Impact on water availability Effect on hydrology Effect on micro-climate Decrease in water quality Disturbance Local atmospheric deposition Effects on natural processes Spreading or introduction of non-native invasive species Climate change</p>	not if a caveat / free standing policy on European Sites and climate change

Plan Proposal: Vision, Objectives Strategic / Supporting Policy	Effects before consideration of design features included in LU and DM polices to avoid damage to features?	Current mitigation	Can the element be changed at this stage to avoid likely sig. effect (LSE)	Effects after the consideration of assessment of other policies	Is an appropriate assessment required?
	<p>development on non-allocated sites within the RSCs, therefore depending on how this is implemented, it could have a significant negative effect</p> <p>Lower Tier Assessment: Allocations will be assessed separately.</p> <p>Potential effects:</p> <p>Habitat loss Impact on water availability Effect on hydrology Effect on micro-climate Decrease in water quality Disturbance Local atmospheric deposition Effects on natural processes Spreading or introduction of non-native invasive species Climate change</p>				
S04: Development in 'Linked Settlements and Other Locations' ⁴	<p>Policy dictates the role development in Linked Settlements and Other locations</p> <p>Effect Category: A5/E2/F</p> <p>Potential International sites affected: Cardigan Bay SAC, Afon Teifi SAC, Pen Llyn a'r Sarnau SAC, Dyfi SPA, Cors Fochno SAC, Cors Fochno and Dyfi Ramsar, Cors Caron SAC, Cors Caron Ramsar, Coed a Cheunant Rheidol SAC, Coed Cwm Einion SAC, Grogwynion SAC, Rhos</p>	<p>National Policies in PPW and TAN 5.</p> <p>LU and DM policies to be reviewed and assessed when written</p> <p>However, as steers development towards</p>	<p>Yes</p> <p>Introduce a caveat / free standing policy on European Sites and climate change</p>	<p>Effect Category: A/B</p> <p>Potential International sites affected: Cardigan Bay SAC, Afon Teifi SAC, Pen Llyn a'r Sarnau SAC, Dyfi SPA, Cors Fochno SAC, Cors Fochno and Dyfi Ramsar, Cors Caron SAC, Cors Caron Ramsar, Coed a Cheunant Rheidol SAC, Coed Cwm Einion SAC, Grogwynion SAC, Rhos Llaw Cwrt SAC, Rhos Talglas SAC, Cwm Doethie-Mynydd Mallaen SAC and Elenydd-Malleen SPA and West Wales Marine SAC</p>	<p>not if a caveat / free standing policy on European Sites and climate change</p>

Plan Proposal: Vision, Objectives Strategic / Supporting Policy	Effects before consideration of design features included in LU and DM polices to avoid damage to features?	Current mitigation	Can the element be changed at this stage to avoid likely sig. effect (LSE)	Effects after the consideration of assessment of other policies	Is an appropriate assessment required?
	<p>Llaw Cwrt SAC, Rhos Talglas SAC, Cwm Doethie-Mynydd Mallaen SAC and Elenydd-Malleen SPA</p> <p>No negative effect: just states general political intentions</p> <p>Depends on implementation: The policy steers development of housing, employment, retail and other sectors to the LSs. This could be steering development to where it could have an effect, but the magnitude is likely to be very small</p> <p>Lower Tier Assessment: Allocations will be assessed separately.</p> <p>Potential effects: Habitat loss Impact on water availability Effect on hydrology Effect on micro-climate Decrease in water quality Disturbance Local atmospheric deposition Effects on natural processes Spreading or introduction of non-native invasive species Climate change</p>	<p>areas where, depending on how it is implemented, may still have an effect on habitat loss, effect on hydrology, effect on micro-climate, disturbance and local atmospheric deposition, therefore need to ensure there is no presumption of development</p>		<p>No negative effect: states general political intentions</p> <p>No effect or no likely significant negative effect, alone or in-combination: LU, DM, Candidate Sites and Incombination Assessment to be carried out at next stage.</p> <p>Potential effects: Habitat loss Impact on water availability Effect on hydrology Effect on micro-climate Decrease in water quality Disturbance Local atmospheric deposition Effects on natural processes Spreading or introduction of non-native invasive species Climate change</p>	
S05: Affordable Housing ⁵	Policy stating the target for the number of affordable homes and how it will be met	National Policies in PPW and TAN 5.	Introduce a caveat / free standing policy on	<p>Effect Category: A1/B2</p> <p>Potential International sites affected: Cardigan</p>	not if a caveat / free standing policy on

