

Carmarthenshire Revised Local Development Plan (LDP)

Habitats Regulations Assessment (HRA) of the Deposit LDP

November 2019

1. Introduction

1.1 Background

Carmarthenshire County Council is preparing a new development plan for the County, referred to as the revised Local Development Plan (rLDP). This will replace the existing adopted Local Development Plan (LDP) and provide a revised framework to inform planning decision making and guide development. This report is a Habitats Regulations Assessment (HRA) of the rLDP, as required under The Conservation of Habitats and Species Regulations 2017. The findings and recommendations of an earlier informal HRA Screening Report¹ of the Preferred Strategy and the Pre Deposit Proposals have informed the development of this report, as part of an iterative approach to the HRA process.

1.2 Habitats Regulations Assessment (HRA)

European Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (known as the 'Habitats Directive'), implemented in the UK by the Habitat Regulations 2017, provides legal protection for a range of habitats and species identified as being of European importance.

Article 2 of the Directive requires the maintenance or restoration of these habitats and species, in a favourable condition, and is achieved through the establishment and maintenance of protected areas referred to as Natura 2000 sites. These are comprised of Special Areas of Conservation (SAC) designated under European Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna ('the Habitats Directive') and Special Protection Areas (SPA) designated under EC Directive 79/409 on the Conservation of Wild Birds ('the Birds Directive') and Ramsar site under the Ramsar Convention on the Conservation of Wetlands of Importance. Sites designated as wetlands of international importance under the Ramsar Convention are subject to the same provisions as Natura 2000 sites.

1.3 The application of Habitats Regulations to Development Plans

Chapter 8 of the Conservation of Habitats and Species Regulations 2017 ("the Habitats Regulations") transposes the requirements of article 6(3) and (4) of the Habitats Directive (92/43/EEC) in relation to "land use plans". These plans are defined in Regulation 111 and include the following:

- Local development plans adopted or approved under the 2004 Act; and
- Unitary development plans adopted or approved under the 1990 Act, in accordance with the transitional agreements.

Welsh Assembly Government's (WAG) Technical Advice Note 5, Annex 6² states that The HRA process should consist of the following elements:

- Determining whether the development plan, alone or in combination with other plans or projects, is likely to have significant effect on any European sites or European offshore marine sites and if so, scoping the "appropriate assessment";
- Undertaking the "appropriate assessment" (in consultation with NRW and/or Natural England) to identify any significant effects that the development plan may have on any European sites or European offshore marine sites, either alone or in combination with other plans or projects, in view of those sites' conservation objectives;

¹ Revised Local Development Plan Habitats Regulations Assessment Screening Report of the Preferred Strategy. December 2018.

² <https://gov.wales/technical-advice-note-tan-5-nature-conservation-and-planning>

- Where the “appropriate assessment” identifies potentially significant impacts on a European site or European offshore marine site, identifying whether there are possible alternative solutions or mitigation measures which, if adopted, will avoid or counteract those adverse impacts;
- Determining, in light of the “appropriate assessment”, whether the development plan will or will not adversely affect the integrity of any European site or European offshore marine site, either alone or in combination with other plans or projects;
- Where there is a possibility that the plan could have such an adverse effect, determining whether there are any alternative solutions to the development plan, or to the potentially damaging elements within that plan, which would avoid or reduce such effects upon the European site(s) or European offshore marine site(s); and
- Where there are no such alternative solutions, determining whether there are imperative reasons of overriding public interest for giving effect to the development plan.

The methods and approach used for this screening are based on guidance currently available and emergent practice, which recommends that HRA is approached in four main stages - outlined in Figure 1.

