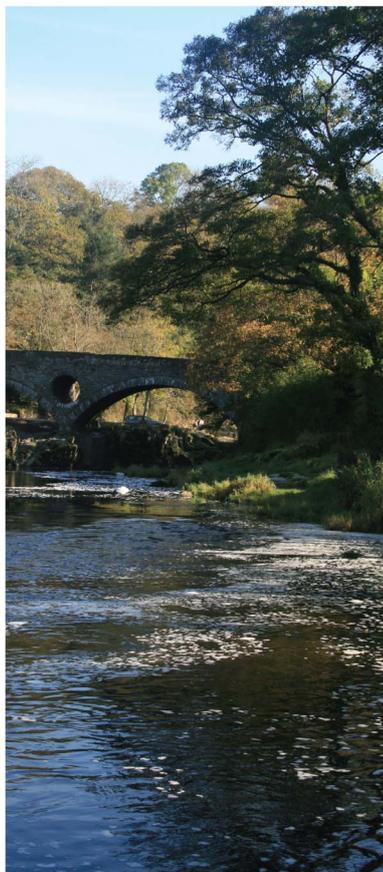


Carmarthenshire Local Development Plan

HABITATS REGULATIONS ASSESSMENT (HRA) **VOLUME 1: MAIN TEXT**

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November
2014

Cyngor Sir Gâr
Carmarthenshire
County Council



Carmarthenshire County Council

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Habitats Regulations Assessment

Volume 1: Main Text

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Executive Summary

Jacobs UK Ltd (Jacobs) has been commissioned by Carmarthenshire County Council (CCC) to assess and document the potential for the Local Development Plan (LDP) to have any significant effects on the European site network within and adjacent to Carmarthenshire.

CCC has prepared its LDP in accordance with Part 6 of the Planning and Compulsory Purchase Act, 2004. The LDP forms the statutory development plan for CCC until 2021. The LDP sets out the Authority's policies and proposals for the future development and use of land within its administrative area.

This report sets out the Habitats Regulations Assessment of the Adopted LDP as required by the Conservation of Habitats and Species Regulations 2010.

This stage of the LDP has been assessed in terms of its potential for significant effects on the European site network. This report sets out the results of the assessment of the LDP, following Examination, the Matters Arising Changes and the Inspector's Report, for the potential for significant effects on the European site network. It continues the approach used at the earlier stages and the key steps were:

- *Screening and assessment of the policies;*
- *Screening and assessment of the proposals;*
- *Review of mitigation options and requirements; and,*
- *In-combination assessment.*

The HRA supporting the earlier stages of the LDP process recorded a number of recommendations for rewording to reduce the risk of any likely significant effects on the European site network. The final iteration of the policies for the LDP gave cognisance to these recommendations.

The assessment of the LDP proposals was carried out in a number of stages. The assessment was broadly split in to spatial and non-spatial impacts. Spatial impacts are those impacts that are influenced by the location of the site allocation in relation to the European site network and non-spatial impacts are those that may occur regardless of where the site is located.

Detailed assessments of the Growth Areas; GA1 Carmarthen, GA2 Llanelli (including T2/1 Burry Port) and GA3 Ammanford/ Cross Hands were carried out and are reported in Appendices B to D.

The allocation in Carmarthen is considered not to have any likely significant effect on the European site network.

The detailed assessment of GA2 and T2/1 concluded that any potential likely significant effects on water quality were appropriately mitigated at a strategic level through the LDP policies, the Memorandum of Understanding, and EAW (now part of NRW) and DCWWs commitments to improve the WWTW level of service. Therefore the site allocation was not considered to have a likely significant effect on the CBEEMS.

The detailed assessment of GA3 concluded that the mitigation provided by LDP policy EQ7 and the Caeau Mynydd Mawr SPG would ameliorate the loss of habitat

used by the Caeau Mynydd Mawr SAC marsh fritillary butterfly metapopulation. With these measures in place it is considered that there will be no significant effects on the European site network (primarily the Caeau Mynydd Mawr SAC) as a result of the LDP proposals in Growth Area 3.

The remainder of the site allocation was assessed as having no likely significant effect on the European site network and the result of that assessment is set out in Appendix F.

The in-combination assessment included consideration of the LDP proposals of neighbouring authorities, the National and Regional Transport Plans and the Shoreline Management Plan. It was concluded that there were no in-combination effects leading to likely significant effects on the European site network.

Under the Conservation of Habitats and Species Regulations, (2010) it is considered the Carmarthenshire LDP alone and in-combination will have no likely significant effects on the European site network.

This strategic plan level HRA does not obviate the need for further HRA at lower planning tier level but this strategic plan level work will inform and support project specific HRA where it is required.

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1.1 Terms of reference

Jacobs Engineering UK Ltd (Jacobs) has been commissioned by Carmarthenshire County Council (CCC) to assess and document the potential for the Local Development Plan to have any significant effects on the European site network within and adjacent to Carmarthenshire.

CCC has prepared its Local Development Plan (LDP) in accordance with the provisions of the Planning and Compulsory Purchase Act, 2004 and the Local Development Plan Regulations 2005. The LDP forms the statutory development plan for CCC until 2021. The LDP will set out the Authority's policies and proposals for the future development and use of land within its administrative area.

The preparation of the LDP involved a number of key stages. These commenced with the Delivery Agreement (DA) as agreed by the then Welsh Assembly Government (WAG) (now the Welsh Government (WG)) in August 2007 and will culminate in the adoption of the plan in 2014.

The key stages in plan preparation are as follows:

Key Stage 1 - Delivery Agreement.

Key Stage 2 - Pre Deposit – Preparation and Participation.

Key Stage 3 - Pre-Deposit – Public Consultation.

Key Stage 4 - Deposit LDP.

Key Stage 5 - Submission of LDP to WG for Examination.

Key Stage 6 - Independent Examination.

Key Stage 7 - Receipt and Publication of Inspector's Report.

Key Stage 8 – Adoption.

Key Stage 9 - Monitoring and Review.

This report sets out the Habitats Regulations Assessment of the LDP following matters arising changes (MACs) at Key Stage 6 and receipt of the Inspector's recommendations at Key Stage 7, as required by the Conservation of Habitats and Species Regulations 2010, and is part of the suite of documents that comprise the adopted LDP

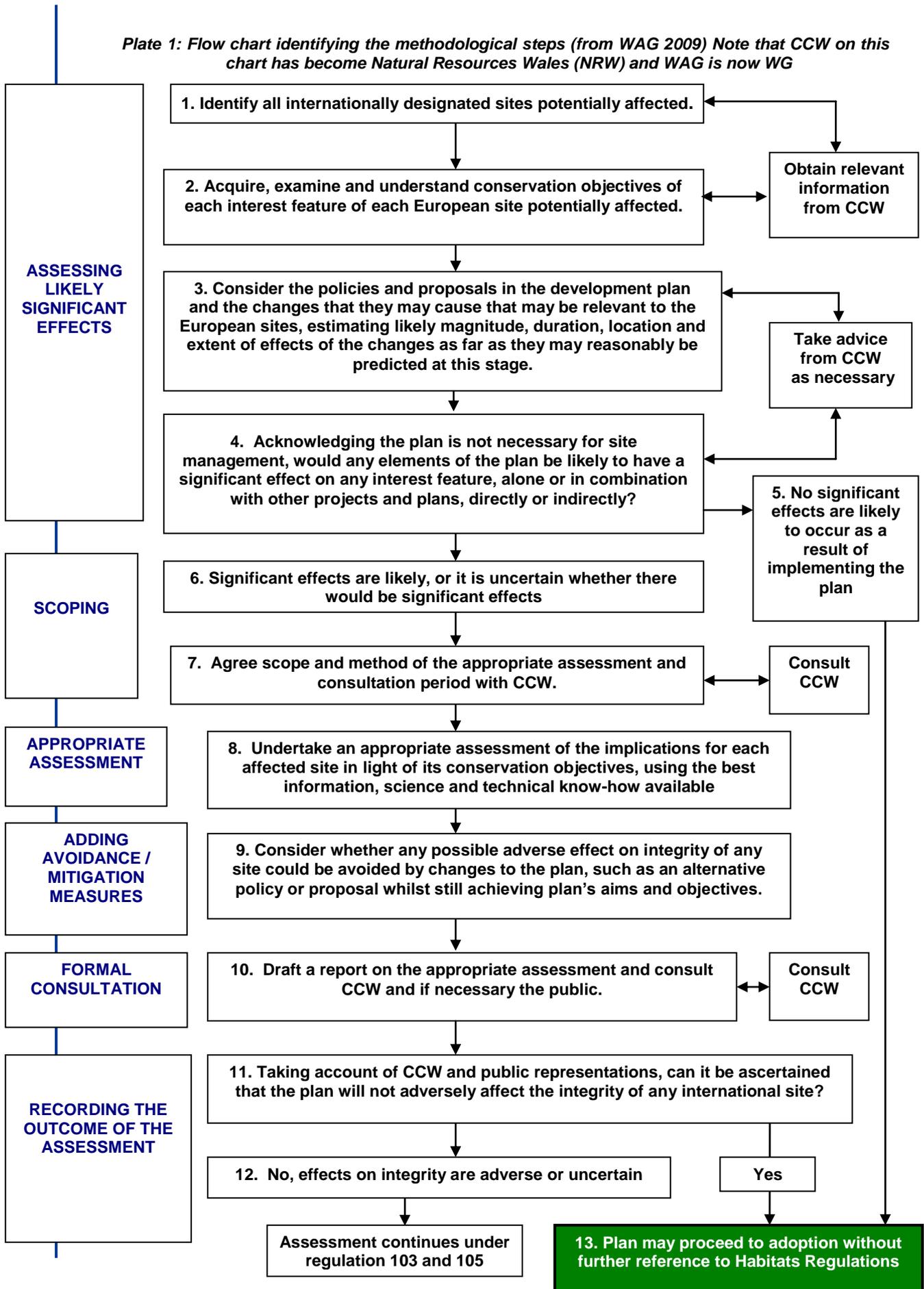
1.2 Requirement for a Habitats Regulations Assessments

The Conservation of Habitats and Species Regulations 2010 sets out the responsibilities of the plan making authority in Part 6, Chapter 8, Regulation 102.

The regulations set out the framework under which the plan making authority should document the LDP process and ultimately create a LDP that, as it is implemented, will have no significant effect on the European Sites resource. The European Site resource includes; Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar and European Marine Sites (EMS).

The flow chart in Plate 1 illustrates the HRA process.

Plate 1: Flow chart identifying the methodological steps (from WAG 2009) Note that CCW on this chart has become Natural Resources Wales (NRW) and WAG is now WG



1.3 Local Development Plan

The aim of the new Local Development Plan (LDP) is to make the Development Plan system more relevant, inclusive and engaging to local communities.

The LDP will set out the Local Planning Authority's proposals and policies for the future development and use of land within its administrative area. The plan period is 15 years and upon adoption (2014), the LDP will supersede the existing Unitary Development Plan (UDP) with decisions on planning permissions primarily based on its content. A Development Plan provides a measure of certainty about what kind of development will, and will not be permitted during the plan period.

The Plan will contain detailed policies and proposals, both for the use of land and also the protection of the environment. It will guide investment and the delivery of services and infrastructure and will determine the level of provision and location of new housing and employment opportunities. The LDP provides the framework for considering all land use proposals across the plan period. The base year for the land use proposals is 2006.

Due regard will be paid to national and regional planning policy and guidance in the formulation of outcomes in respect of the LDP's preparation. In formulating the LDP, regard will also be had to strategies and other background documents where relevant.

The LDP process has been through the following key steps:

- *The LDP Preferred Strategy was published for consultation in November 2009 and was subsequently approved by Council in April 2010.*
- *The Deposit LDP was published for consultation in June 2011 and approved by Council in February 2012.*
- *The LDP was updated with focused changes in October 2013 and published prior to examination between February and May 2014. Following examination a schedule of matters arising changes (MACs) has been collated and the LDP updated to reflect this and the recommendations in the Inspector's Report. The LDP was adopted in December 2014.*

2.1 The HRA process so far

The LDP process has been supported by a HRA at a number of the key stages in its process and this section summarises the steps that have been undertaken up to this final HRA report of the adopted LDP.

2.1.1 HRA – Preferred Strategy (Key Stage 3)

The Habitats Regulations Assessment Preliminary Screening Report for the Preferred Strategy was completed by Jacobs in September 2009 and set out the results of the first stage of the HRA process (steps 1-6 in Plate 1).

This report set out:

- *the European Site network that may be affected by the Carmarthenshire LDP;*
- *the likely impacts that may occur as a result of implementing the LDP;*
- *the potential for in-combination impacts with other plans; and,*
- *the assessment of the preferred strategy in terms of its likely significant effects on the European Site network.*

The HRA Screening Report concluded that the following key European Sites may be affected by the LDP and the HRA process should be continued:

- *Carmarthen Bay and Estuaries European Marine Site (CBEEMS) (Includes Carmarthen Bay and Estuaries SAC, Burry Inlet SPA and Ramsar);*
- *River Tywi SAC;*
- *Caeau Mynydd Mawr SAC; and,*
- *Cernydd Carmel SAC.*

The other European Sites within and out with Carmarthenshire may be affected, but this is generally dependent on the spatial location of the LDP site allocation proposals.

2.1.2 HRA - Deposit LDP (Key Stage 4)

The deposit draft stage LDP has been assessed in terms of its potential for significant effects on the European site network. It continued the approach used at the preliminary screening stage and the key steps were:

- *Review the existing European Site data;*
- *Identification of key issues including consultation with CCW;*
- *Collection of further background information from Environment Agency, Dwr Cymru Welsh Water and CCW;*
- *Screening and assessment of the deposit draft LDP policies;*
- *Screening and assessment of the deposit draft LDP proposals;*
- *Review of mitigation options and requirements; and,*
- *In-combination assessment.*

The initial assessment of the detailed policies recorded a number of recommendations for rewording designed to reduce the risk of any likely significant effects on the European site network. The final iteration of the policies for the Deposit Draft LDP included these recommendations.

The assessment of the Deposit Draft LDP proposals was carried out in a number of stages. The assessment was broadly split in to spatial and non-spatial impacts.

Spatial impacts are those impacts that are influenced by the location of the site allocation in relation to the European site network and non-spatial impacts are those that may occur regardless of where the site is located.

The detailed assessment of GA1 Carmarthen Growth Area concluded that there was no likely significant effect on the European site network.

The detailed assessment of GA2 and T2/1 concluded that any potential likely significant effects on water quality would be appropriately mitigated at a strategic level through the deposit draft LDP policies and Environment Agency Wales and Dwr Cymru Welsh Water's commitments to improve the Waste Water Treatment Works level of service. Therefore the site allocation was not considered to have a likely significant effect on the Carmarthen Bay and Estuaries European Marine Site.

The detailed assessment of GA3 Ammanford /Cross Hands recommended that a mitigation strategy was required to ameliorate the loss of habitat used by the Caeau Mynydd Mawr SAC marsh fritillary butterfly metapopulation. This has been incorporated in to the deposit draft LDP and includes a commitment to prepare Supplementary Planning Guidance (SPG) for the Cross Hands area. With these measures in place it was considered that there would be no significant effects on the European site network (primarily the Caeau Mynydd Mawr SAC) as a result of the LDP proposals in Growth Area 3.

The remainder of the site allocation was assessed as having no likely significant effect on the European site network.

The in-combination assessment included the emerging LDP proposals of neighbouring authorities, the National and Regional Transport Plans and the Shoreline Management Plan. It was considered that there were no likely significant effects on the European site network.

Under the Conservation of Habitats and Species Regulations (2010) it was considered the Carmarthenshire deposit LDP alone and in-combination would have no likely significant effects on the European site network.

2.1.3 Consultation with Statutory Nature Conservation Body

Countryside Council for Wales (now NRW) was consulted on the draft HRA supporting the deposit draft LDP (See Appendix G) and their comments were incorporated in to the published deposit draft HRA.

2.1.4 Public Consultation

The deposit draft HRA was completed by Jacobs in June 2011 and the public consultation period ran from 22 June – 19 August 2011.

Representations were received from the following individuals and organisations:

- *Mr David Rees Stradey Residents Group.*
- *Mr W D Phillips Bynea & District Forum.*
- *Mr Phil Holmes Swansea City Council.*
- *Kerry Rogers Countryside Council for Wales.*
- *Mr Griffiths Burry Inlet Hand Gatherers Association.*
- *Ms Nia Griffith MP Labour Party.*
- *Mr Richard Roper.*
- *Mrs Llinos Quelch Ceredigion County Council.*

The representations were reviewed and a recommendation whether or not to incorporate amendments to the HRA was carried out by CCC. The result of the review and recommendation was published and the deposit draft HRA was finalised at this point incorporating the results of the consultation process.