Plan Proposal: Vision, Objectives Strategic / Supporting Policy	Effects before consideration of design features included in LU and DM polices to avoid damage to features?	Current mitigation	Can the element be changed at this stage to avoid likely sig. effect (LSE)	Effects after the consideration of assessment of other policies	Is an appropriate assessment required?
	<p>Effect Category: A1/F</p> <p>Potential International sites affected: Cardigan Bay SAC, Afon Teifi SAC, Pen Llyn a'r Sarnau SAC, Dyfi SPA, Cors Fochno SAC, Cors Fochno and Dyfi Ramsar, Cors Caron SAC, Cors Caron Ramsar, Coed a Cheunant Rheidol SAC, Coed Cwm Einion SAC, Grogwynion SAC, Rhos Llaw Cwrt SAC, Rhos Talglas SAC, Cwm Doethie-Mynydd Mallaen SAC and Elenydd-Malleen SPA and West Wales Marine SAC</p> <p>No negative effect: the policy will not it self lead to development as it relates to qualitative criteria. It is determining how many affordable houses will be expected and how affordable housing will be dealt with</p> <p>Depends on implementation: The effects of of the policy depend on how it is implemented. Steers development towards USCs, RSCs and LS and also will allow for development adjacent as well as adjoining settlements</p> <p>Potential effects: Habitat loss Effect on hydrology Effect on micro-climate Decrease in water quality Disturbance Local atmospheric deposition Effects on natural processes</p>	<p>LU and DM policies to be reviewed when written</p> <p>However, as steers development towards areas where, depending on how it is implemented, may still have an effect on habitat loss, effect on hydrology, effect on micro-climate, disturbance and local atmospheric deposition, therefore need to ensure there is no presumption of development</p>	<p>European Sites and climate change</p>	<p>Bay SAC, Afon Teifi SAC, Pen Llyn a'r Sarnau SAC, Dyfi SPA, Cors Fochno SAC, Cors Fochno and Dyfi Ramsar, Cors Caron SAC, Cors Caron Ramsar, Coed a Cheunant Rheidol SAC, Coed Cwm Einion SAC, Grogwynion SAC, Rhos Llaw Cwrt SAC, Rhos Talglas SAC, Cwm Doethie-Mynydd Mallaen SAC and Elenydd-Malleen SPA and West Wales Marine SAC</p> <p>No negative effect: will not itself lead to development as they relate to qualitative criteria. It is determining how many affordable houses will be expected and how affordable housing will be dealt with</p> <p>No likely significant negative effect, alone or in-combination: LU, DM, Candidate Sites and Incombination Assessment to be carried out at next stage</p> <p>Potential effects: Habitat loss Effect on hydrology Effect on micro-climate Decrease in water quality Disturbance Local atmospheric deposition Effects on natural processes Spreading or introduction of non-native invasive species Climate change</p>	<p>European Sites and climate change</p>

Plan Proposal: Vision, Objectives Strategic / Supporting Policy	Effects before consideration of design features included in LU and DM polices to avoid damage to features?	Current mitigation	Can the element be changed at this stage to avoid likely sig. effect (LSE)	Effects after the consideration of assessment of other policies	Is an appropriate assessment required?
	Spreading or introduction of non-native invasive species Climate change				
S06: Planning and the Welsh Language	A new policy which identifies a “ whole county” approach to linguistic sensitivity. Effect Category: A1/A5 Potential International sites affected: N/A No negative effect: the policy will not itself lead to development.	N/A	N/A	None	No

APPENDIX 4: Key changes to the LDP through the HRA

- 1.1 During the whole LDP process, Ceredigion County Council employ an ecologist to oversee the ecological aspects of the plan, such as undertaking the HRA, but also generally commenting on candidate sites, allocations, policies etc. Therefore, the HRA has effectively formed an integral part of the LDP planning process.
- 1.2 The information in the HRA Screening of the Preferred Strategy will be used when drawing up policies for the LDP Deposit.
- 1.3 During the candidate site process, the methodology will include that any candidate site within an International Site would be automatically knocked out. In addition, if a candidate site is in close proximity to International Sites it will be highlighted in candidate site assessment proforma. General biodiversity assessments will be made as part of the candidate site assessment and the SA/SEA.
- 1.4 A formal assessment will be made before the LDP Deposit is consulted on.

APPENDIX 5: Other plans or projects

Below is a draft list of Plans and Projects which has been developed in conjunction with the SA/SEA, along with all adjoining Local Authorities adopted LDP's and LDP Review documents which will be reviewed which have policies, objectives or outcomes which may impact on International Sites featured in the Ceredigion LDP's Habitats Regulations Assessment and whether it is likely that these will cause in-combination effects

Climatic Factors
International
2030 Policy Framework for Climate and Energy - European Commission, (2014)
Strategy on adaptation to climate change – European Commission (2013)
Johannesburg Declaration on Sustainable Development (World Summit 200 2).
The Kyoto Protocol on Climate Change (1997)
United Nations Framework Convention On Climate Change (1994)
EU Second European Climate Change Programme –ECCP II (2005)
National
UK Climate Change Risk Assessment 2017 – HM Government, 2017.
UK Climate Change Risk Assessment 2017 Evidence Report, Summary for Wales – Committee on Climate Change, 2017./
Environment (Wales) Act 2016