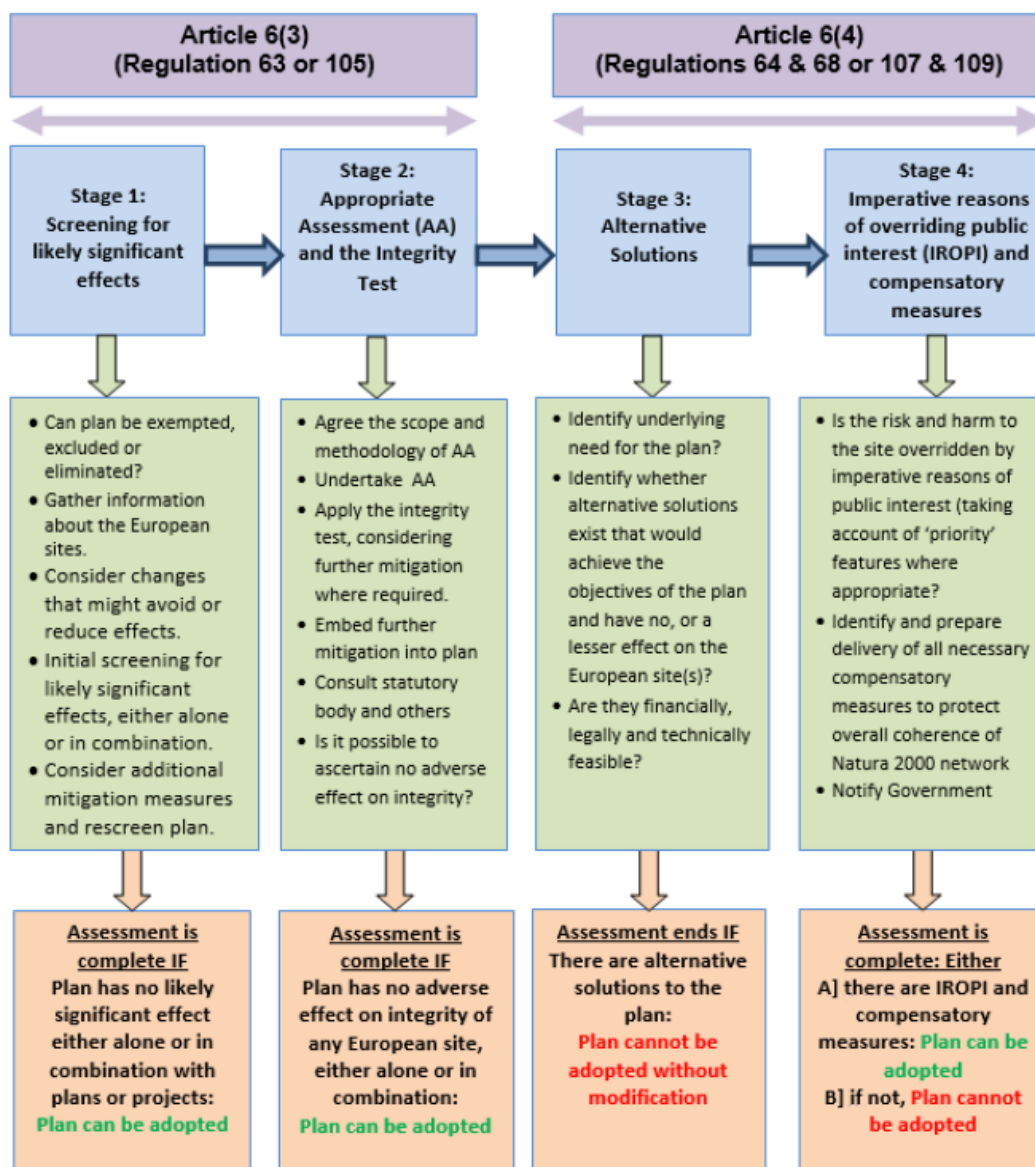


Figure 1 Outline of the four stage approach to the assessment of plans under the Habitats Regulations. Source: Tyldesley, D. and Chapman, C. (2013) *The Habitats Regulations Assessment Handbook*, February 2019 edition UK: DTA Publications Ltd (see www.dtapublications.co.uk)

1.4 Purpose of report

It is accepted by the Council, and agreed with Natural Resources Wales (NRW), that the Deposit LDP is a 'plan' for the purposes of Regulation 105 of the Habitats Regulations. This report is a Habitats Regulations Assessment of the Deposit revised Carmarthenshire LDP as required under Regulation 105 of the Habitats Regulations.

The scope of this assessment is unusual. Due to its strategic nature, in most cases a development 'plan' precedes and provides for subsequent 'project' level development. A plan would therefore normally be subject to assessment under the regulations before the development it provides for is considered for planning permission. In the case of the Deposit Local Development Plan, some of the development provided for relates to sites which have already been granted planning permission or built out since the 2018 base date.

To reflect this situation in respect of housing provision, the Deposit Plan refers both to 'commitments' and 'allocations' (refer to rLDP Deposit Plan Appendix 7 Housing Trajectory). Of particular relevance to this HRA, the development provided for under 'commitments' has already been subject to assessment under the Habitats Regulations at the project stage, including consultation with NRW as the statutory nature conservation body. There is no requirement to re-assess such allocations under the provisions of the Regulations, where they have already been found to be acceptable by the Council as the competent authority, at a project level, in consultation with NRW.

The scope of this HRA in respect of housing provision is therefore limited to detailed consideration of the specific 'allocations' to provide 10,160 new homes as referred to in Policy SP3.

The Council has already undertaken earlier assessment effort under the Habitats Regulations in respect of earlier stages in the development of this Local Plan including:

- HRA Screening Report of the Preferred Strategy (dated December 2018)³

Whilst that work was preliminary in nature and not a full assessment under Regulation 105 (as such an assessment is not required as a matter of law in respect of pre-deposit proposals per se) it has informed the ongoing development of the Deposit Plan. It is therefore appropriate to recognise, in the interests of efficiency, and with a view to avoiding unnecessary duplication of assessment effort, that much of the work undertaken through the earlier HRA screening work will be directly relevant to the assessment now required. This approach reflects the provisions of Regulation 67 of the Habitats Regulations, 'adopting' the reasoning, conclusion or assessment of earlier HRA work where it is appropriate to do so.

1.5 Consultation

The Habitats Regulations require the plan making/competent authority to consult the appropriate nature conservation statutory body (NRW) if undertaking an Appropriate Assessment, however consultation with other bodies and the public is left to the discretion of the local planning authority (Regulation 105 (2)(3)).

WAG guidance notes that it is good practice to make information on HRA available to the public at each formal development plan consultation stage. Therefore, in addition to the statutory consultation undertaken with NRW, this report will be made available for wider consultation.

³ <https://www.carmarthenshire.gov.wales/media/1216964/hra-screening-report-english.pdf>

Responses to this consultation should be sent in writing to:

Forward Planning Section,
Environment Department,
7/8 Spilman Street,
Carmarthen,
Carmarthenshire,
SA31 1JY

or e mail: forward.planning@carmarthenshire.gov.uk

or online at www.carmarthenshire.gov.uk

1.6 Structure of report

This report documents the process and the findings from the screening stages of the HRA for Carmarthenshire County Council Deposit Revised Local Development Plan. Following this introductory section, the document is organised into the following sections:

Section 2 outlines the methodology and key tasks undertaken for the HRA screening of the the rLDP, and includes reference to the key information sources used.

Section 3 outlines the process and summary findings of the Screening Process and assessment including:

- 3.1 Task 1: Identification and characterisation of European Sites
- 3.2 Task 2: Screening of rLDP to identify potential likely effects on European Sites
- 3.3 Task 3: Consideration of effects in combination with other plans, programmes and projects.
- 3.4 Task 4: Screening Assessment Summary

Section 4 outlines a further Appropriate Assessment of the identified potential likely significant effects.

2. Methodology

2.1 Stage 1 – Screening

The process of Screening can be broken down into four main task areas. Each task is outlined below.

- Task 1: Identification and characterisation of European sites
- Task 2: Review and screening of Development Plan to identify potential impacts and likely effects on European sites.
- Task 3: Consideration of other plans and projects that may act ‘in-combination’
- Task 4: Screening Assessment, recording the opinion and supporting information and analysis.

A screening assessment, both alone and in combination, with other identified plans and projects will identify if any significant environmental affects will result affecting the site and conclude whether significant affects are likely or not.