2.1.5 Focused Changes

Prior to LDP Examination the deposit draft LDP was updated with a number of Focused Changes. These changes were reviewed and the deposit draft HRA updated to reflect them.

2.2 Guidance

The assessment methodology is based upon the Welsh Assembly Government 2009 Planning Policy Wales Technical Advice Note 5, but is also influenced by the following guidance documents:

- *Draft Guidance: The Assessment of Development Plans in Wales under the Provisions of the Habitats Regulations (David Tyldesley and Associates 2006, updated 2009);*
- *Managing Natura 2000 sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC (European Commission 2000); and,*
- *Assessment of Plans and Projects significantly affecting Natura 2000 sites - Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (European Commission 2002).*

2.3 The next stage in the HRA process

This report provides the assessment of the LDP, following Examination, the Matters Arising Changes and the Inspector's Report, for the potential for significant effects on the European site network. It continues the approach used at the earlier stages and the key steps are:

- *Screening and assessment of the policies;*
- *Screening and assessment of the proposals;*
- *Review of mitigation options and requirements; and,*
- *In-combination assessment.*

This report is structured in 3 Volumes:

Volume 1: Main Text	Sets out the European Sites data, the assessment of the LDP policies and the assessment of the LDP proposals.
Volume 2: Figures	Figure 1 European Site Network in Carmarthenshire Figure 2 Site Allocation around GA1 Carmarthen Figure 3 Site Allocation around GA2 Llanelli Figure 4 Site Allocation around Burry Port and Pembrey Figure 5 Site Allocation around GA3 Ammanford/Cross Hands Figure 6 Site Allocation within 2km Caeau Mynydd Mawr SAC Figure 7 Site Allocation around Llandeilo Figure 8 Site Allocation around Llandeilo South Figure 9 Site Allocation around Llandovery Figure 10 Site Allocation around Newcastle Emlyn Figure 11 Site Allocation around St Clears Figure 12 Site Allocation around Whitland Figure 13 Site Allocation around Laugharne & Ferryside

- Figure 14 Site Allocation around Kidwelly & Pontyates
- Figure 15 Site Allocation around Pontyberem
- Figure 16 Site Allocation around Hendy
- Figure 17 Site Allocation around Glanamman & Garnant
- Figure 18 Site Allocation around Llanybydder
- Figure 19 Site Allocation around Llangeler
- Figure 20 Site Allocation around Glandy Cross & Efailwen
- Figure 21 Site Allocation around Trelech
- Figure 22 Site Allocation around Cynwyl Elfed
- Figure 23 Site Allocation around Pendine
- Figure 24 Site Allocation around Cwmffrwd
- Figure 25 Site Allocation around Llanpumsaint & Pencader
- Figure 26 Site Allocation around Cwmann & Ffarmers
- Figure 27 Site Allocation around Rhydcymerau
- Figure 28 Site Allocation around Talley
- Figure 29 Site Allocation around Cynghordy
- Figure 30 Site Allocation around Nantgaredig
- Figure 31 Site Allocation around Llanddarog
- Figure 32 Site Allocation around Brechfa

- Volume 3: Appendices
- Appendix A - European Site Citations
 - Appendix B - Strategic Growth Area: Carmarthen Assessment of Potential Effects on the European Site Network
 - Appendix C - Strategic Growth Area: Llanelli Assessment of Potential Effects on the European Site Network
 - Appendix D - Strategic Growth Area: Ammanford/ Cross Hands Assessment of Potential Effects on the European Site Network
 - Appendix E - Detailed Site Assessment Proforma GA1, GA2 and GA3
 - Appendix F - Site Allocation (Non Growth Areas) Assessment Table
 - Appendix G – Consultation

The screening and assessment of the LDP policies and proposals documented within this report and any areas where there is a risk that the HRA process may need to be continued at the project level are highlighted. The LDP proposals are illustrated for the county on the Proposals maps (Carmarthenshire County Council 2014) and have been summarised in Table 2-1 to show the proposals that are included within the scope of this HRA i.e. potential for effect on the European site network.

Table 2-1 Summary of LDP Proposals

LDP Proposal	Included within the HRA
Land allocated for development (residential, employment and mixed use including retail)	Yes, potential for spatial and non spatial impacts
Land allocated for recreation and amenity	Yes, potential for spatial impacts
Designation of Special Landscape Areas	No
Coal resource – Areas not acceptable for extraction	No
Safeguarded mineral resources	Yes, potential for spatial impacts,
Safeguarded highway infrastructure routes	Yes, potential for spatial and non spatial impacts
Proposed cycle routes	Yes, potential for spatial impacts
Proposed Gwili Railway extension and new stations	Yes, potential for non spatial impacts

The key European Sites highlighted in the Preliminary Screening Report have been subject to detailed assessments in terms of the effects of the strategic growth areas of Carmarthen, Llanelli and Ammanford/Cross Hands. These assessments are

reported in detail in three stand-alone reports which have been included in Volume 3 Appendices B, C and D. A summary of each has been included within the site allocation assessment (Chapter 5) of this report.

2.4 Sources of Information

The following sources of baseline information have been used to inform the assessment:

- *Carmarthenshire Site Allocation – GIS data from Carmarthenshire County Council Forward Planning Team;*
- *Catchment Abstraction Management Strategies (CAMS) for The Tywi, Taf & Gwendraeth Rivers (Environment Agency Wales, 2006);*
- *Countryside Council for Wales Carmarthen Bay and Estuaries European Marine Site comprising: Carmarthen Bay and Estuaries Special Area of Conservation, Carmarthen Bay Special Protection Area, Burry Inlet Protection Area & Ramsar Site. Advice provided by the Countryside Council for Wales in fulfilment of Regulation 33 of the Conservation (Natural Habitats, &c.) Regulations 1994, February 2009 (Regulations now consolidated in The Conservation of Habitats and Species Regulations 2010);*
- *Countryside Council for Wales Core Management Plan including Conservation Objectives for Caeau Mynydd Mawr Special Area of Conservation (SAC). Version: 11 Date: 15 April 2008;*
- *Countryside Council for Wales Core Management Plan including Conservation Objectives for Cernydd Carmel SAC (Special Area of Conservation) Version: 9 Date: 15 April 2008;*
- *Countryside Council for Wales Core Management Plan including Conservation Objectives for Afon Tywi / River Tywi SAC (Special Area of Conservation) Version: 11 Date: 15 April 2008;*
- *Environment Agency Annex to Appendix 21 Final Air Pollution Assessment Caeau Mynydd Mawr SAC. Version 2, March 2007;*
- *Environment Agency Habitats Directive Fact sheet River Tywi SAC www.environment-agency.gov.uk accessed 11 Mar 2011;*
- *Environment Agency Review of Consents Stage 3 Assessment Caeau Mynydd Mawr SAC Version 3, August 2009; and,*
- *Smith & Gander (2010) Landscape-Scale Habitat Quality Survey for the Marsh Fritillary Butterfly around Caeau Mynydd Mawr SAC, Carmarthenshire 2009.*

3.1 Designations

This chapter sets out the European sites potentially affected by the Carmarthenshire LDP. Table 3-1 sets out the characteristics of the sites; their location; and their designation and qualifying features.

Figure 1 in Volume 2 shows the location of the European sites in relation to Carmarthenshire. The citations for each European site are provided in Volume 3 Appendix A.

Table 3-1 European Sites potentially affected by the Carmarthenshire LDP

European Site	Qualifying Feature(s)	Size (hectares)	Type of Site
Afon Tywi/ River Twyi SAC	<ul style="list-style-type: none"> • Twaite shad • Otter • Sea lamprey • River lamprey • Brook lamprey • Allis shad • Bullhead 	363.45	Aquatic
Caeau Mynydd Mawr SAC	<ul style="list-style-type: none"> • <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) • Marsh fritillary butterfly 	25.06	Terrestrial
Cernydd Carmel SAC	<ul style="list-style-type: none"> • Turloughs • Northern Atlantic wet heaths with <i>Erica tetralix</i> • European dry heaths • Active raised bogs • <i>Tilio-Acerion</i> forests of slopes, screes and ravines 	361.14	Terrestrial
Carmarthen Bay Dunes SAC	<ul style="list-style-type: none"> • Embryonic shifting dunes • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> • Fixed dunes with herbaceous vegetation • Dunes with <i>Salix repens ssp. argentea</i> • Humid dune slacks • Narrow mouthed whorl snail • Petalwort • Fen orchid 	1206.32	Terrestrial
Afon Teifi/ River Teifi SAC	<ul style="list-style-type: none"> • Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation • Oligotrophic to mesotrophic standing waters with vegetation of <i>Littorelletea uniflorae</i> and/or of IsoÛto-Nanojuncetea • Brook lamprey • River lamprey • Atlantic salmon • Bullhead • Otter • Floating water-plantain • Sea lamprey 	715.58	Aquatic
Afonydd Cleddau/ Cleddau Rivers SAC	<ul style="list-style-type: none"> • Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation • Active raised bogs • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> • Brook lamprey • River lamprey • Bull head • Otter • Sea lamprey 	750.73	Aquatic and terrestrial

European Site	Qualifying Feature(s)	Size (hectares)	Type of Site
Carmarthen Bay and Estuaries SAC	<ul style="list-style-type: none"> Sandbanks which are slightly covered by sea water all the time Estuaries Mudflats and sandflats not covered by seawater at low tide Large shallow inlets and bays <i>Salicornia</i> and other annuals colonising mud and sand Atlantic salt meadows Twaite shad Sea lamprey River lamprey Allis shad Otter 	66101.16	Aquatic
Bae Caerfyrddin/ Carmarthen Bay SPA	<ul style="list-style-type: none"> Common scoter 	95860.36	Aquatic
Cwm Doethie-Mynydd Mallaen SAC	<ul style="list-style-type: none"> Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles European dry heaths 	4122.29	Terrestrial
Elenydd – Mallaen SPA	<ul style="list-style-type: none"> Merlin Red kite 	30022.14	Terrestrial
Burry Inlet SPA	<ul style="list-style-type: none"> Pintail Northern Shoveler Teal Wigeon Dunlin Red knot Oystercatcher Curlew Grey Plover Shelduck Redshank 	6627.99	Aquatic
Burry Inlet Ramsar	<ul style="list-style-type: none"> Tidal flats Salt marshes Estuarine waters Sand/shingle shores Rocky shores Redshank Pintail Oystercatcher Red knot Shoveler Noteworthy flora and fauna 	6627.99	Aquatic
Cardigan Bay/ Bae Ceredigion SAC	<ul style="list-style-type: none"> Sandbanks which are slightly covered by sea water all the time Reefs Submerged or partially submerged sea caves Bottlenose dolphin Sea lamprey River lamprey Grey seal 	95860.36	Aquatic
North Pembrokeshire Woodlands / Coedydd Gogledd Sir Benfro SAC	<ul style="list-style-type: none"> Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> Barbastelle bat 	315.68	Terrestrial
Yerbeston Tops SAC	<ul style="list-style-type: none"> Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) Marsh fritillary butterfly 	18.81	Terrestrial
Rhos Llawr-cwrt SAC	<ul style="list-style-type: none"> Marsh fritillary butterfly <i>Hamatocaulis vernicosus</i> (moss) 	46.13	Terrestrial
Pembrokeshire Bat Sites and Bosherton Lakes / Safleoedd Ystlum Sir Benfro a Llynnoedd Bosherton SAC	<ul style="list-style-type: none"> Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara spp.</i> Greater Horseshoe Bat Lesser Horseshoe Bat Otter 	122.44	Terrestrial
Gower Ash Woods / Coedydd Ynn Gwyr SAC	<ul style="list-style-type: none"> <i>Tilio-Acerion</i> forests of slopes, screes and ravines Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> 	233.15	Terrestrial

European Site	Qualifying Feature(s)	Size (hectares)	Type of Site
Pembrokeshire Marine SAC	<ul style="list-style-type: none"> • Estuaries • Large shallow inlets and bays • Reefs • Sandbanks which are slightly covered by seawater all the time • Mudflats and sandflats not covered by seawater at low tide • Coastal lagoons • Atlantic salt meadows • Submerged/partially submerged sea caves • Grey seal • Shore dock • Sea lamprey • River lamprey • Allis shad • Twaite shad • Otter 	138069.45	Aquatic
Gower Commons / Tiroedd Comin Gwyr SAC	<ul style="list-style-type: none"> • Northern Atlantic wet heaths with <i>Erica tetralix</i> • European dry heaths • Marsh fritillary butterflies • Southern damselflies 	1776.72	Terrestrial
River Wye / Afon Gwy SAC	<ul style="list-style-type: none"> • Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation • Transition mires and quaking bogs • White clawed crayfish • Sea lamprey • Brook lamprey • River lamprey • Twaite shad • Atlantic salmon • Bullhead • Otter • Allis shad 	2234.89	Aquatic
Gweunydd Blaencleddau SAC	<ul style="list-style-type: none"> • Northern Atlantic wet heaths with <i>Erica tetralix</i> • Molinia meadows on calcareous, peaty or clayey-silt-laden soils • Blanket bogs • Transition mires and quaking bogs • Alkaline fens • Marsh fritillary butterfly • Southern damselfly 	150.11	Terrestrial
Preseli SAC	<ul style="list-style-type: none"> • Northern Atlantic wet heaths with <i>Erica tetralix</i> • European dry heaths • Depressions on peat substrates of the <i>Rhynchosporion</i> • Alkaline fens • Southern damselfly • Marsh Fritillary butterfly • <i>Hamatocaulis vernicosus</i> (moss) 	2705.9	Terrestrial
Mynydd Epynt SAC	<ul style="list-style-type: none"> • <i>Hamatocaulis vernicosus</i> (moss) 	40.12	Terrestrial
River Usk. Afon Wysg SAC	<ul style="list-style-type: none"> • Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation • Sea lamprey • Brook lamprey • River lamprey • Twaite shad • Atlantic salmon • Bullhead • Otter • Allis shad 	1007.71	Aquatic

3.2 Factors Influencing the Conservation Status of the European sites

Twenty five European sites were identified in the screening report (Jacobs 2009) as having the potential to be affected by the Preferred Strategy and these have been taken forward to this assessment of the potential effects of the LDP.

The following tables (Table 3-2 to Table 3-25) summarise the conservation objectives for the qualifying features of each European site, their most recent assessment of condition (in relation to being in Favourable Conservation Status), and factors that may influence the conservation status of those qualifying features.

- Features highlighted in **bold** are European priority features.
- Conservation Objectives - The vision for the features are for it to be in a favourable conservation status, where all of the following conditions are satisfied: If these objectives are not met restoration measures will be needed to achieve favourable conservation status.

Table 3-2 Afon Teifi / River Teifi SAC

Feature	Condition from Core Management Plan. (date of condition assessment)	Conservation Objective	Factors influencing Conservation Status
Water courses of plain to montane levels with the <i>Ranuncion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	Favourable (2006)	To reach favourable condition the features must meet the overall river objectives plus: <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 features typical species should be favourable. 	Water abstraction/drainage reducing flow rates, artificially regulating flow, causing entrainment of fish and affecting water quality 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
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 (Llyn Hir, Llyn Teifi, Llyn Egnant, Llyn y Gorlan and Llyn Bach), and will be self-maintaining on a long-term basis. • 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. There will be no deterioration in the conservation status of the feature as represented in these lakes. 	Flood defences alter important bank side habitats and prevent natural river processes Water pollution through disposal of sewage effluent, run-off and metal mine workings including re-opening of old mines and restoration Fish stocking Fish farms

Feature	Condition from Core Management Plan. (date of condition assessment)	Conservation Objective	Factors influencing Conservation Status
Brook lamprey River lamprey Sea lamprey	Unfavourable: Unclassified (2005)	<ul style="list-style-type: none"> The population of the feature in the SAC is stable or increasing over the long term. The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. 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. 	<p>Acidification and eutrophication from atmospheric deposition on aquatic habitats</p> <p>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</p> <p>Sand and gravel quarrying activities in and adjacent to water course</p> <p>Small hydro-electric schemes</p> <p>Non-native invasive species</p> <p>Effects on water quality from forestry and abandoned metal mines</p> <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>In stream artificial structures e.g. bridges</p> <p>Roads – direct mortality of otter</p> <p>Grazing</p> <p>Spread of non-native invasive species</p>
Atlantic salmon	Unfavourable: Unclassified (2007)		
Bullhead	Unfavourable: Unclassified (2006)		
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, as determined by natural levels of prey abundance and associated territorial behaviour. 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 necessary, of suitable riparian habitat, and underpasses, ledges, fencing etc. at road bridges and other artificial barriers. 	
Floating water-plantain	Favourable (2004)	<ul style="list-style-type: none"> The floating water-plantain populations will be viable throughout their current distribution in the SAC (maintaining themselves on a long-term basis). The SAC will have sufficient suitable habitat to support floating water-plantain populations within their current distribution. 	