Statutory standards for sustainable drainage systems. Welsh Government 2018
National Strategy for Flood and Coastal Erosion Risk Management – Welsh Assembly Government, 2014.
Policy Statement: Preparing for a Changing Climate – Welsh Assembly Government, 2013.
National Strategy for Flood and Coastal Erosion Risk Management - HM Government, 2011.
The Clean Growth Strategy- Leading the way to a low carbon future 2017, HM Government 2017
The Carbon Plan: Delivering our low carbon future – HM Government, 2011.
Adaptation Delivery Plan: Climate Change Strategy for Wales – Welsh Assembly Government, 2011.
Flood and Water Management Act 2010, HM Government, 2010.
Climate Change Strategy for Wales – Welsh Assembly Government, 2010.
Flood Risk Regulations 2009 – HM Government, 2009.
Climate Change Act 2008 – HM Government, 2008
Technical Advice Note Fourteen (TAN 14): Coastal Planning - Welsh Assembly Government, 1998.
Technical Advice Note Fifteen (TAN 15): Development and Flood Risk - Welsh Assembly Government, 2004
Local
Ceredigion Local Flood Risk Management Strategy – Ceredigion County Council (2014)

Soil, Air and Water
International
Environmental Impact Assessment Directive 2014/52/EU – European Union, 2014.
7th EU Environment Action Plan – European Council, 2013. & Seventh Environmental Action Programme to 2020 ‘Living well, within the limits of our planet’ – European Commission, 2013
The Waste Framework Directive EU 2018/851
EC Water Framework Directive 2000/60/EC
National
Implementation of sustainable drainage systems on new developments: Consultation –summary of responses. Welsh Assembly Government, 2018.
Taking forward Wales’ sustainable management of natural resources: Consultation- summary of responses. Welsh Assembly Government, 2018.
The Air Quality Standards (Amendment) Regulations 2016 – HM Government, 2016.
The State of Natural Resources Report (SoNaRR) – Natural Resources Wales, 2016.
Marine strategy part three: UK programme of measures - Department for Environment, Food & Rural Affairs (Defra), 2015.
National Seascapes Assessment for Wales – Natural Resources Wales (NRW), 2015.
Natural Resources Policy Statement – Welsh Government (2017).

Water strategy for Wales – Welsh Assembly Government, 2015.
Welsh National Marine Plan – Welsh Assembly Government, 2015. (Draft Welsh National Marine Plan 2018 in progress)
Marine strategy part two: UK marine monitoring programmes – Department for Environment, Food & Rural Affairs (Defra), 2014.
Water Resources Management Plan 2015/2040 – Welsh Water, 2014.(Draft Water Resources Management Plan 2018 in progress)
Wales Marine and Fisheries Strategic Action Plan – Welsh Government, 2013.
Marine Strategy part one: UK initial assessment and good environmental status – Department for Farming & Rural Affairs (Defra), 2012.
Marine Conservation Zone Project – Joint Nature Conservation Committee & Natural England, 2011.
Local
Western Wales River Basin Management Plan 2015-2021 – Natural Resources Wales, 2015
Asset Management Plans – DCWW Investment, ongoing.
Contaminated Land Inspection Strategy (CCC) 2005
Air Quality Strategy (CCC)
Material Assets
International
Directive (EU) 2018/844 amending Energy Efficiency Directive 2012/27/EU

Energy 2020 , A strategy for competitive, sustainable and secure energy – European Commission, 2010
Renewable Energy Directive 2009/8/EC – European Commission, 2009
National
Mobile Action Plan Welsh Assembly Government, 2017.
Next Generation Access Broadband: Consultation – Welsh Assembly Government, 2017.
The Environmental Permitting (England and Wales) Regulations 2017 – HM Government, 2017
The South West Wales Regional Waste Plan - South West Wales Regional Waste Group, ongoing & The South West Wales Regional Waste Planning Monitoring Report (WPMR), 2016.
Green Growth Wales: Local Energy - Welsh Assembly Government, 2016.
Energy Efficiency in Wales: A Strategy for the next ten years 2016-2026 – Welsh Assembly Government, 2016.
Practice Guidance: Planning for Renewable and Low Carbon Energy – A Toolkit for Planners – Welsh Assembly Government, 2015.
The UK's National Energy Efficiency Action Plan and Building Renovation Strategy – HM Government. 2014
Technical Advice Note Twenty One (TAN 21): Waste – Welsh Assembly Government, 2014.
Offshore Wind Industrial Strategy: Business and government action – HM Government, 2013
Contaminated Land (Wales) (Amendments) Regulations 2012– National Assembly for Wales, 2012.
Energy Wales: A low carbon transition – Welsh Assembly Government, 2012 and Delivery Plan, 2014

National Policy Statements for energy infrastructure -HM Government, 2011.
UK renewable energy roadmap Update 2013. – HM Government, 2013.
Rural Development Programme 2014/2020 – Welsh Assembly Government, 2011.
Towards Zero Waste The Overarching Waste Strategy Document for Wales June 2010 and Progress Report 2015.
Energy Act 2016, HM Government, 2016.
Renewable Energy Route Map for Wales consultation on way forward to a leaner, greener and cleaner Wales - Welsh Assembly Government, 2008.
The Energy Challenge: The Energy Review Report (2006)
The Waste Management (England and Wales) Regulations 2011
The Hazardous Waste (England and Wales) Regulations 2005
Technical Advice Note Eight (TAN 8): Planning for Renewable Energy - Welsh Assembly Government, 2005.
Minerals Technical Advice Note (MTAN) 1 – Aggregates (2004)
The Landfill Allowance Scheme (Wales) Regulations 2004
Our Energy Future- creating a low carbon economy, DTI February 2003
The Landfill (England and Wales) (Amendment) Regulations