If no potential significant affects are identified, the process ends at this stage.

If there are found to be likely significant effects, having applied the precautionary principle, the plan must be subject to an appropriate assessment of its implications for the European site in view of the site’s conservation objectives. The work carried out at the evidence gathering stage and the screening stage should be drawn upon to assist in assessing the effects of the plan option on the conservation objectives

2.2 Stage 2 – Appropriate Assessment

The purpose of the appropriate assessment is to establish whether the plan, by itself or in combination with other plans and projects, will adversely affect the conservation objectives of the site’s qualifying features, based on best scientific knowledge. The scope and content of an appropriate assessment will depend on the nature, location, duration and scale of the proposed plan and the qualifying features of the European site. This will involve testing whether the plan ‘in combination’ will affect the environmental factors needed to maintain site integrity, i.e. whether the plan increases air pollution, increases recreational disturbance etc. Natural Resources Wales should be consulted for further information and advice.

2.3 Determining ‘likely significant effect’

In order to decide whether a development plan at any stage requires an appropriate assessment, it is necessary to apply the two tests set out in regulation 6385B(1) of the regulations, which are:

- (1) Is the plan likely to have a significant effect on a European site or European offshore marine site (either alone or in combination with other plans or projects)?
- (2) Is it directly connected with or necessary to the management of the site?

When undertaking this assessment a precautionary approach is required. The development plan should be considered ‘likely’ to have such an effect if the planning authority is unable (on the basis of objective information) to exclude the possibility that the plan could have significant effects on any European site or European offshore marine site, either alone or in combination with other plans or projects.

An effect will be considered ‘significant’ in this context if it could undermine the conservation objectives of a European designated site. The assessment of that risk (of ‘significance’) must be made in the light, amongst other things, of the characteristics and specific environmental conditions of the site concerned.

The screening step will therefore screen out aspects of the plan which could not have any negative effect at all on a European site, because there is no link, nor pathway, nor other relationship between the effects of the policy or proposal and any European site, including cases where the link is severed or eliminated by distance, or because any potential effects would be positive, not negative.

If the likelihood of significant affects cannot be ruled out on the evidence available, then it must be assumed that a risk of significant affects may exist. These will then need to be addressed through either changes to the scheme, avoidance or through securing mitigation measures.

2.4 Guidance for Habitats Regulations Appraisal/Appropriate Assessment

The following methodology developed for the HRA screening is based upon the following regulations and guidance documents:

Regulations:

- Conservation of Habitats and Species (Amendment) Regulations 20172 (the 'Conservation Regulations').
- Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora, (the 'Habitats Directive').

Guidance:

- Assessment of plans and projects significantly affecting Natura 2000 sites. European Commission (2001).
- Department for Communities and Local Government (2006). Planning for the Protection of European Sites: Guidance for Regional Spatial Strategies and Local Development Documents.
- TAN 5
- Habitats Regulations Assessment: A toolkit to support HRA Screening and Appropriate Assessment of Plans. South East Wales Strategic Planning Group (SEWSPG) (2008)
- Tyldesley, D. and Chapman, C. (2013) The Habitats Regulations Assessment Handbook, February 2019 edition UK: DTA Publications Ltd (see www.dtapublications.co.uk).

3. Screening

3.1 Task 1: Identification and Characterisation of European Sites

Plans, programmes and projects can have spatial implications that extend beyond the intended plan boundaries. It is recognised that distance in itself is not a definitive guide to the likelihood or severity of an impact and factors such as prevailing wind direction, river flow direction and groundwater flow direction will all have bearing on the relevant distance at which an impact can occur. This means that a plan directing development some distance away from a European Site could still have effects on the site and therefore, needs to be considered as part of the screening process.

European sites on which Carmarthenshire Local Development Plan could potentially have a significant effect have been identified via data obtained through the Joint Nature Conservation Committee (JNCC) Protected Sites Designations Directory and by applying a 15km buffer from the County boundary, in order to take a precautionary approach to the potential for transboundary impacts.

Twelve designated sites lie within or immediately adjacent to Carmarthenshire's County boundary and are listed in Table 1.

Table 1 European sites within the boundary of Carmarthenshire.

European Site within Plan Boundary	Designation
River Tywi	SAC
Caeau Mynydd Mawr	SAC
Cernydd Carmel	SAC
Carmarthen Bay Dunes	SAC
River Teifi	SAC
Cleddau Rivers	SAC
Carmarthen Bay and Estuary	SAC
Bristol Channel Approaches	SAC
Cwm Doethie – Mynydd Mallaen	SAC
Carmarthen Bay	SPA
Elenydd - Mallaen	SPA
Burry Inlet	SPA
Burry Inlet	Ramsar

A further 15 designated sites have been identified that lie within the 15km buffer zone and could be impacted by transboundary effects of the revised LDP and are listed in Table 2.

Table 2 European sites within 15km of Carmarthenshire

European Site within 15km buffer around Plan Boundary	Designation	Distance from Plan boundary (km)
Cardigan Bay	SAC	9.2km
North Pembrokeshire Woodlands	SAC	9.0km
Yerbeston Tops	SAC	8.8km
Rhos Llawr-cwrt	SAC	7.5km
Pembrokeshire Bat Sites and Bosherton Lakes	SAC	23.0km
Gower Ash Woods	SAC	8.8km
Pembrokeshire Marine	SAC	4.7km
Gower Commons	SAC	4.0km
River Wye	SAC	1.7km
Gweunydd Blaencleddau	SAC	1.9km

Preseli	SAC	0.5km
Mynydd Epynt	SAC	1.8km
River Usk	SAC	0.2km
West Wales Marine	SAC	9.2km

Appendix 1 provides a summary of each of the European sites considered to potentially be affected by the Carmarthenshire revised LDP Deposit Plan, and sets out the Conservation Objectives and condition assessment for each of the features of interest for each site. Detailed site characterisation information for each of the identified sites can be found in the accompanying Core Management Plan and Natura 2000 standard data form for each site, which can be accessed via the Joint Nature Conservation Committee website.