Table 3-3 Afon Tywi / River Tywi SAC

Feature	Condition From Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Twaite shad Allis shad	Unfavourable: Unclassified	<p>To reach favourable condition the features must meet the overall river objectives plus:</p> <ul style="list-style-type: none"> The population of the feature in the SAC is stable or increasing over the long term. The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. 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. 	<p>Agricultural run-off causing pollution and suspended sediment</p> <p>Water abstraction reducing flow rates, artificially regulating flow, causing entrainment and affecting water quality.</p> <p>Pollution and discharges including run off from contaminated land, agricultural pollution and chemical</p> <p>Development on floodplain (including housing and car parks) could potentially increase pollution, increase damaging flood events, reduce the ability of natural processes in the river and on the banks could increase suspended sediment</p>
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, as determined by natural levels of prey abundance and associated territorial behaviour. 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 necessary, of suitable riparian habitat, and underpasses, ledges, fencing etc at road bridges and other artificial barriers. 	<p>Flood defences alter important bank side habitats and prevent natural river processes.</p> <p>Recreation (including fishing, walking and gorge walking) and associated tourist development</p> <p>Fish stocking/ Fish farms</p> <p>Acidification and eutrophication from atmospheric pollution-terrestrial and aquatic habitats</p>
Sea lamprey Brook lamprey River lamprey 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. The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. 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. 	<p>Dredging – aggregate extraction</p> <p>Sand and gravel quarrying activities in and adjacent to water course</p> <p>Small hydro-electric schemes</p> <p>Non-native invasive species</p> <p>Inappropriate engineering works, canalisation and impoundment works, especially those that form a physical or acoustic barrier across water courses such as dams and weirs</p> <p>Modification of river systems including widening, constricting, deepening, straightening and culverts</p> <p>Revetment on active alluvial river banks using stone, concrete or waste materials.</p> <p>Modification of existing features such as weirs, bride sills and</p>

Feature	Condition From Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
			acoustic barriers Conifer plantation In stream artificial structures e.g. bridges Roads – direct mortality of otter

Table 3-4 Afonydd Cleddau / Cleddau Rivers SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Water courses of plain to montane levels with the <i>Ranuncion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	Unfavourable: Unclassified	To reach favourable condition the features must meet the overall river objectives plus: <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 condition. 	Water abstraction reducing flow rates, artificially regulating flow, causing entrainment of fish and affecting water quality 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
Active raised bogs	Unfavourable: Declining	<ul style="list-style-type: none"> The bog's extent, distribution and habitat quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Flood defences alter important bank side habitats and prevent natural river processes effecting river bed substrate and structure
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)	Unfavourable: Unclassified (2004)	<ul style="list-style-type: none"> The forest's extent, distribution and habitat quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Water pollution through disposal of sewage effluent, run-off etc. Fish stocking Fish farms
Brook lamprey River lamprey Sea lamprey	Unfavourable: Unclassified (2004)	<ul style="list-style-type: none"> The population of the feature in the SAC must be stable or increasing over the long term. The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. Passage of the feature through the SAC is not to be hindered by artificial barriers such as weirs. The characteristic channel morphology provides the diversity of water depths, current velocities and substrate types necessary to fulfil the habitat requirements of the features. 	Acidification and eutrophication from atmospheric deposition-terrestrial and aquatic habitats 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 Sand and gravel quarrying activities in and adjacent to water course
Otter	Favourable: Maintained (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 SAC will have sufficient habitat, including riparian trees and vegetation and wetlands, to support the otter population in the 	Small hydro-electric schemes Non-native invasive species

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
		<p>long term.</p> <ul style="list-style-type: none"> • The natural range of otters in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. • The otter must be able to breed and recruit successfully in the SAC. The size of breeding territories may vary depending on prey abundance. • Otter food sources must be sufficient for maintenance of the population. • The safe movement and dispersal of individuals around the SAC is facilitated by the provision, where necessary, of suitable riparian habitat, and underpasses, ledges, fencing etc. at road bridges and other artificial barriers. • No otter breeding site should be subject to a level of disturbance that could have an adverse effect on breeding success. Where necessary, potentially harmful levels of disturbance must be managed. 	<p>Effects on water quality from forestry and abandoned metal mines</p> <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>In stream artificial structures e.g. bridges</p> <p>Grazing</p> <p>Roads – direct mortality of otter</p>
Bullhead	Unfavourable: Unclassified	<ul style="list-style-type: none"> • The population of the feature in the SAC must be stable or increasing over the long term. • The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. • Passage of the feature through the SAC is not to be hindered by artificial barriers such as weirs. • The characteristic channel morphology provides the diversity of water depths, current velocities and substrate types necessary to fulfil the habitat requirements of the features. 	

Table 3-5 Caeau Mynydd Mawr SAC

Feature	Condition From Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	Unfavourable: Unclassified (2007)	The <i>Molinia</i> meadow's extent, distribution 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- terrestrial and aquatic habitats Loss of land, shelter belts and hedges surrounding SAC suitable to support metapopulations e.g. due to industrial and residential development. Key areas are with 2km of the SAC.
Marsh fritillary butterfly	Unfavourable: Unclassified (2007)	<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 	Alterations in hydrology including water abstraction and drainage Construction of roads and vehicle usage including off-roading Water pollution e.g. from agricultural run-off or other discharges Grazing Scrub encroachment

Table 3-6 Cardigan Bay / Bae Ceredigion SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Sandbanks which are slightly covered by sea water all the time Reefs Submerged or partially submerged sea caves	Unfavourable (2008)	<ul style="list-style-type: none"> The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing The physical biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded. The presence, abundance, condition and diversity of typical species are such that habitat quality is not degraded. 	Disturbance - Eco-tourism and Recreation (water sports and boating) Seismic survey for oil and gas Pollution and suspended sediment (principally discharges but also run-off) Diffuse and point pollution Dredging and trawling
Bottlenose dolphin Sea lamprey River lamprey Grey seal	Unfavourable (2008)	<ul style="list-style-type: none"> The population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements are population size, structure, production, and condition of the species within the site. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the 	Water abstraction and mineral extraction Power Stations Wind Farms

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
		<p>foreseeable future.</p> <ul style="list-style-type: none"> The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. 	<p>Artificial reefs and barrages</p> <p>Military testing</p> <p>Commercial fishing (with regard to stock numbers and damage to underwater features)</p> <p>Fishing and Fish farming</p> <p>Refuse and fishing waste disposal</p> <p>Port and Marina development moorings and associated facilities</p> <p>Operation and Maintenance of ports and pipelines and other infrastructure</p> <p>Coastal squeeze including loss of sand and mud-flat as a result of new coastal development / Land claim</p> <p>Disposal of dredged material</p> <p>Litter</p> <p>Shellfish management and associated access</p> <p>Former waste disposal sites - contaminated land</p> <p>Coastal engineering including coastal defence</p> <p>Atmospheric deposition causing high levels of acidity and nutrient nitrogen- terrestrial and aquatic habitats</p>

Table 3-7 Carmarthen Bay and Estuaries / Bae Caerfyrddin ac Aberoedd SAC (Part of the Carmarthen Bay and Estuaries European Marine Site)

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
<p>Sandbanks which are slightly covered by sea water all the time</p> <p>Estuaries</p> <p>Mudflats and sandflats not covered by seawater at low tide</p> <p>Large shallow inlets and bays</p> <p><i>Salicornia</i> and other annuals colonising mud and sand</p> <p>Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>)</p>	<p>Unknown</p>	<ul style="list-style-type: none"> The conservation objective for these habitat features are to maintain at favourable conservation status their natural range and area covered, the structures and functions necessary for their long-term maintenance, and the conservation status of their typical species on a long-term basis. 	<p>Recreation (water sports and boating)</p> <p>Water pollution (principally discharges but also run-off)</p> <p>Dredging and trawling</p> <p>Aggregate extraction</p> <p>Water abstraction and mineral extraction</p> <p>Power Stations, Wind Farms and other in bay structures, Artificial reefs and barrages</p> <p>Military testing</p> <p>Commercial fishing (with regard to stock numbers and damage to underwater features)</p> <p>Fish farming, stocking and fishing</p> <p>Refuse disposal</p>
<p>Twaite shad</p> <p>Sea lamprey</p> <p>River lamprey</p> <p>Allis shad</p> <p>Otter</p>	<p>Unknown</p>	<ul style="list-style-type: none"> The conservation objective for the species features 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. 	<p>Port and Marina development moorings and associated facilities</p> <p>Operation and Maintenance of ports and pipelines and other infrastructure</p> <p>Coastal squeeze including loss of sand and mud-flat as a result of new coastal development / Land claim</p> <p>Disposal of dredged material</p> <p>Sewage/waste disposal</p> <p>Shellfish management and associated access</p> <p>Coastal engineering including coastal defence</p> <p>Atmospheric deposition causing high levels of acidity and nutrient nitrogen- terrestrial and aquatic habitats</p> <p>Roads – direct mortality of otter</p>

Table 3-8 Carmarthen Bay Dunes / Twyni Bae Caerfyrddin SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Embryonic shifting dunes	Favourable (2006)	<ul style="list-style-type: none"> Ensure that the extent and distribution of the 'embryonic shifting dunes' is maintained according to natural processes throughout this SAC. These features must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Coastal engineering, including coastal defence and beach stabilisation Beach cleaning
Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes')	Favourable (2006)	<ul style="list-style-type: none"> The shifting dunes extent, distribution and vegetation composition must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Grazing Military use Recreation – Excessive and/or inappropriate vehicle use and visitor access
Fixed dunes with herbaceous vegetation ('grey dunes')	Unfavourable: Declining	<ul style="list-style-type: none"> Grey dunes should be distributed throughout the SAC. The dune's extent, distribution and habitat quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Water abstraction/drainage or any changes in hydrology Litter
Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>) Humid dune slacks	Unfavourable: Declining	<ul style="list-style-type: none"> A range of dune slack habitat should be present. Limits have been set to reflect this range of habitat types within these two features. 	Scrub encroachment, especially by sea-buckthorn and willow Spread of non-native invasive species
Narrow mouthed whorl snail	Unfavourable: Declining (2006)	<ul style="list-style-type: none"> Habitat extent and quality must not fall below the lower limits and must meet the vision in order to be in favourable condition to support the feature population. 	Atmospheric deposition causing high levels of acidity and nutrient nitrogen, particularly from agriculture-terrestrial and aquatic habitats Land loss/habitat severance from developments, infrastructure works and telecommunication equipment
Petalwort	Unfavourable: Declining (2003)		
Fen orchid	Unfavourable: Declining (2002)		

Table 3-9 Cernydd Carmel SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Turloughs	Unfavourable: Unclassified (2006)	<ul style="list-style-type: none"> Habitat extent and vegetation composition, and water quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Water abstraction/drainage or any changes in hydrology Atmospheric deposition causing high levels of acidity and nutrient nitrogen- terrestrial and aquatic habitats
Northern Atlantic wet heaths with <i>Erica tetralix</i>	Unfavourable: Unclassified (2003)	<ul style="list-style-type: none"> Habitat extent and quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Burning
European dry heaths	Unfavourable: Unclassified (2003)	<ul style="list-style-type: none"> Habitat extent and quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Grazing

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Active raised bogs	Unfavourable: Unclassified (2003)	<ul style="list-style-type: none"> Habitat extent and quality, water levels and quality, and atmospheric deposition must not fall below the lower limits or exceed upper limits and must meet the vision in order to be in favourable condition 	Water pollution and suspended sediment (principally discharges but also run-off), particularly from agriculture
Tilio-Acerion forests of slopes, screes and ravines	Unfavourable: Declining (2008)	<ul style="list-style-type: none"> The forest's extent, canopy cover, structure, species composition, dead wood and regeneration must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Scrub encroachment Land loss/habitat severance from developments, infrastructure works and telecommunication equipment Spread of non-native invasive species Erosion from vehicle use, heavy trampling and track construction Peat removal Quarrying

Table 3-10 Cwm Doethie - Mynydd Mallaen SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Unfavourable (2006)	<ul style="list-style-type: none"> The woods' extent, canopy cover, regeneration, woodland structure, tree and 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 	Water pollution and suspended sediment (principally discharges but also run-off), particularly from agriculture Water abstraction/drainage or any changes in hydrology
European dry heaths	Unfavourable (2004)	<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 	Burning Atmospheric deposition causing high levels of acidity and nutrient nitrogen Erosion from vehicle use, heavy trampling and track construction Grazing Land loss/fragmentation from developments, infrastructure works and telecommunication equipment Quarrying Non native invasive species

Table 3-11 Gower Ash Woods / Coedydd Ynn Gwyr SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Tilio-Acerion forests of slopes, screes and ravines	Unfavourable (2004)	The forest's extent and distribution, structure, regeneration and species composition must not fall below the lower limits and must meet the vision in order to be in favourable condition	Land loss/fragmentation from developments, infrastructure works and telecommunication equipment
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)	Unfavourable (2004)	<ul style="list-style-type: none"> The forest's extent and quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Erosion from bike/vehicle use, heavy trampling and track construction Spread of non-native invasive species Grazing Atmospheric deposition causing high levels of acidity and nutrient nitrogen Disturbance e.g. fly tipping and poaching

Table 3-12 Gower Commons / Tiroedd Comin Gwyr SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Northern Atlantic wet heaths with <i>Erica tetralix</i>	Unfavourable: Declining (2003)	<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 	Land loss/fragmentation from developments, infrastructure works and telecommunication equipment
European dry heaths	Unfavourable (2003)	<ul style="list-style-type: none"> The heaths' extent and habitat quality 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
<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	Unfavourable (2003)	<ul style="list-style-type: none"> The <i>Molinia</i> meadow's extent and habitat quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Erosion from bike/vehicle use, heavy trampling and track construction Water pollution and suspended sediment (principally discharges but also run-off), particularly from agriculture
Southern damselfly	Unfavourable (2003)	<ul style="list-style-type: none"> Habitat extent and quality must not fall below the lower limits and must meet the vision in order to be in favourable condition to support the feature population. 	Grazing, Burning, Encroaching scrub and bracken Disturbance e.g. fly tipping, burning and poaching
Marsh fritillary butterfly	Unfavourable (2003)	<ul style="list-style-type: none"> Habitat extent and quality and 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 	Water abstraction/drainage or any changes in hydrology Atmospheric deposition causing high levels of acidity and nutrient nitrogen- terrestrial and aquatic habitats Spread of non-native invasive species

Table 3-13 Gweunydd Blaencleddau SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Northern Atlantic wet heaths with <i>Erica tetralix</i>	Unfavourable: Declining (2005)	<ul style="list-style-type: none"> The extent and condition of the wet heaths must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Land loss/fragmentation from developments, infrastructure works and telecommunication equipment
<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caeruleae</i>)	Unfavourable: Declining (2005)	<ul style="list-style-type: none"> The extent and condition of <i>Molinia</i> meadows 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. Key areas are with 2km of the SAC. Water abstraction/drainage or any changes in hydrology
Blanket bogs	Unfavourable: Recovering (2005)	<ul style="list-style-type: none"> The extent and condition of blanket bogs 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- terrestrial and aquatic habitats
Transition mires and quaking bogs	Favourable: Maintained (2005)	<ul style="list-style-type: none"> The extent and condition of the transition mires and quaking bogs must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Grazing
Alkaline fens	Favourable: Maintained (2005)	<ul style="list-style-type: none"> The extent and condition of alkaline fens must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Diffuse and point source pollution
Marsh fritillary butterfly	Unfavourable (2005)	<ul style="list-style-type: none"> The recovery targets and habitat quality must be met in addition to the vision in order to be in favourable condition 	Water pollution from run-off Burning
Southern damselfly	Favourable (2005)	<ul style="list-style-type: none"> The presence and population size of Southern damselflies and the extent of breeding habitat must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Scrub encroachment

Table 3-14 Mynydd Epynt SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
<i>Hamatocaulis vernicosus</i> (moss)	Unfavourable (2008)	<ul style="list-style-type: none"> The distribution, population size, extent varnished hook moss and its associated habitat vegetation structure and composition must not fall below the lower limits and must meet the vision in order to be in favourable condition 	Land loss/fragmentation from developments, infrastructure works and telecommunication equipment Water abstraction/drainage or any changes in hydrology Grazing, Military training, Excessive trampling Diffuse and point source pollution incl. Water pollution from run-off, especially from agriculture Atmospheric deposition causing high levels of acidity and nutrient nitrogen- terrestrial and aquatic habitats