2005
Technical Advice Note Nineteen (TAN 19): Telecommunications - Welsh Assembly Government, 2002.
UK Fuel Poverty Strategy (2001)
Local
Regional Technical Statement for the North and South Wales Regional Aggregates Working Parties – 1st Review (RTS)
Waste Management Strategy for Ceredigion February 2002 (Currently under review) Ceredigion County Council Carbon Management Plan 2012/13-2016/17, July 2013
Biodiversity, Flora and Fauna
International
EU biodiversity strategy to 2020 – European Commission, 2011
Council Directive 2009/147/EC on the conservation of wild birds – European Commission, 2009 (The Birds Directive)
Convention on Biological Diversity, Rio de Janeiro 1992.
EC Directive 1992/43/EEC on Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive).
National
State of Nature 2016 Report - Royal Society for the Protection of Birds (RSPB), 2016
The Nature Recovery Plan for Wales – Welsh Assembly Government, 2015.

British Standards for Biodiversity: Code of Practice for Planning and Development (BS42020:2013) - British Standards Institute (BSI), 2013
The Conservation of Habitats and Species Regulations 2017. HM Government, 2017.
Woodlands for Wales – The Welsh Government’s Strategy for Woodlands and Trees. Welsh Assembly Government, 2018
Technical Advice Note Five: Nature Conservation (TAN 5): Nature Conservation and Planning – Welsh Assembly Government, 2009.
Rural Development Programme 2014-2020. Last modified 2017.
UK Forestry Standard: The governments’ approach to sustainable forestry, Fourth Edition (2017)
Wildlife and Countryside Act 1981 (up to date with all changes known to be in force on or before 28 th January 2019)
LIFE Natura 2000 Programme for Wales – Natural Resources Wales 2013
Technical Advice Note Ten (TAN 10): Tree Preservation Orders - Welsh Assembly Government, 1997
National Park and Access to the Countryside Act 1949
Ancient Woodland Inventory - Natural Resources Wales, 2011.
Local
Cardigan Bay SAC Management plan 2008
Ceredigion LBAP 2002
Landscape and Cultural Heritage, including Architectural and Archaeological Heritage

International
European Landscape Convention, 2000
National
Statutory Guidance on Historic Environment Records in Wales: Compilation and Use - Welsh Assembly Government, 2017
Technical Advice Note Twenty Four (TAN 24): The Historic Environment – Welsh Assembly Government, 2017. Technical Advice Note 12: Design, WG, 2016
Historic Environment (Wales) Act 2016 – National Assembly for Wales, 2016. Heritage Impact Statements requirement – Amendment to regulations, 2017 Statutory List of Historic Place Names in Wales, 2017
Scheduled Monuments & nationally important but non-scheduled monuments – HM Government, 2013.
The Natural Choice: securing the value of nature – HM Government, 2011
Countryside and Rights of Way Act (CROW), 2000
Technical Advice Note Seven (TAN 7): Outdoor Advertisement Control, Welsh Assembly Government, 1996.
Planning (Listed Buildings and Conservation Areas) Act (1990)
Ancient Monuments and Archaeology Areas Act (1979)
LANDMAP Programme – Natural Resources Wales, ongoing.
Local

Ceredigion Community Safety Partnership Priorities, 2017 Dyfed Powys Police and Crime Plan 2017-2021
Population and Human Health
Population, Growth and Housing
International
Towards social investment for growth and cohesion 2014-2020 – European Commission, 2013
National
Renting Homes (Wales) Act, Welsh Assembly Government, 2016
Technical Advice Note One (TAN 1): Joint Housing Land Availability Studies, Welsh Assembly Government, 2015.
Housing (Wales) Act 2014 – Welsh Assembly Government, 2014.
National Housing Strategy – ‘Improving Lives and Communities – Homes in Wales’, Welsh Assembly Government, 2010.
Technical Advice Note Six (Tan 6): Planning for Sustainable Rural Communities – Welsh Assembly Government, 2010.
The Race Relations Act 1976 (Amendment) Regulations 2003 , Disability Discrimination Act 2005 (DDA) and Equality Act 2010
Technical Advice Note Two (TAN 2): Planning and Affordable Housing - Welsh Assembly Government, 2006
One Future: different paths – UK Shared Framework for Sustainable Development 2004
Local