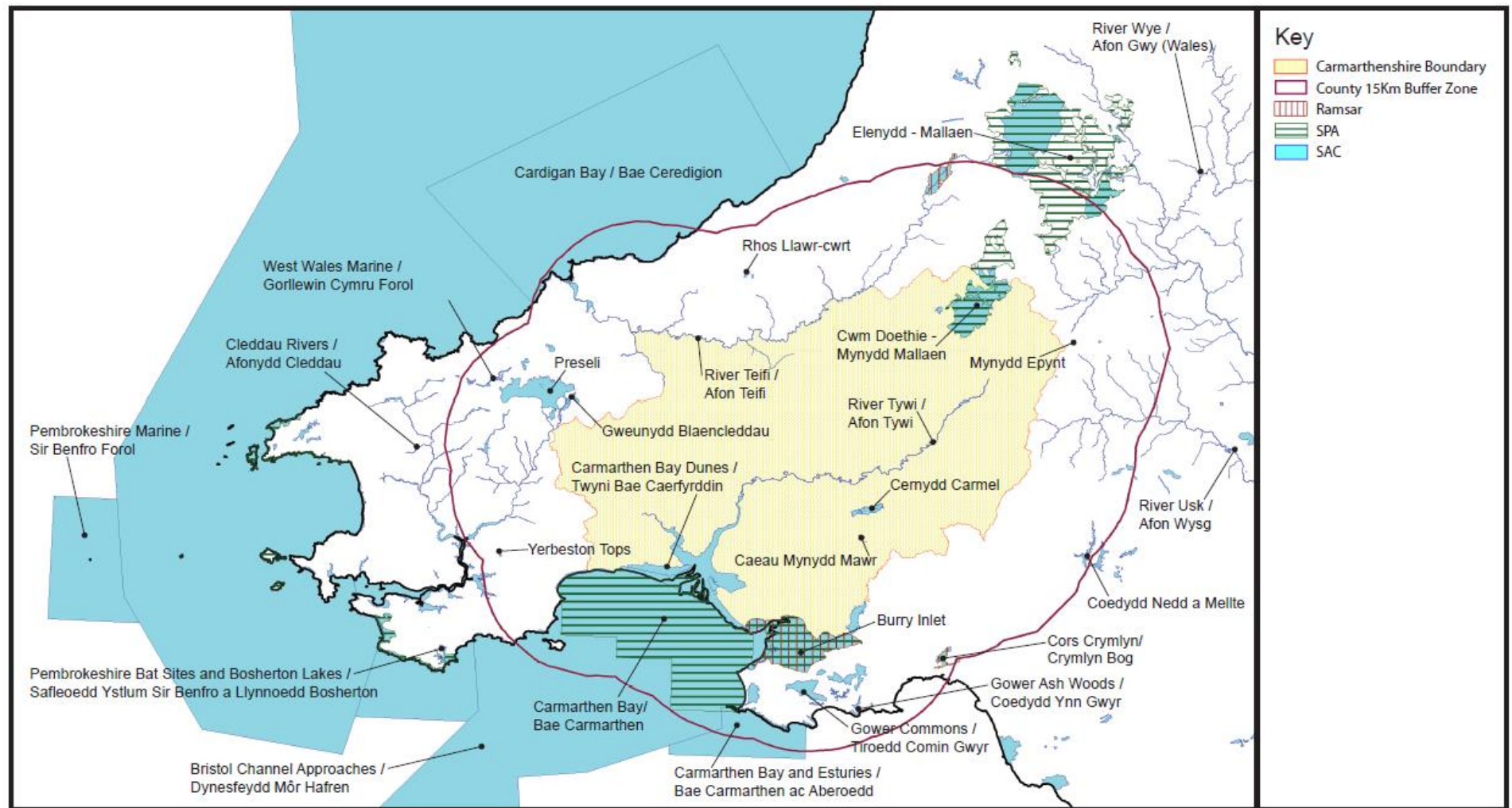


Figure 2 Location of European sites in relation to Carmarthenshire

Scanning and selection of European sites potentially affected.

The scanning stage identifies features of the N2K sites that may be affected by the plan as far beyond as necessary for sites and identifying causal connections and links between the plan proposals and the qualifying features of the sites. The Plan must not undermine the conservation objectives of the sites.

The checklist provided in Table 3 identifies potential pathways by which the Deposit LDP may impact on European sites. This checklist is taken from The Habitats Regulations Assessment Handbook⁴, and reflects and expands upon NRW guidance, and provides a systematic and transparent way of identifying sites and potential impact pathways of the Deposit LDP.

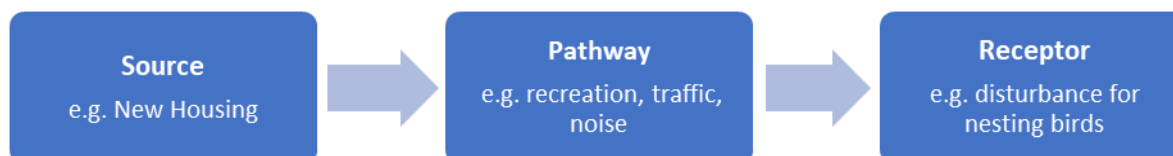


Figure 3 Impact Source, Pathway, Receptor model

This process enables an appropriate 'short list' of sites potentially affected to be identified, from which the final list of sites to be included in assessment can be selected after considering the relevant information. Selection of sites is an iterative process, considering and reconsidering information until there is a satisfactory degree of confidence that all sites potentially adversely affected have been selected.

If there is no causal connection or link between the Plan's proposals and the sites qualifying features there cannot be an effect. If there is a 'theoretical' pathway or 'hypothetical' cause, but in practice there is no credible evidence of a real link to the site, it cannot be regarded as being potentially significant, either alone or in combination with other plans and projects. There is no point including that supposition in further assessment.

This scan is broad ranging, but following a systematic approach is likely to ensure compliance and to provide credible and demonstrable evidence of how sites were scanned and selected.

⁴ Tyldesley, D. and Chapman, C. (2013) The Habitats Regulations Assessment Handbook, February 2019 edition UK: DTA Publications Ltd (see www.dtapublications.co.uk).