Table 3-15 North Pembrokeshire Woodlands / Coedydd Gogledd Sir Benfro SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objectives	Factors influencing Conservation Status
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Unknown; Unfavourable; Recovering (2002)	<ul style="list-style-type: none"> The woods' area, structural development, regeneration and vegetation composition must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Land loss/fragmentation from developments, infrastructure works and telecommunication equipment</p> <p>Water abstraction/drainage or any changes in hydrology</p>
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)	Unknown; Unfavourable; Favourable; Recovering (2007)	<ul style="list-style-type: none"> The forest's area and quality must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Diffuse and point source pollution incl. Water pollution from run-off</p> <p>Disturbance to roosts – human and/or developmental presence (light, noise, chemicals etc.) – in both roosts and feeding areas</p>
Barbastelle	Favourable (2007)	<ul style="list-style-type: none"> The area, structural development and regeneration potential for terrestrial and aquatic habitats must not fall below the lower limits and must meet the vision in order to be in favourable condition to support the feature population. 	<p>Spread of non-native invasive species</p> <p>Land use change, Grazing</p> <p>Atmospheric deposition causing high levels of acidity and nutrient nitrogen- terrestrial and aquatic habitats</p>

Table 3-16 Pembrokeshire Bat Sites and Bosherton Lakes / Safleoedd Ystlum Sir Benfro a Llynnoedd Bosherton SAC

Feature	Condition From Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.	Unfavourable; Declining (2007)	<ul style="list-style-type: none"> The water and <i>Chara</i> spp. extent and quality; and vegetation composition must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Land loss/fragmentation from developments, infrastructure works and telecommunication equipment</p> <p>Water abstraction/drainage or any changes in hydrology</p> <p>Inappropriate engineering works, canalisation and impoundment works, especially those that form a physical or acoustic barrier across water courses such as dams and weirs</p>
Greater horseshoe bat Lesser horseshoe bat	Favourable; Maintained (2007)	<ul style="list-style-type: none"> The population size and availability of the different roosts utilised by bats during their life cycles composition must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Diffuse and point source pollution incl. Water pollution from run-off (nitrate, phosphate, suspended sediments)</p> <p>Fish stocking and fishing</p> <p>Spread of non-native invasive plant and animal species</p> <p>Land use change</p>

Feature	Condition From Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Otter	Unfavourable: (2007) Declining	<ul style="list-style-type: none"> Otter population, breeding activity and suitable habitat availability must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Recreation causing bank side erosion</p> <p>Modification of roosts including destruction</p> <p>Disturbance – noise, lighting, exposure to fumes or chemicals, human presence – in both roosting sites and feeding areas</p> <p>Grazing</p> <p>Loss/severance of hedgerows and tree lines used as flight paths by bats and as wildlife corridors</p> <p>Roads – direct mortality of otter</p>

Table 3-17 Pembrokeshire Marine / Sir Benfro Forol SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
<p>Estuaries</p> <p>Large shallow inlets and bays</p> <p>Reefs</p> <p>Sandbanks which are slightly covered by sea water all the time</p> <p>Mudflats and sandflats not covered by seawater at low tide</p> <p>Coastal lagoons</p> <p>Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>)</p> <p>Submerged or partially submerged sea caves</p>	Unfavourable	<ul style="list-style-type: none"> The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing The physical biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded. The presence, abundance, condition and diversity of typical species are such that habitat quality is not degraded. 	<p>Water pollution from run-off (nitrate, phosphate, chemicals, oil, sewage etc.) and vessel cleaning</p> <p>Modification of the seabed – sewage outlets, artificial reefs, barrages.</p> <p>Inappropriate engineering including coastal engineering i.e. coastal defence, beach stabilisation, coastal development</p> <p>Dredging and dredge-spoil disposal</p> <p>Diffuse and point source pollution – oil and gas from shipping and exploration</p> <p>Dock, marina and shipping infrastructure</p> <p>Pipelines, power stations, cabling, drainage channels</p> <p>Commercial fishing and aquaculture</p> <p>Recreation – boating, angling, vehicular activities, visitor pressure</p>

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Grey seal Shore dock Sea lamprey River lamprey Allis shad Twaite shad Otter	Unfavourable	<ul style="list-style-type: none"> The population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements are population size, structure, production, and condition of the species within the site. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future. The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. 	<p>Spread of non-native invasive species</p> <p>Fishing – dredging and anchoring of vessels (recreational and commercial)</p> <p>Bait digging, over grazing</p> <p>Land claim</p> <p>Litter</p> <p>Land loss/habitat severance from developments, infrastructure works and telecommunication equipment</p> <p>Roads – direct mortality of otter</p>

Table 3-18 Preseli SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Northern Atlantic wet heaths with <i>Erica tetralix</i>	Unfavourable: Unclassified (2004)	<ul style="list-style-type: none"> The extent and quality of wet heath habitat must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Grazing</p> <p>Burning</p>
European dry heaths	Unfavourable: Unclassified (2004)	<ul style="list-style-type: none"> The extent and quality of dry heath habitat must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Water pollution from run-off (nitrate, phosphate, chemicals, oil, sewage etc.)</p>
Depressions on peat substrates of the <i>Rhynchosporion</i>	Favourable: Unclassified (2004)	<ul style="list-style-type: none"> The extent and quality of the Depressions on peat substrates of the <i>Rhynchosporion</i> habitat must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Diffuse and point source pollution</p> <p>Water abstraction/drainage or any changes in hydrology</p>
Alkaline fens	Favourable: Unclassified (2004)	<ul style="list-style-type: none"> The extent and quality of alkaline fen habitat must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Atmospheric deposition causing high levels of acidity and nutrient nitrogen- terrestrial and aquatic habitats</p>
Southern damselfly	Favourable (2004)	<ul style="list-style-type: none"> The presence and population size of Southern damselflies and the extent of their breeding habitat must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Recreation – heavy trampling</p>
Marsh fritillary butterfly	Unfavourable (2006)	<ul style="list-style-type: none"> The population size (larval webs) of Marsh fritillary butterflies and the extent of their breeding habitat must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Land loss/fragmentation from developments, infrastructure works and telecommunication equipment</p>
<i>Hamatocaulis vernicosus</i> (moss)	Favourable: Unclassified	<p>Due to its widespread distribution, the feature is now regarded in combination with rare mosses on damp ground (SSSI feature). This states that:</p> <ul style="list-style-type: none"> The population size and distribution of rare grasses on damp ground and their associated habitat attributes must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Loss of land, shelter belts and hedges surrounding SAC suitable to support metapopulations e.g. due to industrial and residential development. Key areas are with 2km of the SAC.</p>

Table 3-19 Rhos Llawr-Cwrt SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
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 	Land loss/fragmentation from developments, infrastructure works and telecommunication equipment
<i>Hamatocaulis vernicosus</i> (moss)	Unfavourable: Unclassified (2004)	<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 	<p>Atmospheric deposition causing high levels of acidity and nutrient nitrogen</p> <p>Loss of land, shelter belts and hedges surrounding SAC suitable to support metapopulations e.g. due to industrial and residential development. Key areas are with 2km of the SAC.</p> <p>Alterations in hydrology including water abstraction and drainage</p> <p>Construction of roads and vehicle usage including off-roading</p> <p>Pollution from agricultural run-off</p> <p>Grazing</p>

Table 3-20 River Usk / Afon Wysg SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Water courses of plain to montane levels with the <i>Ranuncilion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	Unfavourable: unclassified	<p>To reach favourable condition the features must meet the overall river objectives plus:</p> <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. 	<p>Water abstraction reducing flow rates, artificially regulating flow, causing entrainment of fish and affecting water quality</p> <p>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</p>
Otter	Favourable	<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, as determined by natural levels of prey abundance and associated territorial behaviour. 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 	<p>Flood defences alter important bank side habitats and prevent natural river processes</p> <p>Water pollution through disposal of sewage effluent, run-off etc.</p> <p>Fish stocking</p>

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
		facilitated by the provision, where necessary, of suitable riparian habitat, and underpasses, ledges, fencing etc at road bridges and other artificial barriers.	Fish farms
Sea lamprey	Unfavourable: unclassified	<ul style="list-style-type: none"> The population of the feature in the SAC is stable or increasing over the long term. The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. 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. 	Acidification and eutrophication from atmospheric deposition- terrestrial and aquatic habitats
River lamprey Brook lamprey	Favourable		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 or impacts on river bed structure
Atlantic salmon Bullhead Twaite shad Allis shad	Unfavourable: unclassified		<p>Sand and gravel quarrying activities adjacent to water course</p> <p>Small hydro-electric schemes</p> <p>Non-native invasive species</p> <p>Effects on water quality from forestry and abandoned metal mines</p> <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>Roads – direct mortality of otter</p>

Table 3-21 River Wye / Afon Gwy (Wales) SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation Transition mires and quaking bogs	Unfavourable: Unclassified	To reach favourable condition the features must meet the overall river objectives plus: <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
Otter	Unfavourable	<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 	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
			Flood defences alter important bank side habitats and prevent natural river processes

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
		<p>within the SAC, as determined by natural levels of prey abundance and associated territorial behaviour.</p> <ul style="list-style-type: none"> 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 necessary, of suitable riparian habitat, and underpasses, ledges, fencing etc at road bridges and other artificial barriers. 	<p>Water pollution through disposal of sewage effluent, run-off and siltation. Lack of water treatment capability</p> <p>Diffuse and point source pollution incl Agricultural run-off causing pollution and suspended sediment</p> <p>Fish stocking, Fishing and Fish farms</p>
White clawed crayfish	Unfavourable: Declining	<ul style="list-style-type: none"> The population of the feature in the SAC is stable or increasing over the long term. The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. 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. 	<p>Acidification and eutrophication from atmospheric deposition- terrestrial and aquatic habitats</p> <p>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 or impacts on river bed structure</p> <p>Sand and gravel quarrying activities adjacent to water course</p> <p>Small hydro-electric schemes</p> <p>Non-native invasive species</p> <p>Effects on water quality from forestry and abandoned metal mines</p> <p>Recreation (including fishing, walking, gorge walking and boating) and associated tourist development</p> <p>Roads – direct mortality of otter</p>
Sea lamprey	Favourable: Unclassified		
River lamprey Brook lamprey Atlantic salmon Bullhead Twaite shad Allis shad	Unfavourable: Unclassified		

Table 3-22 Yerboston Tops SAC

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caeruleae</i>)	Unfavourable: Recovering (2005)	<ul style="list-style-type: none"> The extent and condition of <i>Molinia</i> meadow habitat must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Grazing</p> <p>Scrub encroachment</p> <p>Burning</p>
Marsh fritillary butterfly	Unfavourable (2005)	<ul style="list-style-type: none"> The marsh fritillary's abundance (larval webs) and habitat quality and extent must not fall below the lower limits and must meet the vision in order to be in favourable condition 	<p>Land loss/fragmentation from developments, infrastructure works and telecommunication equipment</p> <p>Loss of land, shelter belts and hedges surrounding SAC</p>

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
			<p>suitable to support metapopulations e.g. due to industrial and residential development. Key areas are with 2km of the SAC.</p> <p>Alterations in hydrology including water abstraction and drainage</p> <p>Atmospheric deposition causing high levels of acidity and nutrient nitrogen- terrestrial and aquatic habitats</p> <p>Water pollution from run-off (nitrate, phosphate, chemicals etc.)</p>

Table 3-23 Bae Caerfyrddin / Carmarthen Bay SPA (Part of the Carmarthen Bay and Estuaries European Marine Site)

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Common scoter	Favourable: Unclassified	<ul style="list-style-type: none"> The numbers of common scoter bird species are stable or increasing. The abundance and distribution of suitable prey are sufficient and appropriate to support population. All SPA birds are allowed to inhabit their feeding grounds and resting areas with minimum disturbance, and are allowed to move unhindered between them. All states of the Conservation Objectives for the supporting habitats and species, subject to natural processes, are fulfilled and maintained in the long-term. 	<p>Recreation (water sports, boating and aerial activity) Pollution and suspended sediment (principally discharges but also run-off)</p> <p>Dredging and trawling, Commercial fishing</p> <p>Water abstraction and mineral extraction</p> <p>Power Stations, Wind Farms, Artificial reefs and barrages</p> <p>Military testing</p> <p>Refuse disposal, Sewage/waste disposal</p> <p>Port and Marina development moorings and associated facilities</p> <p>Operation and Maintenance of ports and pipelines and other infrastructure</p> <p>Coastal squeeze including loss of sand and mud-flat as a result of new coastal development / Land claim</p> <p>Disposal of dredged material</p> <p>Shellfish management and associated access</p> <p>Former waste disposal sites - contaminated land Coastal engineering including coastal defence</p>

Table 3-24 Elenydd – Mallaen SPA

Feature	Condition from Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
Merlin	Favourable (2003)	<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 	<p>Land loss from development including infrastructure works and telecommunications</p> <p>Atmospheric deposition causing high levels of acidity and nutrient nitrogen- terrestrial and aquatic habitats</p>
Red kite	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 	<p>Recreation causing disturbance</p> <p>Wind farm development</p> <p>Grazing, Burning</p>

Table 3-25 Burry Inlet SPA and RAMSAR (Part of the Carmarthen Bay and Estuaries European Marine Site)

Feature	Condition From Core Management Plan incl. date of assessment	Conservation Objective	Factors influencing Conservation Status
<p>Northern Pintail Northern shoveler Teal Wigeon Dunlin Red knot Oystercatcher Curlew Grey plover Shelduck Redshank</p> <p>Intertidal mud- and sand- flats Salt marsh Noteworthy flora Noteworthy fauna</p>	Unknown	<ul style="list-style-type: none"> The numbers of all SPA bird species are stable or increasing. The abundance and distribution of suitable prey are sufficient and appropriate to support population. All SPA birds are allowed to inhabit their feeding grounds and resting areas with minimum disturbance, and are allowed to move unhindered between them. All states of the Conservation Objectives for the supporting habitats and species, subject to natural processes, are fulfilled and maintained in the long-term. 	<p>Recreation (water sports and boating, inappropriate access)</p> <p>Water pollution (principally discharges but also run-off)</p> <p>Dredging and trawling, Commercial fishing (with regard to stock numbers and damage to underwater features), Fishing</p> <p>Water abstraction and mineral extraction</p> <p>Power Stations and generation schemes, Off shore Wind Farm development, Artificial reefs and barrages</p> <p>Fish farming/fish stocking</p> <p>Refuse disposal, Sewage/waste disposal</p> <p>Port and Marina development moorings and associated facilities</p> <p>Operation and Maintenance of ports and pipelines and other infrastructure</p> <p>Coastal squeeze including loss of sand and mud-flat as</p>

Feature	Condition From Core Plan incl. assessment	Management date of	Conservation Objective	Factors influencing Conservation Status
				a result of new coastal development / Land claim Disposal of dredged material Shellfish management and associated access Former waste disposal sites - contaminated land Coastal engineering including coastal defence

4.1 Introduction

The LDP policies are divided in to two categories, strategic and specific. The Preliminary Screening of the Preferred Strategy (Jacobs 2009) indicated that the strategic policies may have an effect on the European Site network and this has been summarised in Table 4-1.