Local Housing Market Assessment Update - Ceredigion County Council, 2006. Ceredigion Gypsy Traveller Accommodation Assessment, 2016 Ceredigion Local Housing Strategy: Housing for All 2018-2023
Ageing Well in Ceredigion 2016-2019
Education
National
Education in Wales: Our national mission Action Plan 2017-21
Welsh Medium Education Strategy - Welsh Assembly Government, 2016
A living language: a language for living. Welsh Language Strategy 2012-2017 Action Plan 2016-2017
Building a Brighter Future: Early Years and Childcare Plan - Welsh Assembly Government, 2015
National model for regional working - Welsh Assembly Government, 2015.
Schools Standards and Organisation (Wales) Act - Welsh Assembly Government, 2013
Languages Count WAG's National Modern Foreign Languages Strategy (2002)
The Learning Country: A Paving Document A Comprehensive Education and Lifelong Learning Programme to 2009 in Wales (August 2001)
Special Educational Needs and Disability Act 2001
Local

Welsh in Education Strategic Plan 2017-2020 Ceredigion County Council, 2016
Ceredigion Single Education Plan 2006 –2008
Ceredigion Supplementary Education Strategic Plan 2003 - 2004
Welsh Language
National
Cymraeg 2050: A million Welsh speakers- Welsh Government Welsh language strategy
Cymraeg 2050: Work programme 2017-21
Taking Wales Forward 2016–21
Welsh-medium Education Strategy: Next Steps – Welsh Assembly Government, 2016.
Technical Advice Note Twenty (TAN 20): Planning and the Welsh Language, Welsh Assembly Government, 2017.
The Welsh Language (Wales) Measure 2011 – Welsh Assembly Government, 2011.
Well-being of Future Generations (Wales) Act 2015- Welsh language is one of the Seven well-being goals.
Welsh Language Act, 1993
Local
Ceredigion Language Strategy 2018-23 (2018)

Welsh Language Standards imposed on Ceredigion County Council first implementation date March 2016(in accordance with Welsh language (Wales) Measure 2011.)
Transport
National
Active Travel (Wales) Act 2013 – Welsh Assembly Government (2013) Active Travel Action Plan for Wales – Welsh Assembly Government, 2016.
One Wales: Connecting the Nation. The Wales Transport Strategy - Welsh Government, 2008
Technical Advice Note Eighteen (TAN 18): Transport - Welsh Assembly Government, 2007
Transport Wales Act 2006
The National Transport Finance Plan for Wales 2015 updated 2017- welsh Government 2017
Traffic Management Act 2004
Local
TraCC the Mid Wales Joint Local Transport Plan 2015 – Prepared Jointly by Ceredigion County Council, Gwynedd County Council & Powys County Council, 2015.
Tourism
National
Partnership for Growth: strategy for tourism 2013-2020 – Welsh Assembly Government, 2013.

Welsh Coastal Tourism Strategy – Welsh Assembly Government, 2008.
Technical Advice Note Thirteen (TAN 13): Tourism - Welsh Assembly Government, 1997
Local
Ceredigion Destination Management Plan 2013/2020– Ceredigion County Council, 2013.
Mid Wales Regional Tourism Strategy – Tourism Partnership Mid Wales, 2 011
Tourism & Visitor Economy Strategy for Ceredigion 2011/2020 – Ceredigion County Council, 2011.
Leisure, Recreation, Health and Wellbeing
International
Committee on the Rights of the Child Recommendations report – United Nations, 2016.
The Environmental Noise Directive- EU Directive 2002/49/EC (relating to the assessment and management of environmental noise) (EU 2002)
National
Well-being of Future Generations (Wales) Act 2015
Public Health (Wales) Act 2017– National Assembly for Wales, 2017.
Strategic Equality Plan and Equality Objectives 2016/2020 – Welsh Assembly Government, 2016.
Child Poverty Strategy for Wales – Welsh Assembly Government, 2015.

Working to achieve a healthier future for Wales. Long term strategy 2018-30
Volunteering Policy, Supporting Communities, Changing Lives – Welsh Assembly Government, 2015.
Mobile Homes (Wales) Act 2013 – Welsh Assembly Government, 2013.
Social Services and Well-being (Wales) Act – National Assembly for Wales, 2014.
Wales a Play Friendly Country Statutory Guidance - Welsh Assembly Government, 2014.
The Strategy for Older People in Wales 2013-2023 – Welsh Assembly Government, 2013.
Climate change: health effects in the UK – Public Health England, 2012.
Rights of Children and Young Persons (Wales) Measure 2011 – Welsh Assembly Government, 2011.
Sustainable Development: The key to tackling Health Inequalities – Sustainable Development Commission, 2010.
The Equality Act 2010, HM Government, 2010.
Food for Wales, Food from Wales 2010:2020 - Food Strategy for Wales – Welsh Assembly Government, 2010.
Technical Advice Note Sixteen (TAN 16): Sport, Recreation and Open Space – Welsh Assembly Government, 2009.
Countryside and Rights of Way Act 2000
Local
Dyfed Powys Police and Crime Plan for 2017-2021 - Dyfed-Powys Policy, 2017
Ceredigion County Council Sport and Recreational Activity Strategy 2014-2020 - Ceredigion County Council, 2014.