Table 3 Scanning and site selection list for sites that could potentially be affected by the plan.

Types of plan	Site selection criteria	Sites selected for further consideration
1. All plans (terrestrial, coastal and marine)	Sites within the plan area	SACs
		<ul style="list-style-type: none"> ▪ River Tywi ▪ Caeau Mynydd Mawr ▪ Cernydd Carmel ▪ Carmarthen Bay Dunes ▪ Cleddau Rivers ▪ River Teifi ▪ Carmarthen Bay and Estuaries ▪ Cwm Doethie – Mynydd Mallaen
		SPA/Ramsar
		<ul style="list-style-type: none"> ▪ Carmarthen Bay SPA ▪ Burry Inlet SPA/Ramsar ▪ Elenydd - Mallaen
2. Plans that could affect the aquatic environment	Sites upstream or downstream of the plan area in the case of river or estuary sites. Effects considered include localised effects on surface/groundwater resources and quality, resulting from changes in run-off, sedimentation, erosion etc as well as effects downstream.	SACs
		<ul style="list-style-type: none"> ▪ Afon Tywi ▪ Carmarthen Bay and Estuaries ▪ River Usk ▪ River Wye ▪ Cardigan Bay ▪ West Wales Marine ▪ Bristol Channel Approaches ▪ Pembrokeshire Marine
		SPA/Ramsar
		<ul style="list-style-type: none"> ▪ Carmarthen Bay ▪ Burry Inlet
	Open water, peatland, fen, marsh and other wetland sites with relevant hydrological links to land within the plan area, irrespective of distance	SACs
		<ul style="list-style-type: none"> ▪ Afon Teifi ▪ Caeau Mynydd Mawr ▪ Cernydd Carmel ▪ Carmarthen Bay Dunes ▪ Cleddau Rivers ▪ Cwm Doethie-Mynydd Mallaen ▪ Gweunydd Blaencleddau ▪ Preseli ▪ River Wye
		SPA/Ramsar
3. Plans that could affect the marine environment	Sites that could be affected by changes in water quality, currents or flows; or effects on the intertidal or subtidal areas or the seabed or marine species	<ul style="list-style-type: none"> ▪ Burry Inlet SPA/Ramsar
		SACs
		<ul style="list-style-type: none"> ▪ Carmarthen Bay and Estuaries ▪ Cardigan Bay ▪ West Wales Marine ▪ Bristol Channel Approaches ▪ Pembrokeshire Marine
		SPA/Ramsar
		<ul style="list-style-type: none"> ▪ Burry Inlet

		<ul style="list-style-type: none"> ▪ Carmarthen Bay
4. Plans that could affect the coast	Sites in the same coastal 'cell' or part of the same coastal ecosystem, or where there are interrelationships with or between different physical coastal processes	SACs
		<ul style="list-style-type: none"> ▪ Carmarthen Bay Dunes ▪ Carmarthen Bay and Estuaries ▪ Cardigan Bay ▪ West Wales Marine ▪ Bristol Channel Approaches ▪ Pembrokeshire Marine
		SPA/Ramsar
		<ul style="list-style-type: none"> ▪ Burry Inlet ▪ Carmarthen Bay
5. Plans that could affect mobile species	Sites whose qualifying features include mobile species which may be affected by the plan irrespective of the location of the plans or whether the species would be in or out of the site when they might be affected.	SACs
		<ul style="list-style-type: none"> ▪ River Tywi ▪ River Teifi ▪ Cleddau Rivers ▪ Carmarthen Bay and Estuaries ▪ Caeau Mynydd Mawr ▪ Cardigan Bay ▪ West Wales Marine ▪ Bristol Channel Approaches ▪ Pembrokeshire Marine ▪ River Wye ▪ River Usk ▪ North Pembrokeshire Woodlands ▪ Pembrokeshire Bat Sites and Bosherton Lakes ▪ Yerboston Tops ▪ Rhos Lawr Cwrt ▪ Preseli ▪ Gower Commons ▪ Gweunydd Blaencleddau
		SPA/Ramsar
		<ul style="list-style-type: none"> ▪ Carmarthen Bay ▪ Burry Inlet ▪ Elenydd Mallaen
6. Plans that could increase recreational pressure on European sites potentially vulnerable to such pressure	Such sites in the plan area	SAC
		<ul style="list-style-type: none"> ▪ River Teifi ▪ River Tywi ▪ Carmarthen Bay and Estuaries ▪ Carmarthen Bay Dunes ▪ Cwm Doethie – Mynydd Mallaen
		SPA/Ramsar
		<ul style="list-style-type: none"> ▪ Burry Inlet ▪ Carmarthen Bay ▪ Elenydd - Mallaen

	Such sites within a reasonable travel distance of the plan area boundaries that may be affected by local recreational or other visitor pressure from within the plan area	None
	Such sites within a longer travel distance of the plan area which are major (regional or national) visitor attractions such as site which are National Nature Reserves where public visiting is promoted, sites in National Parks, coastal sites and sites in other major tourist or visitor destinations.	None
7. Plans that would increase the amount of development	Sites in the plan area or beyond that are used for, or could be affected by, water abstraction irrespective of distance from the plan area	SACs
		<ul style="list-style-type: none"> ▪ River Teifi ▪ River Tywi ▪ Cleddau Rivers ▪ Caeau Mynydd Mawr ▪ Cardigan Bay ▪ Carmarthen Bay and Estuaries ▪ Carmarthen Bay Dunes ▪ Cernydd Carmel ▪ Cwm Doethie – Mynydd Mallaen ▪ Mynydd Epynt ▪ Preseli ▪ River Wye ▪ River Usk ▪ Yerboston Tops ▪ Pembrokeshire Bat Sites and Bosherton Lakes ▪ Pembrokeshire Marine ▪ Gower Commons
		SPA/Ramsar
		<ul style="list-style-type: none"> ▪ Burry Inlet ▪ Carmarthen Bay
	Sites used for, or which could be affected by, discharge of effluent from waste water treatment works or other waste management streams serving the plan area, irrespective of distance	SACs
		<ul style="list-style-type: none"> ▪ River Teifi ▪ River Tywi ▪ Cleddau Rivers ▪ Cardigan Bay ▪ West Wales Marine ▪ Bristol Channel Approaches ▪ Carmarthen Bay and Estuaries ▪ Carmarthen Bay Dunes ▪ Pembrokeshire Marine
		SPAs/Ramsar
		<ul style="list-style-type: none"> • Burry Inlet