Table 4-1 Summary of the preferred Strategy Assessment and link to the scope of the LDP Policies Assessment

Strategic Policy	Preferred Strategy Assessment	Scope of LDP Policies Assessment
SP1 Sustainable Places and Spaces	It is likely that this policy will not result in any potential impacts on European sites; however specific policies that may sit within this strategic policy could be used to mitigate impacts.	Assessment of detailed policies. GP1
SP2 Climate Change	It is likely that this policy will not result in any potential impacts on European sites, however specific policies that may sit within this strategic policy could be used to mitigate impacts	Assessment of detailed policies.
SP3 Sustainable Distribution - Settlement Framework	<p>It is likely that this policy will result potential impacts on European sites, however specific policies that may sit within this strategic policy could be used to mitigate impacts.</p> <p>European sites potentially affected by the highlighted Growth Areas:</p> <ul style="list-style-type: none"> • River Tywi SAC • Carmarthen Bay and Estuaries SAC • Burry Inlet SPA/Ramsar • Caeau Mynydd Mawr SAC • Cernydd Carmel SAC <p>The non-strategic Tier 2 and 3 settlements have the potential to affect the European Sites in close proximity to them and depending on the development plans in these areas there is also the potential to have both water quality and water supply and hydrology impacts.</p>	<p>Assessment of detailed policies GP2, GP3, GP4, GP5, H1-7, AH1-4, EMP1-5, RT1-8.</p> <p>These policies are also assessed via the site allocation that has been created using a Sustainable Distribution - Settlement Framework, includes strategic sites, housing, employment and retail.</p> <p>Non Spatial Impacts (Water resource and quality)</p> <ul style="list-style-type: none"> • River Tywi SAC • River Teifi SAC • Cleddau SAC • Carmarthen Bay and Estuaries EMS • Pembrokeshire Marine SAC
SP4 Strategic Sites	<p>Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts:</p> <ul style="list-style-type: none"> • Air quality • Water quality • Water supply and hydrology • Disturbance • Land take and fragmentation 	<p>Spatial Impacts (habitat loss (land take, non-native/ invasive species), disturbance, air quality and fragmentation)</p> <ul style="list-style-type: none"> • Caeau Mynydd Mawr SAC • Cernydd Carmel SAC • River Tywi SAC • River Teifi SAC • Carmarthen Bay and Estuaries EMS
SP5 Housing	<p>Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts:</p> <ul style="list-style-type: none"> • Water quality • Water supply and hydrology • Disturbance • Land take and fragmentation • Non-native invasive species 	
SP6 Affordable Housing	<p>Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts:</p> <ul style="list-style-type: none"> • Water quality • Water supply and hydrology • Disturbance • Land take and fragmentation • Non-native invasive species 	
SP7 Employment	<p>Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts:</p> <ul style="list-style-type: none"> • Air quality • Water quality • Water supply and hydrology • Disturbance • Land take and fragmentation • Non-native invasive species 	

Strategic Policy	Preferred Strategy Assessment	Scope of LDP Policies Assessment
SP8 Retail	Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts: <ul style="list-style-type: none"> • Water quality • Water supply and hydrology • Disturbance • Land take and fragmentation 	
SP9 Transportation	Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts: <ul style="list-style-type: none"> • Air quality • Water quality • Water supply and hydrology • Disturbance • Land take and fragmentation • Non-native invasive species 	Assessment of the detailed policies. Growth Area Assessment for Carmarthen and Ammanford/Cross Hands include in-combination effects of the allocation and the highway infrastructure that has been safeguarded in this policy. Other safeguarded routes to be assessed in combination with the site allocation.
SP10 Sustainable Mineral Development	Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts: <ul style="list-style-type: none"> • Air quality • Water quality • Water supply and hydrology • Disturbance • Land take and fragmentation • Non-native invasive species 	The strategic policy safeguards mineral resource areas within the proposals map, these areas will be assessed as part of the site allocation. Detailed policy MPP1 – requires any new mineral developments to have no significant adverse impacts on nature conservation sites.
SP11 Renewable Energy and Energy Efficiency	Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts: <ul style="list-style-type: none"> • Disturbance • Land take and fragmentation • Non-native invasive species 	SP11 identifies – Brechfa Forest and Pontardawe as potential wind farm areas. These are Strategic Search Areas (SSAs) (TAN8 (WAG2005)). These areas are considered unlikely to have an effect on the European site network by virtue of their inclusion in TAN8 and because there are no European sites within approximately 2.5km. The key potential impacts of wind farm sites are on birds and bats. However, the nearest European bird site (SPA) is over 10km away and the nearest European bat sites are over 30km away from these SSAs. All renewable energy projects will require assessment at the project level to screen any potential effects, particularly with respect to mobile species (bats, birds, fish and otter). Assessment of detailed policies
SP12 Waste Management	Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts: <ul style="list-style-type: none"> • Air quality • Water quality • Water supply and hydrology • Disturbance • Landtake and fragmentation • Non-native invasive species 	LDP developed proposals and policies with regard to the Overarching Waste Strategy Document for Wales “Towards Zero Waste”, Planning Policy Wales Ed. 7 and TAN21: Waste (2014) No proposals for any new “open air” sites. In-building proposals possible but assessed as part of employment site allocation.
SP13 Protection and Enhancements of the Historic and Built Environment	This policy will not result in any impacts on European Sites	
SP14 Protection and Enhancements of the Natural Environment	It is likely that this policy will not result in any potential impacts on European sites, however specific policies that may sit within this strategic policy could be used to mitigate impacts	Assessment of detailed policies.

Strategic Policy	Preferred Strategy Assessment	Scope of LDP Policies Assessment
SP15 Tourism and the Visitor Economy	Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts: <ul style="list-style-type: none"> • Disturbance • Water quality • Water supply and hydrology • Land take and fragmentation • Non-native invasive species 	Assessment of detailed policies.
SP16 Community Facilities	Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts: <ul style="list-style-type: none"> • Water quality • Water supply and hydrology • Disturbance • Land take and fragmentation 	The strategic policy is linked to the settlement framework, so further assessment is therefore considered as part of the assessment of the site allocation. Assessment of detailed policies on recreation and leisure
SP17 Infrastructure.	Development of these sites to allow the implementation of the strategy has the potential to result in the following impacts: <ul style="list-style-type: none"> • Air quality • Water quality • Water supply and hydrology • Disturbance • Land take and fragmentation • Non-native invasive species 	The strategic policy is linked to the settlement framework, so further assessment is therefore considered as part of the assessment of the site allocation. Assessment of detailed policies on environmental protection.
SP 18 Welsh Language	This policy will not result in any impacts on European Sites	

4.2 Detailed Policy Assessment

This assessment section looks at each of the policies using a simple proforma to determine any likely significant effects on the European site network. The key impacts on European sites are related to the LDP's new proposals for development, areas safeguarded for mineral extraction and road schemes proposed in National and Regional Transport Plans.

This assessment therefore is focussed on how a policy is likely to influence the risk of spatial or non-spatial impacts occurring as a result of the proposals.

4.2.1 General Policies

Policy Title	GP1 Sustainability and High Quality Design
Summary	Guide and influence the design quality of development proposals with the county
Potential for Impacts	Unlikely, policy makes specific reference to biodiversity enhancement and ecological connectivity
Likely Significant Effects	No

Policy Title	GP2 Development Limits
Summary	Limits defined for all communities in Settlement Framework to essentially identify areas where development is permitted.
Potential for Impacts	The spatial and non-spatial impacts as a result of development in the settlement framework are assessed as part of the development allocation in chapter 5.
Likely Significant Effects	The policy will prevent inappropriate development in the wider countryside and settlement coalescence which will reduce the risk of likely significant effects from development.

Policy Title	GP3 Planning Obligations
Summary	Allows for Section 106 Agreements or contributions via the Community Infrastructure Levy to fund improvements or future provisions as a result of new developments
Potential for Impacts	Potential for provisions such as biodiversity enhancement areas and infrastructure betterment (linked to GP4) therefore highly likely to result in positive impacts.
Likely Significant Effects	Dependent on location, however unlikely to result in significant impacts and potential for positive impacts and betterment.

Policy Title	GP4 Infrastructure and New Development
Summary	Development proposals will only be permitted if adequate infrastructure is in place and if new infrastructure is required it will be developer funded/assisted.
Potential for Impacts	No impacts but considered a safeguard mechanism or mitigation for non-spatial impacts within the development allocation assessment in chapter 5.
Likely Significant Effects	Highly likely to reduce the risk of significant effects as a result of development. This is one of the key mitigation policies and will be linked to the LDP monitoring strategy. The monitoring strategy will include relevant reporting criteria to enable the effective function of this policy from a European site perspective.

Policy Title	GP6 Advertisements
Summary	Advertising that is subject to planning controls will be strictly controlled.
Potential for Impacts	No impacts considered likely.
Likely Significant Effects	None

Policy Title	GP7 Extensions
Summary	Extension of existing residential properties must comply with a variety of requirements including no adverse effect on the natural environment.
Potential for Impacts	Potential for spatial and non-spatial impacts, however the requirement to comply with this policy will mitigate these. There is a key potential impact which will be dependent on the use of a dwelling by bats belonging to an SAC out with Carmarthenshire.
Likely Significant Effects	This policy is likely to mitigate and therefore unlikely to result in a significant effect on a Bat SAC.

4.2.2 Housing

Policy Title	H1 Housing Allocations
Summary	Land has been allocated for housing purposes throughout the county.
Potential for Impacts	This is assessed in detail as the residential allocation within Chapter 5.
Likely Significant Effects	This is assessed in detail as the residential allocation within Chapter 5.

Policy Title	H2 Housing within Development Limits
Summary	Allows for un-allocated small housing sites to be developed within development limits.
Potential for Impacts	Potential for spatial and non-spatial impacts with HRA requirements at project level. Other general policies will also provide safeguards/mitigation for non-spatial impacts in particular.
Likely Significant Effects	Extremely low risk of likely significant effect as within already developed area and small sites reduce likelihood of significant effects from non-spatial sites.

Policy Title	H3 Conversion or Subdivision of Existing Dwellings
Summary	Provides a number of requirements on permissions being granted.
Potential for Impacts	Potential for spatial and non-spatial impacts, however the general policies on infrastructure and natural environment will mitigate these. There is a key potential impact which will be dependent on the use of a dwelling by bats belonging to an SAC out with Carmarthenshire.
Likely Significant Effects	Unlikely to result in a significant effect on a Bat SAC.

Policy Title	H4 Replacement Dwellings
Summary	Provides a number of requirements on permissions being granted.
Potential for Impacts	Potential for spatial and non-spatial impacts, however the general policies on infrastructure and natural environment will mitigate these. There is a key potential impact which will be dependent on the use of a dwelling by bats belonging to an SAC out with Carmarthenshire.
Likely Significant Effects	Unlikely to result in a significant effect on a Bat SAC.

Policy Title	H5 Adaptation and Re-use of Rural Buildings for Residential Use
Summary	Provides a number of requirements on permissions being granted.
Potential for Impacts	Potential for spatial and non-spatial impacts, however the general policies on infrastructure and natural environment will mitigate these. There is a key potential impact which will be dependent on the use of a dwelling by bats belonging to an SAC out with Carmarthenshire.
Likely Effects	Significant Natural environment policies mean it is unlikely to result in a significant effect on a Bat SAC.

Policy Title	H6 Residential Care Facilities
Summary	Allows for residential care facilities to be developed within development limits or extend existing facilities.
Potential for Impacts	Potential for spatial and non-spatial impacts with HRA requirements at project level depending on exact locations. Other policies provide safeguards/mitigation for non-spatial impacts in particular.
Likely Effects	Significant Extremely low risk of likely significant effect if within already developed areas and extension of existing facilities.

Policy Title	H7 Gypsy and Traveller Sites
Summary	Provides a number of requirements to new site permissions being granted.
Potential for Impacts	There is potential for impacts, particularly spatial if a proposed site was close to a European site. Key spatial areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's and in close proximity to the otter SAC's and SPA's where habitat loss and disturbance may be an issue. Other policies such as EQ4 and EQ7 will mitigate any risk.
Likely Effects	Significant Unlikely to result in a significant effect.

Policy Title	H8 Renovation of Derelict or Abandoned Dwellings
Summary	Provides a number of requirements on permissions being granted.
Potential for Impacts	Potential for spatial and non-spatial impacts, however the general policies on infrastructure and natural environment will mitigate these. There is a key potential impact which will be dependent on the use of a dwelling by bats belonging to an SAC out with Carmarthenshire.
Likely Effects	Significant Unlikely to result in a significant effect on a Bat SAC.

Policy Title	H9 Residential Caravans
Summary	Provides a number of requirements on permissions being granted.
Potential for Impacts	None. The policy requirements are such that no potential impacts are anticipated.
Likely Effects	Significant None

Policy Title	H10 Home Working
Summary	Provides requirements and clarity on when planning is required for operating a business from home.
Potential for Impacts	Potential for spatial and non-spatial impacts, however the general policies on infrastructure and natural environment will be likely to mitigate these.
Likely Effects	Significant Extremely low risk of likely significant effect if within already developed areas and using of existing facilities.

Policy Title	AH1 Affordable Housing
Summary	Sets out affordable housing requirements.
Potential for Impacts	None. It is included within the residential site allocation, which is assessed in Chapter 5.
Likely Effects	Significant None

Policy Title	AH2 Affordable Housing – Exceptions Sites
Summary	Provides a number of requirements that would allow affordable housing development on sites adjacent to development limits.
Potential for Impacts	Potential for spatial and non-spatial impacts with HRA requirements at project level depending on exact locations. Key spatial impact areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's (latter two are in Pembrokeshire) and in close proximity to the river SAC's (otters) and SPA's (birds) where habitat loss and disturbance may be an issue. Policies such as EQ4 and EQ7 will mitigate any spatial risks. Other policies provide safeguards/ mitigation for non-spatial impacts in particular.
Likely Effects	Significant Unlikely to result in a significant effect.

Policy Title	AH3 Affordable Housing – Minor Settlement in Open Countryside
Summary	Provides a number of requirements that would allow affordable housing single dwelling development in areas without development limits.
Potential for Impacts	Potential for spatial impacts with HRA requirements at project level depending on exact locations. Key spatial impact areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's (latter two are in Pembrokeshire) and in close proximity to the otter SAC's and SPA's where habitat loss and disturbance may be an issue. Policies such as EQ4 and EQ7 will mitigate any spatial risks. Other policies provide safeguards/mitigation for non-spatial impacts in particular.
Likely Effects	Significant Unlikely to result in a significant effect.

4.2.3 Economy and Employment

Policy Title	EMP1 Employment – Safeguarding of Employment Sites
Summary	Land has been allocated for employment purposes throughout the county.
Potential for Impacts	This is assessed in detail as the employment allocation within Chapter 5.
Likely Effects	Significant This is assessed in detail as the employment allocation within Chapter 5.

Policy Title	EMP2 New Employment Proposals
Summary	Sets out the requirements for new employment sites within or adjacent to development limits.
Potential for Impacts	Potential for spatial and non-spatial impacts with HRA requirements at project level depending on exact locations. Key spatial impact areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's (latter two are in Pembrokeshire) and in close proximity to the river SAC's (otters) and SPA's (birds) where habitat loss and disturbance may be an issue. Other policies provide safeguards/ mitigation for non-spatial impacts in particular.
Likely Effects	Significant Unlikely to result in a significant effect.

Policy Title	EMP3 Employment – Extensions, Intensification
Summary	Sets out the requirements for extensions etc. of existing employment sites.
Potential for Impacts	Generally unlikely to be any impacts, however this depends on the location. Key spatial impact areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's (latter two are in Pembrokeshire), within the range of bat SACs (more likely in west of county), and in close proximity to the river SAC's (otters) and SPA's (birds) where habitat loss and disturbance may be an issue. Policies such as EQ4 and EQ7 will mitigate any spatial risks. Other policies provide safeguards/ mitigation for non-spatial impacts in particular.
Likely Effects	Significant Unlikely to result in a significant effect.

Policy Title	EMP4 Farm Diversification
Summary	Sets out the requirements for farm diversification projects.
Potential for Impacts	Potential for impacts dependent on the location. Key spatial impact areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's (latter two are in Pembrokeshire) and in close proximity to the river SAC's (otters) and SPA's (birds) where habitat loss and disturbance may be an issue. Policies such as EQ4 and EQ7 will mitigate any spatial risks. Other policies provide safeguards/ mitigation for non-spatial impacts in particular.
Likely Effects	Significant Unlikely to result in a significant effect.

Policy Title	EMP5 Mixed Use Sites
Summary	Sets out the mixed use site allocation throughout the county.
Potential for Impacts	This is assessed in detail as the mixed use allocation within Chapter 5.
Likely Effects	Significant This is assessed in detail as the mixed use allocation within Chapter 5.

4.2.4 Retailing

Policy Title	RT1 Retail Hierarchy
Summary	Sets out the framework for retail proposals.
Potential for Impacts	The framework mirrors the settlement framework and the site allocation is broadly assessed within Chapter 5. New sites, change of use and redevelopment of existing sites for retail may have spatial impacts depending on their exact location. Key spatial impact areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's (latter two are in Pembrokeshire) and in close proximity to the river SAC's (otters) and SPA's (birds) where habitat loss and disturbance may be an issue. Policies such as EQ4 and EQ7 will mitigate any spatial risks. Other policies provide safeguards/ mitigation for non-spatial impacts in particular.
Likely Effects	Significant Unlikely to result in a significant effect.