Ceredigion Local Well-being Plan 2018-2023
Community Strategy - Ceredigion 2020 This incorporates the Ceredigion Health, Social Care and Wellbeing Strategy and Summary Action Plan, 2005 – 2007
Employment and Retail
National
Vibrant and Viable Places - Welsh Assembly Government, 2013.
National Infrastructure Delivery Plan 2016 to 2021 – HM Government, 2016
Technical Advice Note Four (TAN 4): Retail & Town Commercial Development – Welsh Assembly Government, 2016.
Welsh Government Programme for government, Taking Wales Forward 2 016-2021 – Welsh Assembly Government, 2016.
Green Growth Wales: Local Energy- Welsh Assembly Government, 2015.
Technical Advice Note Twenty Three (TAN 23): Economic Development – Welsh Assembly Government, 2014.
UK Growth Plan – HM Government, 2013.
Wales Infrastructure Investment Plan –Project Pipeline Update 2018. Welsh Assembly Government, 2018.
Local growth: realising every place's potential – HM Government, 2010
Wales: A Vibrant Economy, 2005. Welsh Assembly, 2005.
Local

Teifi Valley Local Growth Zone - Welsh Assembly Government, 2015
Growing Mid Wales Partnership- Powys/ Ceredigion County Council 2015
Ceredigion local Well-being Plan, 2018
Ceredigion 2020 Community Strategy, 2004 Ceredigion for All: Our Livelihoods, Our Economic Regeneration Strategy 2014-2020, 2015
Inter-relationships
International
A roadmap for moving to a competitive low carbon economy in 2050 – European Commission, 2011
Europe 2020, A strategy for smart, sustainable and inclusive growth – European Commission, 2010
National
Environment (Wales) Act 2016 – National Assembly for Wales, 2016.
The State of Natural Resources Report (SONARR) NRW, 2016
National Natural Resources Policy, 2017
Prosperity For All: the national strategy, 2017- Welsh Government 2017
National Development Framework- Under Development- Welsh Government, 2019
Planning Policy Wales Edition 10 – Welsh Assembly Government, 2018.
Technical Advice Note Twelve (TAN 12): Design – Welsh Assembly Government, 2016

Planning (Wales) Act 2015 – National Assembly for Wales, 2015.
Well-being of Future Generations (Wales) Act 2015 – National Assembly for Wales, 2015.
Towards Zero Waste One Wales: Wales' Overarching Waste Strategy – Welsh Assembly Government, 2010.
People, Places, Futures – Welsh Assembly Government, 2008.
People, Places, Futures – The Wales Spatial Plan – 2008 update Welsh Assembly Government, 2008
Town and Country Planning Act - HM Government, 1990.
Local
Ceredigion for All: Our Livelihoods, Our Economic Regeneration Strategy 20 14-2020 - Ceredigion County Council, 2015.
Ceredigion for All: Single Integrated Plan (SIP) – Ceredigion County Council, 2013.
Ceredigion Local Development Plan 2007/2022 - Ceredigion County Council 2013.
Housing for All- Local Housing Strategy 2018-2023, Ceredigion County Council.
Ceredigion Shoreline Management Plan 2 - Ceredigion County Council, 2011
Single Integrated Plan - Ceredigion Local Service Board, 2013.
Well-being objectives – Ceredigion County Council, 2017.
Ceredigion Local Well-being Plan 2018-2023 – Ceredigion Public Service Board, 2018.

APPENDIX 6: Assessment of factors from the Natura 2000 Data Forms from the Preferred Strategy HRA Screening

1. Introduction

- 1.1 The list below comprise the assessment of factors affecting the UK SACs and SPAs which share primary features with SACs and SPAs occurring within the Ceredigion HRA assessment. In total, the Natura 2000 forms for 364 UK SACs and 24 SPAs were checked for additional factors. In addition guidance on freshwater SACs in Scotland (SNH 2006) that lists factors known to affect the condition of these Scottish sites was checked for additional factors not previously identified.
- 1.2 The factors listed exclude natural processes, agriculture, fisheries, forestry and military activities which are all outside the scope of the HRA assessment.
- 1.3 SAC features are grouped to broad habitat type where appropriate to allow adequate cross-referencing of factors to related species and habitats. How the SAC features are grouped is shown in Section 2.
- 1.4 Some factors have been looked at in more detail in Section 3 to assess whether or not they are appropriate for inclusion in the HRA assessment.

2. Features assessed

Freshwater habitats

- 2.1 Features: Water courses of plain to montane levels with the *Ranunculus fluitans* and *Callitriche-Batrachion* vegetation, Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*, brook, river and sea lamprey, Atlantic salmon, bullhead, otter, floating water plantain.

Marine and Estuaries

- 2.2 Features: Estuaries, sandbanks which are slightly covered by seawater all the time, reefs, large shallow inlets and bays, mudflats and sandbanks not covered by seawater at low tide, *Salicornia* and other annuals colonizing mud and sand, Atlantic salt meadows (*Glauco-Puccinellietalia maritima*), submerged or partially submerged sea caves, sea lamprey, bottle-nosed dolphin and grey seal.