		<ul style="list-style-type: none"> • Carmarthen Bay
	Sites that could be affected by the provision of new or extended transport or other infrastructure	None
	Sites that could be affected by increased deposition of air pollutants arising from the plan, including emissions from significant increases in traffic	SACs <ul style="list-style-type: none"> • River Teifi • Caeau Mynydd Mawr • Carmarthen Bay and Estuaries • Carmarthen Bay Dunes • Cernydd Carmel • Cleddau Rivers • Cwm Doethie – Mynydd Mallaen • Gower Ash Woods • Gower Commons • Gweunydd Blaencleddau • Mynydd Epynt • Pembrokeshire Bat Sites and Bosherton Lakes • Pembrokeshire Marine • Preseli • Rhos Llawr-cwrt • North Pembrokeshire Woodlands • Yerboston Tops
8. Plans for linear developments or infrastructure	Sites within a specified distance from the centre line of a proposed route (or alternative routes), the distance may be varied depending on type of site/qualifying features and in the absence of established good practice standards, distances are to be agreed by the statutory nature body	None (Plan does not produce such risks)
9. Plans that introduce new activities or new uses to the marine, coastal or terrestrial environment	Sites considered have qualifying features potentially vulnerable or sensitive to the effects of the new activities proposed by the plan	None (Plan does not produce such risks)
10. Plans that could change the nature, area, extent, intensity, density, timing or scale of existing use activities.	Sites considered to have qualifying features potentially vulnerable or sensitive to the effects of the changes to existing activities proposed by the plan	None (Plan does not produce such risks)
11. Plans that could change the quantity, quality, timing, treatment or	Sites considered to have qualifying features potentially vulnerable or sensitive to the changes in emissions or	None (Plan does not produce such risks)

mitigation of emissions or discharges to air, water or soil	discharges that could arise as a result of the plan (over and above those already identified)	
12. Plans that could change the quantity, volume, timing, rate or other characteristics of biological resources harvested, extracted or consumed	Sites whose qualifying features include the biological resources which the plan may affect, or whose qualifying features depend on the biological resources which the plan may affect e.g. as prey species or supporting habitat or which may be disturbed by the harvesting, extraction or consumption	None (Plan does not produce such risks)
13. Plans that could change the quantity, volume, timing, rate or other characteristics of physical resources extracted or consumed	Sites whose qualifying features rely on the non-biological resources which the plan may affect e.g. as habitat or physical environment on which habitat may develop or which may be disturbed by the extraction or consumption	None (Plan does not produce such risks)
14. Plans that could introduce, increase or alter the timing, nature or location of disturbance to species	Sites whose qualifying features are considered to be potentially vulnerable or sensitive to disturbance e.g. as a result of noise, activity or movement, or the presence of disturbing features that could be brought about by the plan	SACs
		<ul style="list-style-type: none"> • Afon Teifi • Afon Tywi • Cleddau Rivers • Cardigan Bay • Carmarthen Bay and Estuaries • Gower Commons • Gower Ash Woods • North Pembrokeshire Woodlands • Pembrokeshire Marine • Pembrokeshire Bat sites and Bosherton Lakes • River Wye • River Usk
		SPA/Ramsar
		<ul style="list-style-type: none"> • Burry Inlet • Carmarthen Bay • Elenydd - Mallaen
15. Plans which could introduce, increase or change the timing, nature or location of light or noise pollution	Sites whose qualifying features are considered to be potentially vulnerable to the effects of changes in light or noise that could be brought about by the plan	SACs
		<ul style="list-style-type: none"> • Afon Teifi • Afon Tywi • Cleddau Rivers • Cardigan Bay • Carmarthen Bay • Pembrokeshire Marine • Pembrokeshire Bat Sites and Bosherton Lakes • River Wye • River Usk

		SPAs
		<ul style="list-style-type: none"> • Burry Inlet • Carmarthen Bay • Elenydd - Mallaen
16. Plans which could introduce or increase a potential cause of mortality of species	Sites whose qualifying features are considered to be potentially vulnerable to the source of new or increased mortality that could be brought about by the plan	Potential for mortality as a result of disturbance, however to avoid duplication this is addressed under Section 14

In summary, from the table all sites identified have potential impact pathways identified and must therefore be included in the screening of likely significant effects of the Deposit plan.

3.2 Task 2 Screening of Deposit Plan to identify potential likely effects on European Sites

Generic Screening

Based on the checklist in Table 3 and taking into account the nature, scope content and function of the Deposit Plan, it is considered that the screening will need to consider the following range of effects:

- Effects on aquatic environment
- Effects on the marine environment
- Effects on the coast
- Effects on mobile species
- Recreational effects
- Effects associated development
 - Water abstraction
 - Discharge of effluent from wastewater
 - Effects of air pollution
- Species disturbance effects
- Noise and light pollution effects

Each effect is introduced and considered at a generic level in relation to the overall Deposit Plan in the subsequent paragraphs.

Effects on the aquatic environment

The 'aquatic environment' of a site is typically the body of water in a site, taking into consideration its movement into, through and out of the site. Effects considered under this heading relate to the localised effects of development on the existing surface water and ground water movement. Direct effects (such as sediment run off or the reduction of rainwater infiltration) are distinct from indirect effects such as water abstraction and wastewater, which are assessed separately under 'effects associated with development'.

Development and changes in land use can have affect the aquatic environment. It can cause acceleration of run off by increasing hard surface and reducing areas where infiltration can occur, which can increase the amount of chemicals or other pollutants entering watercourses. Water run off can also be slowed, through water retention and the introduction of sustainable drainage systems. Sedimentation of surface water can also occur through run off from building sites or the diversion of water courses to other catchments.