Policy Title	RT2 Principal Centres (Growth Areas): Primary Retail Frontage RT3 Principal Centres (Growth Areas): Secondary Retail Frontage RT4 Principal Centres (Growth Areas): Town Centre Zones RT5 Town Centres (Service Centres) RT6 Town Centres (Service Centres) – Convenience Stores
Summary	Various requirements on non-retail use proposals
Potential for Impacts	None
Likely Effects	Significant None

Policy Title	RT7 District Centres (Local Service Centres)
Summary	Requirements for small scale retail proposals.
Potential for Impacts	The policy requires any proposals to be within development limits therefore any impacts are extremely unlikely. Other policies provide safeguards/ mitigation for non-spatial impacts.
Likely Effects	Significant None

Policy Title	RT8 Local Shops and Facilities
Summary	Requirements of proposals that would result in loss of local shops/facilities.
Potential for Impacts	None
Likely Effects	Significant None

Policy Title	RT9 Regional Centres (Retail Parks)
Summary	Requirements for proposals within designated retail parks.
Potential for Impacts	It has been assumed that proposals would be within existing retail parks and no greenfield development necessary, therefore no impacts are anticipated.
Likely Significant Effects	None

4.2.5 Transport and Accessibility

Policy Title	TR1 Primary and Core Road Networks
Summary	Defines the primary and core road network.
Potential for Impacts	If any of the existing road network has elements of development within it then there is potential for 'in-combination' effects with both the National Transport Plan and Regional Transport Plan. This is assessed in section 5.3 of this document.
Likely Significant Effects	Other policies such as EQ4 will set a mitigation framework that will significantly reduce the risk of any likely significant effects.

Policy Title	TR2 Location of Development – Transport Considerations
Summary	Requirements for proposals with a significant trip generation.
Potential for Impacts	This policy promotes non car modes of transport, therefore has the potential to contribute to air quality improvement and can be considered a positive impact to those European sites sensitive to negative changes in air quality.
Likely Significant Effects	None.

Policy Title	TR3 Highways in Developments – Design Considerations
Summary	Requirements of highway design and layout.
Potential for Impacts	The SUDS provision is considered a positive impact to European sites sensitive to negative changes in water quality. Potential for spatial impacts depending on location of highways within developments. Key spatial impact areas are within metapopulation areas of the Caeau Mynydd Mawr and in close proximity to the river SAC's (otters) and SPA's (birds) where habitat loss and disturbance may be an issue. Policies such as EQ4 and EQ7 will mitigate any spatial risks.
Likely Significant Effects	Unlikely to result in a significant effect.

Policy Title	TR4 Cycling and Walking
Summary	Safeguards land required to facilitate improvements to the cycle network including opportunities for equestrians.
Potential for Impacts	Potential for spatial impacts depending on location. Key spatial impact areas are within metapopulation areas of the Caeau Mynydd Mawr and in close proximity to the river SAC's (otters) and SPA's (birds) where habitat loss and disturbance may be an issue. Policies such as EQ4 and EQ7 will mitigate any spatial risks. This policy has potential to contribute to air quality improvement and can be considered a positive impact to those European sites sensitive to negative changes in air quality.
Likely Significant Effects	Unlikely to result in a significant effect.

Policy Title	TR5 Gwili Railway
Summary	Defines the proposals for the Gwili railway extension and new stations.
Potential for Impacts	The historic track bed and station locations are not in close proximity to the European site network. The Afon Gwili does flow in to the River Tywi SAC and therefore has the potential to be used by the SAC species. A project level HRA will define the impacts and mitigation measures. Policies such as EQ4 and SPG will mitigate any spatial risks.

Likely Effects	Significant	Unlikely to result in a significant effect but project level HRA required.
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Policy Title	TR6 Redundant Rail Corridors	
Summary	No development proposals permitted on redundant rail corridors that would prejudice their re-use recreationally or for rail.	
Potential for Impacts	None	
Likely Effects	Significant	None

4.2.6 Environmental Qualities – Built Environment

Policy Title	EQ1 Protection of Buildings and Features of Historic Importance EQ2 Enabling Development	
Summary	Set out requirements for protection and securing the long term future of a historic feature or building.	
Potential for Impacts	Extremely unlikely but potential to have spatial impacts dependent upon location of any proposals. The presence of mobile SAC species such as bats, otters and marsh fritillary are the most likely risks to a development proposal having an impact. Policies such as EQ4 and SPG will mitigate any spatial risks.	
Likely Effects	Significant	Unlikely to result in a significant effect.

4.2.7 Environmental Qualities – Natural Environment

Policy Title	EQ3 Regional and Local Designations	
Summary	Development proposals will not be permitted if they are likely to have a negative effect on regional and local designations.	
Potential for Impacts	None. This policy has the potential to have a positive impact on the European sites by safeguarding areas that may be used by mobile SAC species.	
Likely Effects	Significant	None. Policy provides a good safeguard against any likely significant effects of any development (both allocated and non allocated proposals).

Policy Title	EQ4 Biodiversity	
Summary	Set out development proposals requirements to protect biodiversity.	
Potential for Impacts	None. This policy has the potential to have a positive impact on the European sites by safeguarding areas that may be used by mobile SAC species and areas in close proximity to European sites.	
Likely Effects	Significant	None. Policy provides a good safeguard/mitigation against any likely significant effects of any development (both allocated and non allocated proposals). This is one of the key mitigation policies and will need to be linked to the LDP monitoring strategy. The monitoring strategy will include relevant reporting criteria to enable the effective function of this policy from a European site perspective.

Policy Title	EQ5 Corridors, Networks and Features of Distinctiveness	
Summary	Set out development proposals requirements to protect local distinctiveness.	
Potential for Impacts	None. This policy has the potential to have a positive impact on the European sites by safeguarding areas that may be used by mobile SAC species and areas in close proximity to European sites.	
Likely Effects	Significant	None. Policy provides a good safeguard/mitigation against any likely significant effects of any development (both allocated and non allocated proposals).

Policy Title	EQ6 Special Landscape Areas	
Summary	Defines the Special Landscape Areas that have been designated.	
Potential for Impacts	None	
Likely Effects	Significant	None

Policy Title	EQ7 Development within the Caeau Mynydd Mawr SPG Area
Summary	Sets out the SPG area and the planning obligations associated with development within it.
Potential for Impacts	This policy has the potential to have a positive impact on the Caeau Mynydd Mawr SAC.
Likely Significant Effects	None, this is a mitigation measure for any likely significant effects of the site allocation in much of GA3.

4.2.8 Renewable Energy

Policy Title	RE1 Large Scale Wind Power
Summary	Sets out the permission requirements for large scale wind farms.
Potential for Impacts	There are risks to birds from SPAs within and outside of the Carmarthenshire boundary. The proposed areas at Brechfa Forest and Pontardawe are about 15km from an SPA. This policy has clear requirements that will protect European sites which is considered to include SAC and SPA mobile species such as birds, bats, fish and otter which may range out with the protected site boundaries. Project level HRA will be required to ensure no significant effects on European Sites.
Likely Significant Effects	The Strategic Search Areas defined by TAN 8 have been the subject of a Strategic Environmental Assessment (SEA) and the potential effects on SPAs was not considered a key issue. Due to this outcome, and by virtue of their inclusion in the TAN8 SSAs, these sites are considered unlikely to have significant effects on European Sites. However, this does not remove the requirement to defer HRA to the project level.

Policy Title	RE2 Local, Community and Small Wind Farms
Summary	Sets out the permission requirements for small scale wind farms/ individual turbines.
Potential for Impacts	There are risks to birds in particular and the location of the proposals in relation to the SPA's is key issue.
Likely Significant Effects	This policy has clear requirements that will protect European sites and that is considered appropriate to reduce the risk of likely significant effects. The requirements protecting European sites are also considered to include SAC and SPA mobile species such as birds, bats, fish and otter which may range out with the protected site boundaries. Unlikely to result in a significant effect.

Policy Title	RE3 Non-wind Renewable Energy Installations
Summary	Requirements for proposals both within and outside development limits.
Potential for Impacts	Key spatial impact areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's (latter two are in Pembrokeshire) and in close proximity to the river SAC's (otters) and SPA's (birds) where habitat loss and disturbance may be an issue. Policies such as EQ4 and EQ7 will mitigate any spatial risks. Other policies provide safeguards/ mitigation for non-spatial impacts in particular.
Likely Significant Effects	The policy includes specific requirements to protect ecological resources (which is considered to include European sites and their mobile species), and this is considered appropriate to reduce the risk of likely significant effects. Unlikely to result in a significant effect.

4.2.9 Environmental Protection

Policy Title	EP1 Water Quality and Resources EP2 Pollution EP3 Sustainable Drainage
Summary	These policies set out the requirements for new proposals to have no adverse impacts on the water environment, improve air quality, minimise light and noise pollution reduce contaminated land risks and incorporate sustainable drainage systems.
Potential for Impacts	None These policies have the potential to have a positive impact on the European site network and are likely to assist in delivering betterment of local air quality, water quality and reducing the effects of combined sewer overflow storm events.
Likely Effects	Significant None. Potential enhancement of network. This is one of the key mitigation policies and will need to be linked to the LDP monitoring strategy. The monitoring strategy will include relevant reporting criteria to enable the effective function of this policy from a European site perspective.

Policy Title	EP4 Coastal Management EP5 Coastal Development
Summary	Sets out requirements for coastal management projects and development in coastal locations.
Potential for Impacts	The Environment Agency Shoreline Management Plan (SMP) for the Carmarthenshire coast line is “hold the line” for the plan period. This means that there is no risk that any coastal management or development areas will become part of the CBEEMS. The detailed locations of any proposals are important in determining any spatial impacts and the HRA decisions need to be deferred to the project specific level. Management initiatives will be implemented to manage the risks of in-combination disturbance impacts on CBEEMS.
Likely Effects	Significant Unlikely at a plan level, however project specific HRA may be required, particularly if developments come online towards the end of the plan period and coincide with areas that have a “managed realignment” policy in the SMP Epoch 2 or 3 (for example in south west Burry Port). In-combination disturbance effects will need to be considered at the project specific levels. Positive effects likely as policy states that no new development requiring coastal protection will be permitted therefore provides some safeguards to protect the CBEEMS.

Policy Title	EP6 Unstable Land
Summary	Sets out requirements for areas where land instability is known
Potential for Impacts	Some potential for spatial impacts if areas of instability (e.g. underground cavities) are used by bats. There is a key potential impact which will be dependent on the use of a instability by bats belonging to an SAC out with Carmarthenshire.
Likely Effects	Significant Unlikely at a plan level as other natural environment policies will mitigate for any loss of habitat. Project specific HRA may be required but appropriate mitigation is likely to result in no significant effects.

4.2.10 Recreation and Leisure

Policy Title	REC1 Protection of Open Space REC2 Open Space Provision and New Developments
Summary	Provisions to protect and enhance open space.
Potential for Impacts	None. This policy has the potential to have a positive impact on the European site network possibly through connectivity and habitat improvements that could benefit mobile species (terrestrial).
Likely Effects	Significant None. Potential enhancement of European site network.

Policy Title	REC3 Proposed New Open Space
Summary	Defines areas of new open space provision.
Potential for Impacts	This is assessed within the proposed recreation allocation within Chapter 5.
Likely Significant Effects	This is assessed within the proposed recreation allocation within Chapter 5.

4.2.11 Tourism

Policy Title	TSM1 Static Caravan and Chalet Sites
Summary	Requirements for new proposals within development limits and extensions to existing sites.
Potential for Impacts	There is potential for impacts, particularly spatial and in combination if a proposed site was close to a European site. Key spatial areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's and in close proximity to the other SAC's and SPA's where habitat loss and disturbance may be an issue. Policies such as EQ4 and EQ7 will mitigate any spatial risks.
Likely Significant Effects	Unlikely to result in a significant effect.

Policy Title	TSM2 Touring Caravan and Tent Sites
Summary	Requirements for new proposals and extensions to existing sites.
Potential for Impacts	There is potential for impacts, particularly spatial and in-combination if a proposed site was close to a European site. Key spatial areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's and in close proximity to the other SAC's and SPA's where habitat loss and disturbance may be an issue. Policies such as EQ4 and EQ7 will mitigate any spatial risks.
Likely Significant Effects	Unlikely to result in a significant effect.

Policy Title	TSM3 Small Scale Tourism Development in the Open Countryside
Summary	Requirements for small scale tourism proposals outside development limits.
Potential for Impacts	There is potential for impacts, particularly spatial and in-combination if a proposal was close to a European site. Key spatial areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's and in close proximity to the other SAC's and SPA's where habitat loss and disturbance may be an issue. There is potential for positive impacts if public awareness of site increases resulting in decreases in disturbance. Policies such as EQ4 and EQ7 will mitigate any spatial risks.
Likely Significant Effects	Unlikely to result in a significant effect.

Policy Title	TSM4 Visitor accommodation
Summary	Requirements for self-catering provision
Potential for Impacts	There is potential for impacts, particularly spatial and in-combination if a proposal was close to a European site. Key spatial areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's and in close proximity to the other SAC's and SPA's where habitat loss and disturbance may be an issue. There is potential for positive impacts if public awareness of site increases resulting in decreases in disturbance. Policies such as EQ4 and EQ7 will mitigate any spatial risks.
Likely Significant Effects	Unlikely to result in a significant effect.

Policy Title	TSM5 Major Tourism proposals in the Open Countryside
Summary	Requirements for major tourism proposals outside development limits.
Potential for Impacts	There is potential for impacts, particularly spatial and in-combination if a proposal was close to a European site. Key spatial areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's and in close proximity to the otter SAC's and SPA's where habitat loss and disturbance may be an issue. There is potential for positive impacts if public awareness of site increases resulting in decreases in disturbance. Policies such as EQ4 and EQ7 will mitigate any spatial risks.
Likely Effects	Significant Unlikely to result in a significant effect.

4.2.12 Minerals

Policy Title	MPP1 Minerals Proposals
Summary	Sets out the requirements for mineral extraction proposals.
Potential for Impacts	High potential for spatial impacts given locations of the mineral resource in relation to the European site network (see Figure 1) and Cernydd Carmel SAC is a key site where a spatial impact could occur. However this policy requires no adverse effects on nature conservation sites.
Likely Effects	Significant It is unlikely that a proposal within a European site would be granted permission and there are mineral resource areas available that could provide satisfactory alternatives. Therefore no likely significant effects are anticipated.

Policy Title	MPP2 Mineral Buffer Zones
Summary	Essentially safeguards areas around extant mineral workings (see Figures 2-32)
Potential for Impacts	This is assessed within the proposed recreation allocation within Chapter 5.
Likely Effects	Significant This is assessed within the proposed recreation allocation within Chapter 5.

Policy Title	MPP3 Mineral Safeguarding
Summary	Highlights the areas of mineral resource within Carmarthenshire on the Proposals map and sets out the requirements for development proposals in those areas.
Potential for Impacts	The potential for impacts in these areas is as for MPP1.
Likely Effects	Significant Other development proposals are also subject to the other policies within the LDP and therefore no significant effects are anticipated.

Policy Title	MPP4 Coal Extraction Operations
Summary	Sets out the requirements for any coal extraction proposals
Potential for Impacts	None anticipated as policy states that proposals would not be permitted within a European site. There is potential for spatial impacts if the proposal was close to a European site. Key spatial areas are within metapopulation areas of the Caeau Mynydd Mawr, Preseli and Gweunydd Blaencleddau SAC's and in close proximity to the otter SAC's and SPA's where habitat loss and disturbance may be an issue. Policies such as EQ4 and EQ7 will mitigate any spatial risks.
Likely Effects	Significant Unlikely to result in a significant effect.

Policy Title	MPP5 Aggregate Alternatives
Summary	Supports use of secondary and recycled aggregates
Potential for Impacts	None. It is considered that this proposal will help to remove any need to work the unused mineral resource therefore preventing any impacts on European sites.
Likely Effects	Significant None

Policy Title	MPP6 Restoration and Aftercare of Mineral Sites
Summary	Sets out provision requirements for restoration and aftercare of the land.
Potential for Impacts	None. Potential for positive impacts depending on locations and existing effects on the European site network.
Likely Significant Effects	None.

4.2.13 Waste Management

Policy Title	WPP1 Nantycaws Waste Management Facility
Summary	Safeguarding this site for continued waste management provision.
Potential for Impacts	None. The Nantycaws site is not in close proximity to any European sites (see Figure 1).
Likely Significant Effects	None

Policy Title	WPP2 Waste Management Facilities Outside Development Limits
Summary	Sets out the requirements for any proposals for new sites.
Potential for Impacts	Unlikely. The policy refers to the Regional Waste Plan 1 st Review which provides Areas of Search maps. These maps use the locations of the European site network as a constraint to site locations, therefore help to protect the European site network from further spatial impacts. The policy also has a clear requirement for proposals to have no adverse impacts on the environment.
Likely Significant Effects	Unlikely given the safeguards within Planning Policy Wales Ed. 7, TAN21: Waste, Wales Strategy Document “Towards Zero Waste” and the policy itself.

5.1 Baseline

The LDP proposals that may have an effect on the European site network consist of residential, employment, mixed use sites and areas of open space within the development site allocation and proposals to safeguard mineral resources.