Woodland

2.3 Features: Old sessile oak woods with Ilex and Blechnum and Tilio-Acerion forests of slopes, screes and ravines

Raised bogs and lowland mires

2.4 Features: Active raised bog, degraded raised bogs still capable of natural regeneration, transition mires and quaking bogs, depressions on peat substrates of the Rhynchosporion, bog woodland

Uplands

2.5 Features: Blanket bog and European dry heaths.

Grasslands

2.6 Features: Calaminarian grasslands of the *Violetalia calaminariae* and *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)

Other individual species assessed

2.7 Features: Marsh fritillary, Slender-green feather-moss, Merlin and Greenland White-fronted Goose.

2.8 Red kite

2.9 No other sites designated for this species away from Ceredigion

3. Assessment of additional issues

Habitat Type	Factor	Assessment of Factors in a Ceredigion Context
Freshwater	Acidification and eutrophication from atmospheric pollution	River systems in mid-Wales are known to be affected by atmospheric acid deposition although pollution sources are probably away from the area. Recommend inclusion of factor.
Freshwater	Modification of river systems including widening, constricting, deepening, straightening and culverts	Dredging parts of the Afon Teifi has been previously proposed and Tregaron Flood Alleviation Scheme will require dredging. Effects of bank protection and other works upstream also relevant to the functioning of the river ecosystem and should be included. Recommend inclusion of factor.

Habitat Type	Factor	Assessment of Factors in a Ceredigion Context
Freshwater	Any activity increasing suspended sediment in the water course	Dredging works at any point in the watercourse and fluctuations in water levels by abstraction could cause increased sediment loading, identified above. Dredging in estuary will not affect upstream sections but does have potential to affect Cardigan bay SAC. Recommend NRW assess if other mechanisms could cause similar effects. EA will have information on diffuse pollution. Erosion of banks is a possible mechanism for increasing suspended sediment and retaining natural wooded banks can reduce this. Development adjacent to the banks needs to be appropriate. It can be managed, including during construction to prevent excess sediment entering watercourses. Recommend inclusion of factor
Freshwater	Land drainage schemes	Outside scope of LDP
Freshwater	Disposal of sewage effluent	Sewage issues have been identified on the Afon Teifi at Llandysul. Recommend inclusion of factor.
Freshwater	Inappropriate engineering works, canalisation and impoundment works, especially those that form a barrier across water courses such as dams and weirs	Can affect erosion and sedimentation downstream on works, can affect natural functioning of river system with potential to affect all features, can affect passage of fish. Recommend inclusion of factor.
Freshwater	Any river work that involves the clearance of bank-side and aquatic vegetation	As above. This is likely to be direct removal of the Ranunculus feature. Can also damage fish habitat and affect erosion and sedimentation. Recommend inclusion of factor.
Freshwater	Tourist development causing recreation pressure	Any development which increases recreational pressure could be problematic. Recommend inclusion of factor.
Freshwater	Sand and gravel quarrying activities adjacent to water course	There is a former sand and gravel site at Abercoed near Tregaron on the Teifi which is undergoing restoration work. Recommend inclusion of factor.
Freshwater	Small hydro-electric schemes	Unknown but increasingly likely with moves to increase green energy. Recommend inclusion of factor.
Freshwater	Activities associated with ferry ports	No ferry ports in Ceredigion. Recommend exclusion factor.
Marine	Land claim	The few areas where this could be possible are subject to flooding and are not near areas where development is necessary. Recommend exclusion of factor.

Habitat Type	Factor	Assessment of Factors in a Ceredigion Context
Marine	Aggregate extraction	No off-shore extraction licences. Recommend exclusion factor.
Marine	Barrage and artificial reef construction	Large scale hydro-electric and offshore barrage schemes are unlikely in Ceredigion in the lifetime of the plan. Artificial reef proposed off Borth (north of the SAC) Recommend inclusion factor.
Marine	Port and marina development moorings and associated facilities	Plans have been proposed for marina extensions and improvements. Tourism plans encourage water sports which increase pollution and disturbance. Recommend inclusion factor.
Marine	Operation and maintenance of ports and pipelines and other infrastructure	Coastal harbours are subject to regular maintenance. Recommend inclusion of factor.
Marine	Changes in water flow	Recommend excluding this factor with respect to marine SACs
Marine	Deep water moorings	There are no major ports in Cardigan bay and so deep water moorings are unlikely to be required. Recommend exclusion of factor.
Marine	Coastal squeeze	The requirements of coastal defence may result in coastal squeeze. Note effect under flood defence factors in both offshore SACs. Recommend inclusion of factor
Marine	Disposal of dredged material	Dredging has been identified as an issue therefore the disposal of material is also important. Recommend inclusion of factor.
Marine	Sewage disposal	Some sewage systems in Cardigan Bay have been identified as being inadequate, but water quality is generally good. Recommend including factor – cumulative and in combination effects relevant.
Marine	Shellfish management and associated access	Proposals for shellfish cultivation or harvesting have potential to cause disturbance to habitats through access, nutrient enrichment through cultivation of shellfish and possible introduction of alien species. Recommend inclusion of factor
Marine	Former waste disposal sites	No sites affected by disposal. Recommend exclusion of factor – check with environmental health
Woodland	Erosion caused by recreation	An issue particularly near watercourses could be an issue. Recommend inclusion of factor
Woodland	Fire risk from railways	A steam railway does run through one of the woodland SACs. Recommend inclusion of factor