Sites identified as potentially vulnerable to this effect are detailed in Table 4.

Although identified as sites sensitive to effects on the aquatic environment, Gweunydd Blaencleddau SAC, Preseli SAC and River Wye SAC are all located outside of the plan area and so will not be at risk of direct effects to the aquatic environment. In addition, they are located upstream of the plan area and are therefore unlikely to be influenced by any effects outside of the plan area **and are therefore screened out under this impact pathway.**

In the case of all remaining sites, effects are only considered likely where development is in close proximity to a water course that is in hydraulic continuity to the site, and will be considered in the screening of the rLDP allocations, where each proposed allocation is individually screened.

Table 4 Summary of generic level screening of sites identified as vulnerable to effects on aquatic environment.

Sites identified as vulnerable	Further Assessment Required?	Summary of generic level screening
SAC		
Afon Tywi	Yes	Identify allocations in close proximity to a water course that flows in/out of sites
Afon Teifi	Yes	
Caeau Mynydd Mawr	Yes	
Carmarthen Bay Dunes	Yes	
Cardigan Bay	Yes	
Carmarthen Bay and Estuaries	Yes	
Cernydd Carmel	Yes	
Cleddau Rivers	Yes	
Cwm Doethie – Mynydd Mallaen	Yes	
River Usk	Yes	
Pembrokeshire Marine	Yes	
Bristol Channel Approaches	Yes	
West Wales Marine	Yes	
Gweunydd Blaencleddau	No	Screened out of further consideration under this impact pathway
Preseli	No	
River Wye	No	
SPA/Ramsar		
Carmarthen Bay SPA	Yes	Identify allocations in close proximity to a water course that flows in/out of sites
Burry Inlet SPA/Ramsar	Yes	

Effects on the marine environment

Development and growth can lead to effects on the marine environment. Sites identified as potentially vulnerable to this effect are identified in Table 5. **It is considered unlikely that the policies within the Deposit Plan will result in effects on the marine environment, however they will be considered on precautionary basis in the screening of the rLDP allocations where each proposed allocation is individually screened.**

Table 5 Summary of generic level screening of sites identified as vulnerable to effects on marine environment.

Sites identified as vulnerable	Further Assessment Required?	Summary of generic level screening
SAC		

Carmarthen Bay and Estuaries	Yes	Ensure no such effects occur as a result of allocations
Cardigan Bay	Yes	
Pembrokeshire Marine	Yes	
West Wales Marine	Yes	
Bristol Channel Approaches	Yes	
SPA/Ramsar		
Burry Inlet SPA/Ramsar	Yes	Ensure no such effects occur as a result of allocations
Carmarthen Bay SPA	Yes	

Effects on the coast

New development and growth can result in impacts on coastal processes. Installation of coastal defence structures to protect land and property can interfere with natural sand movement and erosion, which can result in coastal squeeze and effects on coastal dynamics.

Sites identified as potentially vulnerable to this effect are detailed in Table 6. **It is considered unlikely that the policies within the Deposit Plan will result in effects on the marine environment, however they will be considered on precautionary basis in the screening of the rLDP allocations, where each proposed allocation is individually screened.**

Table 6 Summary of generic level screening of sites identified as vulnerable to effects on the coast.

Sites identified as vulnerable	Further Assessment Required?	Summary of generic level screening
SAC		
Carmarthen Bay Dunes	Yes	Ensure no such effects occur as a result of allocations
Carmarthen Bay and Estuaries	Yes	
Cardigan Bay	Yes	
Pembrokeshire Marine	Yes	
West Wales Marine	Yes	
Bristol Channel Approaches	Yes	
SPA/Ramsar		
Burry Inlet SPA/Ramsar	Yes	Ensure no such effects occur as a result of allocations
Carmarthen Bay SPA	Yes	

Effects on mobile species

Mobile Species are those listed features of a site that are dependent on areas of land outside of the designated site boundary, such as birds, bats, fish etc. The mobile species identified as relevant to this preliminary assessment and the sites they are designated within are detailed in Table 7. In summary, mobile species to be considered are:

- Twaite Shad, Allis Shad, River lamprey, Sea lamprey and Atlantic Salmon
- Marsh Fritillary Butterfly
- Barbastelle Bat
- Greater and Lesser Horseshoe Bats
- European Otters
- Bottlenose Dolphin, Grey Seal and Harbour Porpoise
- SPA Bird Assemblages

a) Twaite Shad, Allis Shad, River lamprey, Sea lamprey and Atlantic salmon

Twaite Shad, Allis Shad, River lamprey, Sea Lamprey and Atlantic salmon all utilise migratory routes through both estuarine and riverine SACs within Carmarthenshire at different stages of their life cycles. In Carmarthenshire, the Rivers Tywi, Teifi and Cleddau all have migratory species as designated features. The River Tywi is of particular importance to shad species as it is thought to be one of only four rivers in Wales in which they are known to spawn.

The rivers Tywi, Teifi and Cleddau all drain into estuaries which also have shad and lamprey as protected features, namely Carmarthen Bay and Estuaries SAC, Cardigan Bay SAC and Pembrokeshire Marine SAC respectively. The rivers Usk and Wye also have shad and lamprey as designated species and their catchment area lies partially within Carmarthenshire.

Offsite impacts on features within these sites are likely to be as a result of water quality or abstraction. However, these are assessed separately under 'effects associated with development' and will be therefore not be considered further under this effect pathway.

Growth and development could also result in barriers to migration, such as physical barriers or noise impacts. **Noise impacts are addressed separately under 'Effects of species disturbance, noise and light pollution effects' and will be therefore not be considered further under this effect pathway.**

Physical barriers to migration may be caused by the introduction of supporting infrastructure to development such as roads or bridges. **The potential for impacts as a result of physical barriers to migration will be considered in the screening of the rLDP allocations where each proposed allocation is individually screened.**

b) Marsh Fritillary Butterfly

Marsh fritillary butterfly are designated features of a number of sites within the 15km buffer zone for consideration under HRA (Table 7). Conservation objectives for Marsh fritillary butterflies in Yerboston Tops SAC, Rhos Lawr Cwrt SAC, Preseli SAC and Gower Commons SAC state that 'There will be at least 10ha of Good Condition (optimal breeding) habitat on or within 2km radii of the SAC, set in a matrix of at least 50ha of Suitable Condition habitat'.