The provision for development in Carmarthenshire has been developed at sustainable locations in the following settlement framework:

Growth Areas:

Carmarthen (Includes Abergwili, Llangunnor, Johnstown and Trevaughan)
Llanelli (Includes Llangennech)
Ammanford/Cross Hands (Includes Tumble, Llandybie, Penygroes, Tycroes, Betws, Blaenau/Caerbryn, Drefach, Capel Hendre, Cefneithin, Gorslas, Saron and Castell y Rhingyll)

Service Centres:

<i>T2/1 Burry Port/Pembrey</i>	<i>T2/4 Newcastle Emlyn</i>
<i>T2/2 Llandeilo (Includes Ffairfach, Rhosmaen and Nanyrhibo)</i>	<i>T2/5 St Clears (Includes Pwll Trap)</i>
<i>T2/3 Llandovery</i>	<i>T2/6 Whitland</i>

Local Service Centres:

<i>T3/1 Laugharne</i>	<i>T3/7 Hendy</i>
<i>T3/2 Ferryside</i>	<i>T3/8 Glanamman/Garnant</i>
<i>T3/3 Kidwelly</i>	<i>T3/9 Brynamman</i>
<i>T3/4 Trimsaran</i>	<i>T3/10 Llangadog</i>
<i>T3/5 Pontyates/Meinciau/Ponthenri</i>	<i>T3/11 Llanybydder</i>
<i>T3/6 Pontyberem /Bancffosfelen</i>	

Sustainable Communities:

<i>SC1 Penboyr; Drefelin; Cwmpengraig; Waungilwen; Drefach/Felindre</i>	<i>SC11 Meidrim; Llanddowror; Llangynin</i>
<i>SC2 Pentrecwrt; Llangeler; Saron; Rhos</i>	<i>SC12 Broadway; Cross Inn; Llansadurnen</i>
<i>SC3 Blaenwaun; Cwmfelin Mynach; Cwmbach; Llanboidy</i>	<i>SC13 Pendine; Llanmiloe</i>
<i>SC4 Efailwen; Glandy Cross; Llanglydwen</i>	<i>SC14 Red Roses</i>
<i>SC5 Llanfallteg; Cwmfelin Boeth;</i>	<i>SC15 Bancyfelin; Llangynog</i>
<i>SC6 Cenarth; Pentrecagal</i>	<i>SC16 Llansteffan; Llanybri</i>
<i>SC7 Capel Iwan</i>	<i>SC17 Llansaint/Broadway; Four Roads;</i>
<i>SC8 Trelech</i>	<i>Mynyddygarreg; Llandyfaelog</i>
<i>SC9 Cynwyl Elfed; Cwmdud; Hermon</i>	<i>SC18 Cwmffrwd; Peniel; Bronwydd; Idole/Pentrepoeth; Whitemill; Bancycapel;</i>
<i>SC10 Talog; Abernant; Blaenycloed</i>	<i>Cwmdwyfran; Llanllwch; Nantycaws; Croesyceiliog; Llangain</i>

SC19	Alltwalis; Llanpumsaint; Rydargaeau; Pontarsais; Nebo	SC32	Nantgaredig; Pontarogothi; Capel Dewi;
SC20	Pencader; Gwyddgrug; Llanfihangel Ar Arth; New Inn;		Felingwm Uchaf; Felingwm Isaf; Llanegwad
SC21	Pontwelly; Bancyffordd	SC33	Llanddarog;
SC22	Pencarreg; Llanllwni		Porthyrhyd
SC23	Cwmann	SC34	Carmel; Cwmgwili; Foelgastell; Derwydd;
SC24	Pumsaint; Ffarmers; Caeo; Crugybar; Ffaldybrenin		Maesybont; Temple Bar; Milo; Pentregwenlais; Heol Ddu; Stag And Pheasant; Pantyllyn; Capel Seion; Llannon
SC25	Talley; Cwmdu; Abergorlech; Rhydcymerau; Llansawel	SC35	Ystradowen;
SC26	Llanwrda; Llansadwrn; Ashfield Row; Felindre;		Rhosamman;
	Waunystad Meurig		Cefnbrynbrain
SC27	Cilycwm	SC36	Llanedi
SC28	Cynghordy	SC37	Five Roads; Horeb
SC29	Rhandirmwyn	SC38	Penymynydd
SC30	Cwmifor; Golden Grove; Penybanc; Salem; Broad Oak; Manordeilo; Llangathen; Trapp	SC39	Crwbin;
SC31	Llanarthne; Dryslwyn; Felindre (Dryslwyn) Cwrt Henri		Mynyddcerrig; Llangyndeyrn
		SC40	Cynheidre; Pontantwn; Carway
		SC41	Llanfynydd
		SC42	Brechfa

Figure 1 broadly illustrates the site allocation in relation to the European site network. Figures 2-32 illustrate the site allocation at a more detailed scale.

The site allocation consists of the following site types:

- Residential (incl. Mixed Use sites) – 356 sites with indicative housing figure 13,352 units.
- Employment (incl. Mixed Use sites) – 26 sites (111.13 ha).
- Proposed Recreation/Public Open Space – 4 sites.

Table 5-1 sets out a summary of how the site allocation is distributed though out the settlement framework. The growth areas of Carmarthen, Llanelli (incl. T2/1) and Ammanford/ Cross Hands (incl. SC34 Cwmgwili) have been subject to a detailed assessment which is reported in Appendices B, C and D respectively and summarised within this chapter.

Table 5-1 Summary of the spread of the site allocation throughout the settlement framework (not including areas of public open space)

Settlement	Number of allocated sites	Uses	Total area of Employment Allocated Sites (hectares)	Total Indicative Housing Figure
GA1	24	Housing, Employment, Mixed Use	25.33	1854
GA2	65	Housing, Employment, Mixed Use	32.58	3927
GA3	72	Housing, Employment, Mixed Use	37.24	2552
T2/1	16	Housing, Employment, Mixed Use	3.28	413
T2/2	7	Housing, Employment	2.33	263
T2/3	3	Housing, Mixed Use		111
T2/4	6	Housing, Employment	1	89
T2/5	11	Housing, Employment, Mixed Use	1.92	279
T2/6	9	Housing, Employment, Mixed Use	3.04	205
T3/1	2	Housing		82
T3/2	2	Housing		32
T3/3	10	Housing		301
T3/4	7	Housing		164
T3/5	10	Housing		239
T3/6	6	Housing		140
T3/7	9	Housing		219
T3/8	15	Housing, Employment	0.7	247
T3/9	5	Housing		107
T3/10	2	Housing		37
T3/11	6	Housing, Employment	0.51	98
SC1	5	Housing		88
SC2	4	Housing		63
SC3	1	Housing		20
SC4	3	Housing		25
SC5	0			0
SC6	0			0
SC7	2	Housing		20
SC8	2	Housing		11
SC9	3	Housing		29
SC10	0			0
SC11	3	Housing		32
SC12	0			0
SC13	3	Housing		50
SC14	1	Housing		8
SC15	2	Housing		28
SC16	1	Housing		10
SC17	4	Housing		143
SC18	7	Housing		123
SC19	5	Housing		66
SC20	6	Housing		91
SC21	2	Housing		36
SC22	3	Housing		29
SC23	5	Housing		73
SC24	2	Housing		16
SC25	5	Housing		36
SC26	1	Housing		8
SC27	0			0

Settlement	Number of allocated sites	Uses	Total area of Employment Allocated Sites (hectares)	Total Indicative Housing Figure
SC28	1	Housing		22
SC29	0			0
SC30	3	Housing		35
SC31	3	Housing		34
SC32	3	Housing		53
SC33	4	Housing		58
SC34	7	Housing, Employment	3.2	139
SC35	4	Housing		34
SC36	1	Housing		7
SC37	3	Housing		73
SC38	0			0
SC39	1	Housing		12
SC40	3	Housing		493
SC41	1	Housing		14
SC42	1	Housing		14

The two areas proposed for recreation and public amenity are located as follows:

- *POS1 South of Picton Terrace, Carmarthen.*
- *POS2 Land to the rear of Ammanford Comprehensive School.*
- *POS3 Land to the rear of Station Road, St Clears.*
- *POS4 Land at Dylan, Trallwm, Llanelli.*

These sites are not within close proximity of a European site therefore there are considered to be no spatial impacts and are not considered to have any potential for significant non-spatial impacts therefore they are not considered any further within this assessment.

The following road schemes identified within the National Transport Plan (WAG 2009) and Regional Transport Plan (SWWITCH 2008) ¹ have been included on the proposals map and have therefore been assessed as potentially having an in-combination effect with the LDP proposals.

- *A40 Llandewi Velfrey to Penblewin (formerly St Clears to Haverfordwest).*
- *A483 Llandeilo and Ffairfach Improvement.*
- *Cross Hands Economic Link Road.*
- *Carmarthen West Link Road.*

5.2 Potential Impacts

The impacts have been divided in to two types; spatial and non-spatial. Spatial impacts are those that are directly influenced by the location of the site allocation in relation to the European site network and comprise habitat loss (resulting from land take or encroachment of non-native/ invasive species), disturbance, air quality and fragmentation. Non spatial impacts are those that could occur irrespective of the location of the site allocation in relation to the European site network and are associated with water supply (water resource) and sewage treatment (water quality).

¹ At the time of this HRA (2014) the new Swansea City Region will take on the regional transport role and will update the regional transport plan at a future date

5.2.1 Spatial Impacts

Residential/Employment & Mixed Use Sites – Growth Areas

(i) GA1 Carmarthen (See Figure 2)

The detailed assessment is set out in Appendix B with the assessment proforma for each of the sites assessed set out in Appendix E. The allocation is shown on Figure 2 (Vol. 2)

The River Tywi SAC flows through the centre of Carmarthen and the land use proposals in Carmarthen have the potential to affect this SAC as a result of the following spatial impacts:

- *Disturbance - affecting otter; and,*
- *Fragmentation - affecting otter.*

The mitigation requirements to ameliorate these impacts is considered to be best implemented at a project specific level. Mitigation is likely to include design phase measures such as provision of otter underpasses and design of site layout to provide buffer strips along water course; and construction phase requirements such as no night time working and continuous access for otter through the site.

Some potential for effects on migratory fish has been highlighted, however the spatial locations of the proposals in relation to the main river is such that this is extremely unlikely to result in any likely significant effects on the River Tywi SAC.

The LDP proposals for Carmarthen are not considered to have any spatial impacts that will result in any likely significant effects on the River Tywi SAC.

(ii) GA2 Llanelli & T2/1 Burry Port & Pembrey

The detailed assessment is set out in Appendix C with assessment proforma for each of the sites assessed set out in Appendix E. The allocation is shown on Figures 3 and 4 (Vol. 2)

The settlements of Llanelli, Burry Port and Pembrey are all located on the south coast of Carmarthenshire and are, therefore, adjacent to the Carmarthen Bay and Estuaries European Marine Site (CBEEMS).

The European sites in close proximity to the allocation that could be subject to spatial impacts from the site allocation are:

- *Carmarthen Bay and Estuaries SAC;*
- *Carmarthen Bay SPA; and,*
- *Burry Inlet SPA / Ramsar.*

The potential for disturbance impacts on the bird and otter features are possible given the spatial location of some of the allocation. The mitigation requirements to ameliorate these impacts are considered to be best implemented at a project specific level; for example timing of works.

(iii) GA3 Ammanford/Cross Hands

The detailed assessment is set out in Appendix D with the assessment proforma for each of the sites assessed set out in Appendix E.

The Caeau Mynydd Mawr SAC is located in Cross Hands and the land use proposals in the Ammanford/ Cross Hands area have the potential to affect this SAC through the following spatial impacts:

- *Habitat loss – affecting marsh fritillary butterfly metapopulation;*
- *Fragmentation - affecting marsh fritillary butterfly metapopulation.*

There are also potential impacts on the SAC as a result of changes in air quality, however the other policies (in particular EP2 Pollution) within the LDP are considered appropriate mitigation at this stage to reduce the likelihood of significant effects.

Mitigation for the potential effects on Caeau Mynydd Mawr SAC is in the form of LDP policy EQ7 and Supplementary Planning Guidance (SPG).

- *The Caeau Mynydd Mawr SPG provides guidance in relation to the consideration of proposals for potential developments impacting upon the SAC and the need to establish a management strategy to ameliorate for the loss of and secure the ongoing and future management of habitat used by the marsh fritillary butterfly metapopulation. The SPG provides a framework for sufficient land to be managed in order to seek to provide a minimum 100ha of suitable habitat. The implementation of the SPG (land management) is delivered via a project officer who is in post (as of 2013).*
- *Policy EQ7 which sets out the SPG area within which development proposals will be required to contribute towards increasing the quality and amount of suitable habitat for marsh fritillary butterfly.*

With this mitigation in place the LDP proposals are not considered to have any spatial impacts that will result in any likely significant effects on the Caeau Mynydd Mawr SAC.

Residential/Employment & Mixed Use Site – All Other Areas

The full results of the assessment of the site allocation in the rest of the settlement framework are shown in Appendix F.

The assessment recorded three sites that had potential to result in disturbance to European site features and is summarised in Table 5-2.

Table 5-2 Summary of spatial impacts

Site Allocation Reference	Settlement	Use	European Site and Feature	Potential Impacts
SC20/H4	Pencader	Residential	River Teifi SAC – Otter, Migratory fish	Site is adjacent to the SAC and the construction of the site may result in disturbance.
T2/4/H2	Newcastle Emlyn	Residential	River Teifi SAC – Otter	Site is close to the SAC and the construction of the site may result in disturbance.

All of these sites will require a project level HRA. Policy EQ4 in the deposit draft LDP sets out the requirements for new developments to have due regard to biodiversity and prevents any developments having an adverse impact on protected sites and species. This policy in-conjunction with project specific mitigation that will be developed in a project level HRA is highly likely to ameliorate any potential impacts associated with disturbance. Therefore it is considered that these allocations will have no likely significant effects on the European site network.

The assessment did not record any other areas of the settlement allocation that were considered to have any spatial impacts on the European site network. This was generally because the remaining allocation areas were not in close proximity to

a European site or were buffered from the site by existing areas of development or infrastructure.

Mineral Resource

The LDP proposals map shows the areas of Carmarthenshire where Policy MPP2 Mineral Buffer Zones, Policy MPP3 Mineral Safeguarding and MPP4 Coal Extraction apply. The policies do stress that although these areas are safeguarded for future working they only illustrate the location of the mineral rather than any presumption in favour of working it within the plan period.

The locations of the mineral resource and mineral buffer zones do coincide with the following European sites:

- *Cernydd Carmel SAC;*
- *Caeau Mynydd Mawr SAC;*
- *River Tywi SAC;*
- *River Teifi SAC;*
- *Cleddau Rivers SAC;*
- *Carmarthen Bay Dunes SAC;*
- *Carmarthen Bay and Estuaries European Marine Site;*
- *Cwm Doethie - Mynydd Mallaen SAC; and,*
- *Elenydd – Mallaen SPA.*

If the mineral resource was to be worked or reworked then there are considered to be likely significant effects on the European sites through habitat loss (land take, changes in air and water quality), fragmentation (land take), and disturbance (land take).

It is considered that the mineral resource would not be worked within these sensitive areas and this is supported by a number of the LDP policies including MPP1 Mineral Proposals which requires any proposals to show that there will be no adverse impacts upon sites of nature conservation importance.

Therefore it is considered that the mineral resources proposals will not have a likely significant effect on the European site network.

Test of Likely Significance

The individual site allocation within the growth areas may be subject to project level HRA and this is supported by the requirements of the LDP policies SP14 Protection and Enhancement of the Natural Environment, EQ4 Biodiversity, EQ7 Caeau Mynydd Mawr SPG, the Caeau Mynydd Mawr SAC SPG, and the proposed SPGs for Biodiversity.

Overall the spatial impacts that may result from the LDP proposals are considered to have no likely effect on the European site network.

5.2.2 Non Spatial Impacts

(i) Water Resource

The proposed residential, employment and mixed use site allocation (all areas) will require a potable water supply.

Potable water is supplied by Dŵr Cymru Welsh Water (DCWW) in Carmarthenshire and DCWW have completed draft and final Water Resources Management Plans (DCWW 2008 & 2014) that incorporate the period 2006 to 2040. This includes the LDP period for which the site allocation is proposed.

Carmarthenshire is part of three water resource zones (DCWW 2014):

- 88% Tywi Conjunctive Use System (CUS);
- 7% Mid & South Ceredigion; and,
- 5% Pembrokeshire.

The European sites potentially affected by these water resource zones and, therefore, the water demand from the LDP proposed allocation, are the River Tywi, Cleddau Rivers and the River Teifi. As well as the DCWW Water Resources Management Plan the abstraction from these rivers is also managed through the Environment Agency’s (EA now NRW) Catchment Abstraction Management Strategies and the Review of Consents process.