Habitat Type	Factor	Assessment of Factors in a Ceredigion Context
Woodland	Fly tipping	Woodland are remote and this has not been identified as being a significant problem. Recommend exclusion of factor
Woodland	Timber production	Not an issue. Recommend exclusion of factor
Woodland	Quarrying	Forestry excavations can be permitted development without going through the planning system. Recommend inclusion of factor
Bogs and mires	Low water levels from water abstractions and near by aggregate extraction	No current sites that could cause problems. Recommend exclusion of factor
Bogs and mires	Peat cutting	No live cutting rights. Recommend exclusion of factor
Bogs and mires	Drainage (for non-agricultural reasons)	Unlikely. Recommend exclusion of factor
Bogs and mires	Mineral prospecting and abstraction	No mineral licences that could affect the highlighted sites. Recommend exclusion of factor
Bogs and mires	Pollution including industrial and chemical pollution from adjacent areas	There are no major industries close to Cors Fochno or Cors Caron. However, need to keep in as could be from remote sources and air quality important. Recommend inclusion of factor
Bogs and mires	Accidental fires from railways	Unlikely. Recommend exclusion of factor
Bogs and mires	Infrastructure works	There may be possible impacts associated with recreational projects e.g. coast path, railway lines and roads. Recommend inclusion of factor
Uplands	Reduced water table due to bore-hole water abstraction, mining subsidence	No evidence that this is an issue. Recommend exclusion of factor
Uplands	Track construction	Could be a problem. Recommend inclusion of factor
Uplands	Urban development	Unlikely. However could occur near boundaries affecting drainage. Recommend inclusion of factor
Uplands	Infrastructure works	Wind turbines, power lines and water pipelines could be an issue. Recommend inclusion of factor
Uplands	Telecommunication development	Could be an issue Recommend inclusion of factor
Uplands	Peat cutting	Not an issue. Recommend exclusion of factor
Grasslands	Reduced Water table due to, water abstraction and the over-deepening of local rivers and drainage	Could be an issue Recommend inclusion of factor
Grasslands	Recreation	More an issue for uplands than lowland grasslands. Recommend inclusion of factor

Habitat Type	Factor	Assessment of Factors in a Ceredigion Context
Grasslands	Change in micro-climate caused by the construction of a reservoir	Unlikely. Recommend exclusion of factor
Grasslands	Developments	See preferred options and policies. Recommend inclusion of factor
Grasslands	Off road vehicles	More an issue for uplands than lowland grasslands. Recommend inclusion of factor
Grasslands	Deposition of limestone quarry dust	Calminarion grasslands may be affected by dust deposition, but this is unlike to change the floral composition. Recommend exclusion of factor
Marsh fritillary	Industrial and residential development	See preferred options and policies. Recommend inclusion of factor
Marsh fritillary	Alterations to hydrology including water abstraction and drainage	Could be an issue. Recommend inclusion of factor
Marsh fritillary	Construction of roads	See preferred options and policies. Recommend inclusion of factor
Slender-green feather-moss	Hydrology including drainage	Could be an issue. Recommend inclusion of factor
Slender-green feather-moss	Recreation	Unlikely. Recommend exclusion of factor
Greenland white-fronted goose	Wildfowling	Not in the scope of the LDP. Recommend exclusion of factor
Greenland white-fronted goose	Disturbance caused by adjacent wind farm development	Dyfi estuary is not within strategic search area for wind-farms. Recommend excluding factor.
Greenland white-fronted goose	Peat extraction	Population of geese on Dyfi are not reliant on the raised bog. peat extraction unlikely Recommend exclusion of factor
Greenland white-fronted goose	Disturbance caused by recreation (fishing and water sports)	Disturbance from recreational use is an issue. Recommend inclusion of factor
Greenland white-fronted goose	Fluctuating water levels caused by water abstraction in a key water body causing bank erosion	Geese are not associated with a key water body. Recommend exclusion of factor
Greenland white-fronted goose	Sand and gravel abstraction	None currently near the Dyfi. Recommend exclusion of factor
Merlin	Habitat destruction caused by previous quarrying	No major quarrying in area. Recommend exclusion of factor
Merlin	Vehicular access	Potential to disturb in nesting areas. Recommend inclusion of factor

Habitat Type	Factor	Assessment of Factors in a Ceredigion Context
Merlin	Degradation of hunting habitat through acidification and eutrophication from atmospheric pollution	Could be an issue. Recommend inclusion of factor

References

SNH (2006). Guidance for Competent Authorities when dealing with proposals affecting SAC freshwater sites. Scottish Natural Heritage, Edinburgh.