The Review of Consents process (see NRW website) that was carried out between 2000 and 2010 concluded that the some of the abstraction consents in place on these SAC Rivers were having an adverse effect. The mitigation proposals that have been recommended will be implemented through changes in the consents and these are summarised in Table 5-3.

Table 5-3 Summary of Changes Proposed for Abstraction from SACs (Source EA website – Review of Consents Fact Sheets)

European Site	EA Review of Consents – Changes Proposed	Water Resource Zone
River Tywi SAC	Changes to abstraction licences: <ul style="list-style-type: none"> • prevention of diurnal pumping at low flows, so that flows and the availability of habitat at the edge of the river are more consistent through the day; and, • any insufficient screening at abstraction intakes will be conditioned for replacement 	Tywi CUS
River Teifi SAC	Changes to abstraction licences: <ul style="list-style-type: none"> • reducing the volume of water licence holders can take from the river, or • by preventing them taking water when river flows are too low. • Any insufficient screening at abstraction intakes will be conditioned for replacement 	Mid and South Ceredigion
Cleddau Rivers SAC	Changes to abstraction licences: <ul style="list-style-type: none"> • reducing the volume of water licence holders can take from the river, or • by preventing them taking water when river flows are too low. • Any insufficient screening at abstraction intakes will be conditioned for replacement 	Pembrokeshire

The DCWW Water Resource Management Plan (DCWW 2014) forecasts both household and non-household demand for water using Welsh Assembly Government Population and Household Projections and their own monitoring of the non-household customer base respectively. Therefore it is considered that the DCWW Water Resource Management Plan will have accounted for the water supply demand of the LDP allocation. DCWW (2014) consider that water resource zones that supply Carmarthenshire’s water are all in surplus for the LDP period, except Pembrokeshire. DCWW (2014) have a strategy to manage that deficit and it is considered that the LDP allocation is included within that management strategy.

DCWW indicated in the draft Water Resource Management Plan (DCWW 2008) that the robustness of the supply-demand balance could be impacted by the sustainability reductions that will be required under the Habitats Directive. The reductions required were unable to be incorporated in to the draft Water Resources Management Plan because of ongoing work by Environment Agency Wales (Now NRW). The final Water Resources Management Plan (DCWW 2014) has included these reductions and the supply-demand balance incorporates the recommendations made following the NRW Review of Consents process.

Test of Likely Significance

The proposals for residential, employment and mixed use sites will be developed throughout the plan period and each sites’ permission will be subject to the Environmental Protection policies, in particular EP1 Water Quality and Resource.

It is considered that a combination of the water resource zones being in surplus, the implementation of the recommendations from the Review of Consents process (EA web and see Table 5-2), the development of the site allocation across the plan period and the requirements of policy EP1 will provide sufficient safeguards to ensure that the site allocation proposals will not have a likely significant effect on the River Tywi SAC, Cleddau Rivers SAC and the River Teifi SAC.

(ii) Water Quality

The proposed residential, employment and mixed use site allocation (all areas) will require sewage to be collected and treated. The impact on water quality as a result of the GA2 detailed assessment is set out in section 5.2.1 (ii).

In Carmarthenshire the sewerage provider is DCWW and the discharge consents for waste water treatment works (WWTW) are granted and managed by the Environment Agency.

Figures 2 to 32 illustrate the locations of the WWTWs in relation to the proposed residential, employment and mixed use allocations. The assessment of the site allocation indicates that the following European sites have the potential to be affected by any changes in water quality as a result of the WWTW discharges and combined sewer overflow storm events.

- River Tywi SAC.
- River Teifi SAC.
- Cleddau Rivers SAC.
- Pembrokeshire Marine SAC.
- Carmarthen Bay and Estuaries European Marine Site.
- Cardigan Bay SAC.

The Environment Agency’s Review of Consents process has reviewed the effect of all of its discharge consents on the European site network. A summary of the review of consents in relation to WWTW discharge consents is set out in Table 5-4.

Table 5-4 Summary of the Changes Proposed as a Result of the Review of Consents Process (Source EA website – Review of Consents Fact Sheets)

European Site	EA Review of Consents – Changes Proposed
River Tywi SAC	Discharge consents (5 in total) will be revised during the Asset Management Plan 4 (AMP) (set out in DCWW Business Plan 2000-1010) scheme to ensure they do not impact on the SAC.
River Teifi SAC	Discharge consents (15 in total) will be revised to ensure there are lower concentrations of phosphate entering the river
Cleddau Rivers SAC	Discharge consents (6 in total) will be revised to ensure there are lower concentrations of phosphate entering the river
Pembrokeshire Marine SAC	All the consents assessed were considered as having no adverse effect on site integrity.
Carmarthen Bay and Estuaries European Marine Site	RoC Fact Sheet not present on website. Process is ongoing.
Cardigan Bay SAC	RoC Fact Sheet not present on website. Process completed 2008.

The EA Review of Consents process has reviewed all the discharge consents affecting the European site network and has planned and implemented many of the changes required to resolve any significant effects on the integrity of the SACs. Therefore, WWTW discharges are not considered to be a key risk to site integrity.

The key risk to the European site network related to sewage is the number of combined sewer overflow (CSO) storm events that essentially discharge raw sewage in to the watercourses. These events are considered particularly high risk in the Llanelli area (GA2), where the CSO's are regularly flooded during periods of rain and the CBEEMS subsequently receives these low quality inputs. The key stakeholders (including DCWW, NRW Carmarthenshire and Swansea) have a Memorandum of Understanding (MOU) (Sept 2011) that aims to "set out a partnership approach to improve and safeguard the environmental quality of the CBEEMS, when taking decisions on development and regeneration scheme." The MoU contains guidance with regard to surface water management for development in the Llanelli catchment. This is implemented by Carmarthenshire and Swansea by only giving planning permission once existing flows (surface water or foul) have been removed from the system to allow capacity or other works undertaken to improve the infrastructure. There is also the requirement for a betterment factor. Both planning authorities manage this process by keeping a Surface Water and Hydraulic Register for the Llanelli and Gowerton catchments.

Test of Likely Significance

The LDP proposals will contribute to the demand on the sewage treatment system in Carmarthenshire. The DCWW Final Business Plans for 2010 – 2015 and 2015-2020 has planned for new sewage connections for most of the LDP period. This combined with the LDP Policy EP1 Water Quality and Resource and EP2 Pollution is considered sufficient to ensure that there is an adequate infrastructure in place to treat sewage whilst complying with the WWTWs discharge consent. These factors reduce the risk of adverse effects on the European site network as a result of any WWTW discharges.

The risk to the European site network from CSO events is considered highest in Llanelli. The guidance and Registers set out by the MOU in combination with the LDP Policies EP1 Quality and Resource, EP2 Pollution and EP3 Sustainable Drainage is considered appropriate to both reduce the risk of adverse effects on the European Site network and has the potential to provide betterment during the lifetime of the LDP.

5.3 In-combination Effects

5.3.1 Neighbouring Local Authorities Proposals

(i) Spatial Impacts

Ceredigion

The River Teifi SAC is the only European site at risk from any in-combination effects from spatial impacts of the Ceredigion and Carmarthenshire LDP policies and proposals. There are no spatial impacts recorded for the Carmarthenshire LDP and Ceredigion has adopted its LDP. The supporting HRA concluded that the LDP would not have a significant effect on the River Teifi SAC alone or in-combination with other plans.

Pembrokeshire

The Cleddau Rivers SAC and Pembrokeshire Bat Sites and Bosherton Lakes SAC are the two European sites at risk from any in-combination effects from spatial impacts of the Pembrokeshire and Carmarthenshire LDP policies and proposals. Pembrokeshire has adopted its LDP. The supporting HRA concluded that the Pembrokeshire LDP would not have a significant effect on the Cleddau Rivers SAC alone or in-combination with other plans.

The risks to bats belonging to the Pembrokeshire Bat Sites and Bosherton Lakes SAC are extremely low and generally associated with the west of the county. The

Carmarthenshire LDP policy EQ4 and equivalent policies in the Pembrokeshire LDP are highly likely to reduce the risk of a likely significant effect.

Swansea

The Carmarthen Bay and Estuaries European Marine Site (CBEEMS) is the only site that may be affected by the combined site allocation for Swansea and Carmarthenshire in terms of spatial impacts.

Swansea has only recently begun its LDP process and is not yet at the site allocation stage therefore it is not possible to assess the likely significant effects as a result of spatial impacts. However, the LDP proposals in Carmarthenshire are not considered to have a spatial impact on this site and it seems reasonable to conclude that given the existing rural nature of Swansea's border with the CBEEMS it is extremely unlikely any proposals in Swansea would result in in-combination effects.

(ii) Non Spatial Impacts

The three neighbouring authorities' site allocation (Ceredigion, Pembrokeshire and Swansea) in-combination with Carmarthenshire's LDP proposals will have impacts on the water resources of the:

- *River Teifi SAC; and,*
- *River Tywi SAC.*

and on the water quality of the:

- *River Teifi SAC;*
- *Cardigan Bay SAC;*
- *Cleddau Rivers SAC;*
- *Pembrokeshire Marine SAC;*
- *River Tywi SAC; and,*
- *CBEEMS.*

The DCWW Water Resources Management Plan (DCWW 2014) and Final Business Plans 2010-2015 & 2015-2020 (DCWW 2010 & 2014) set out DCWWs forward plan for both water supply and waste water treatment proposals, both of which influence the water resources and water quality of the European site network respectively. The plans are based on the population growth for all of the regions in Wales, therefore have considered the likely demands of the site allocation of all of the local authorities in Wales for water supply and waste water treatment.

The water resource zones that are used by these counties are considered to be in surplus between now and 2034 (DCWW 2014), except Pembrokeshire. However DCWW have a strategy in place to manage the deficit and it is considered that no likely significant effect is anticipated on the water resources of the SACs as a result of the LDP proposals of all of the counties.

Ceredigion has DCWW agreement that the infrastructure is in place for the proposed allocation (Ceredigion 2010). The risk to water quality is considered by DCWW in their Final Business Plan (DCWW 2010) and the EA in the Review of Consents process. All these measures have associated mechanisms and recommendations in place that will safeguard against any potential effects on water quality as a result of the waste water treatment demands of the combined proposals of all of the four counties LDP's (Carmarthenshire, Pembrokeshire, Ceredigion and Swansea).

5.3.2 Regional Transport Plan Schemes

There are two regional transport schemes that have the potential to have a likely significant effect on the European site network in combination with the LDP proposals.

Cross Hands Economic Link Road

The Cross Hands Economic Link Road proposals are within 2 km of the Caeau Mynydd Mawr SAC and are highly likely to result in the loss of both suitable and good condition habitat. Therefore in-combination with the LDP site allocation proposals there is a likely significant effect on the SACs conservation objectives relating specifically to the availability of good and suitable condition habitat within 2km of the SAC.

The mitigation strategy set out within the Ammanford/ Cross Hands Detailed HRA (Appendix D) and the certainty that this scheme will be subject to the planning obligations set out in EQ7 and the Caeau Mynydd Mawr SPG will result in the in-combination effects of this road scheme and the LDP on the SAC being unlikely to be significant.

Carmarthen West Link Road

The Carmarthen West Link Road is located within the LDP site allocation GA1/MU1 and will cross the Tawelan Brook, a tributary of the River Tywi SAC. The potential impact of both the proposed road and the site allocation are considered to be related to the disturbance of otter and fragmentation of otter habitat.

The Development Brief (Nathaniel Lichfield & Partners 2010) for the site and link road indicates that the Tawelan corridor will be protected from disturbance and landscape will remain largely un-fragmented. Although it is considered that the road scheme in-combination with the LDP proposal GA1/MU1 is unlikely to result in a likely significant effect on the SAC, the HRA should be deferred to the project level to ensure that any detailed mitigation is designed and implemented.

Both road schemes will also have potential effects on water quality. These will be considered as part of their project level detailed environmental assessments and HRAs; therefore it is considered that there will not be an impact on the quality of the receiving waters (River Tywi SAC and CBEEMS (via Afon Gwili)) in-combination with the LDP proposals in these areas.

5.3.3 National Transport Plan

The two schemes that may have an in-combination effect on the European site network are:

- *A40 Llanddewi Velfrey to Penblewin (Formerly St Clears to Haverfordwest) Phase 3 – crosses tributaries of the Afon Taf; and,*
- *A483 Llandeilo and Ffairfach Improvements - 3 route options, includes crossing of River Tywi.*

The National Transport Plan HRA (Welsh Government March 2010) indicated that the A40 Llanddewi Velfrey to Penblewin and A483 Llandeilo and Ffairfach Improvements were unlikely to have any significant effects on any European site alone or in combination with other plans or projects.

The combination of the road schemes and the LDP site allocation is considered to only result in any likely effects on the SAC attributable to the road. The National

Transport Plan HRA considers that the project level HRA is appropriate to resolve any likely significant effects.

5.3.4 Shoreline Management Plan

The LDP proposals have been allocated with due regard to the policies set out in the Lavernock Point to St Ann's Head Shoreline Management Plan (SMP2).

The potential for in-combination effects is limited to the CBEEMS and only in those areas where the LDP site allocation proposals become either closer to the CBEEMS as a result of the SMP policies. This may result in land-take and disturbance impacts. The areas where the policy is "hold the line" will be unaffected. The settlements most at risk of change as a result of the SMP2 are:

- *Llangennech where the policy is "no active intervention";*
- *Kidwelly where the policy is "no active intervention" and "hold the line"; and,*
- *Laugharne where the policy is "managed realignment".*

The proposed site allocation at Llangennech and Kidwelly is currently separated from the CBEEMS by the railway line. The SMP2 does not recommend realigning this feature as part of the no active intervention policy, therefore it is considered appropriate to assume that the proposed allocations in these areas will not have a significant effect on the CBEEMS in-combination with the SMP2.

At Laugharne the site allocation is on the landward sides of the settlement therefore it is assumed that the settlement itself is unaffected by the managed realignment policy in this area. Given this consideration it is appropriate to assume that the proposed allocations in these areas will not have a significant effect on the CBEEMS in-combination with the SMP2.

However, it is considered appropriate to highlight the SMP for consideration at project specific HRA level for any coastal LDP proposals to reduce the risk of any effects of the second SMP epoch which is managed realignment in some parts of the Carmarthenshire coastline.

This report assessed the LDP following Examination, the Matters Arising Changes and the Inspector's Report for the potential for significant effects on the European site network. It continues the approach used at the earlier stages and the key steps are:

- *Screening and assessment of the policies;*
- *Screening and assessment of the proposals;*
- *Review of mitigation options and requirements; and,*
- *In-combination assessment.*

The HRA supporting the earlier stages of the LDP process recorded a number of recommendations for rewording to reduce the risk of any likely significant effects on the European site network. The final iteration of the policies for the LDP gave cognisance to these recommendations.

The assessment of the LDP proposals was carried out in a number of stages. The assessment was broadly split in to spatial and non-spatial impacts. Spatial impacts are those impacts that are influenced by the location of the site allocation in relation to the European site network and non-spatial impacts are those that may occur regardless of where the site is located.

Detailed assessments of the Growth Areas; GA1 Carmarthen, GA2 Llanelli (including T2/1 Burry Port) and GA3 Ammanford/ Cross Hands were carried out and are reported in Appendices B to D.

The allocation in Carmarthen is considered not to have any likely significant effect on the European site network.

The detailed assessment of GA2 and T2/1 concluded that any potential likely significant effects on water quality were appropriately mitigated at a strategic level through; the LDP policies; the Memorandum of Understanding; and, EAW (now part of NRW) and DCWWs commitments to improve the WWTW level of service. Therefore the site allocation was not considered to have a likely significant effect on the CBEEMS.

The detailed assessment of GA3 concluded that the mitigation provided by EQ7 and the Caeau Mynydd Mawr SPG would ameliorate the loss of habitat used by the Caeau Mynydd Mawr SAC marsh fritillary butterfly metapopulation. With these measures in place it is considered that there will be no significant effects on the European site network (primarily the Caeau Mynydd Mawr SAC) as a result of the LDP proposals in Growth Area 3.

The remainder of the site allocation was assessed as having no likely significant effect on the European site network and the result of that assessment is set out in Appendix F.

The in-combination assessment included consideration of the LDP proposals of neighbouring authorities, the National and Regional Transport Plans and the Shoreline Management Plan. It was concluded that there were no in-combination effects leading to likely significant effects on the European site network.

Under the Conservation of Habitats and Species Regulations, (2010) it is considered the Carmarthenshire LDP alone and in-combination will have no likely significant effects on the European site network.

This strategic plan level HRA does not obviate the need for further HRA at lower planning tier level but this strategic plan level work will inform and support project specific HRA where it is required.

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