All but Gower Commons SAC are considered to support insufficient habitat to achieve good conservation status under the above objective and are therefore highly sensitive to habitat fragmentation and loss as a result of development within a 2km radii of SAC boundaries.

However, Yerboston tops SAC, Rhos Lawr cwrt SAC and Gower Commons SAC are sited more than 2km outside of the direct influence of Carmarthenshire's LDP and are therefore all screened out of further consideration under this impact pathway, as the LDP is not likely to have a significant effect on habitat fragmentation at these sites.

Due to its proximity to Carmarthenshire's boundary, potential for impacts on Preseli SAC as a result of supporting habitat fragmentation are screened in for further consideration in the screening of the rLDP allocations, where any allocations that may potentially impact on the 2km habitat buffer around this site must be identified and assessed.

The conservation objectives for Caeau Mynydd Mawr SAC were updated by NRW in 2016, to reflect more current information and understanding of the site and its features.

These updated conservation objectives state that to be viable in the long term, the Marsh Fritillary metapopulation requires 'at least 100ha of available habitat, with adequate connectivity linked to the core SAC units'. The core SAC units have a requirement to provide a minimum of 17.5ha of available habitat, and to provide at least 6ha of good habitat within Caeau Mynydd Mawr SAC.

The Conservation Objective for the Marsh Fritillary feature of Caeau Mynydd Mawr SAC is considered to be in unfavourable condition, with no 'peak' count of Marsh Fritillary larval webs

since 1991, when approximately 279 were counted by Butterfly Conservation within the SAC. The amount of both Suitable and Good Condition Marsh Fritillary habitat within the SAC is also below the target included in the Conservation Objective.

During the 2009 monitoring by Butterfly Conservation it was considered that the Mynydd Mawr Marsh Fritillary population was in steady decline. This was thought to be due to neglect and unsympathetic management within some of the protected sites, in addition to habitat destruction which was occurring outside the protected sites, but within the meta-population landscape area.

The potential for impacts on Caeau Mynydd Mawr SAC as a result of supporting habitat fragmentation will be considered in the screening of the rLDP allocations where each proposed allocation is individually screened.

c) Barbastelle Bat

With regards to potential offsite impacts on Barbastelle bats, the management plan for North Pembrokeshire Woodlands SAC states that *'One threat to the barbastelle feature is that around half of the roosting sites and the majority of the foraging areas lie outside the SAC boundaries, as the boundaries were drawn up before the bats were discovered.'* To address this, the site management plan has the following conservation objectives for the Barbastelle bat feature:

'there will be continual foraging habitat within a 16km radius around Pengelli Forest, including wooded stream valleys, low and overgrown hedgerows, scrub, overgrown pastures, broken stands and woodland (which can include conifer plantations).'

'Roosts outside the [SAC] boundary will be left undisturbed, with no woodland management within 50m of a barbastelle roost and no clearance of shrub layer.'

As a result, further screening will need to be carried out to identify impacts any potential impacts on foraging habitat within a 16km radius around Pengelli, used by Barbastelle bats. This will be considered in the screening of the rLDP allocations where each proposed allocation is individually screened.

d) Greater and Lesser Horseshoe Bats

Both Greater and Lesser horseshoe bats are features of Pembrokeshire Bat Sites and Bosherton Lakes, which contains a range of important roosting sites and nursery roosts for a range of bat species.

The Pembrokeshire Bat Sites and Bosherton Lakes Management Plan states that between 1-16km from the component SSSI *'extensive hedgerow systems and tree-lined watercourses, linking roost sites and grasslands foraging areas are to be retained within up to 16km of these roosts'*.

It also states that an area between 7-16km from component SSSIs may be used for foraging, but flight routes may lead further connecting to other roost sites. And that *'All existing roosts known to CCW (now NRW) should be maintained and there should be no physical deterioration in or disturbance of these sites, or loss or of roosting opportunity within 1-16 km radius of the key breeding roosts within the SAC.'*

Pembrokeshire Bat Site and Bosherton Lakes SAC sits more than 16km outside of Carmarthenshire's border and therefore the LDP deposit plan will not have any direct impacts on this objective. However, it is relevant to this assessment that the management plan does make reference to cumulative records, which show that both Greater horseshoe bats and Lesser horseshoe bats utilise roosts throughout the West Wales region, including Carmarthenshire.

Records would need to be checked to inform the screening of any such areas that are considered for development with regards to potential threats to both Greater and Lesser horseshoe bats, and as such this will be considered further in the screening of the rLDP allocations where each proposed allocation is individually screened.

e) European Otters

European otters are designated features of a number of European sites considered for screening within this document, including River Tywi, River Teifi, Cleddau Rivers, Carmarthenshire Bay and Estuaries, Pembrokeshire Bat Sites and Bosherton Lakes, Pembrokeshire Marine, River Wye and River Usk SACs. Management plans for all of the aforementioned sites highlight that otters '*may be affected by developments that affect resting and breeding sites outside of SAC boundaries*'.

With regards to riverine SACs, the management plans state that '*otters require sufficient undisturbed riparian habitat for breeding and resting to be maintained in areas adjacent to the SACs and that in urban areas focus is often placed on maintaining the river as a 'communication corridor' without considering the requirement of the surrounding supporting habitats, which enable the river corridor to function efficiently*'.

One threat of particular relevance is an increase in road use, as otter road deaths have been highlighted as having a potentially significant impact on populations within river catchments.

It is also highly likely that otters travel between water courses and along the coastline, utilising inland watercourses for breeding and coastal areas for foraging. Otters are known to utilise most areas of the coastline within and adjacent to both Pembrokeshire Marine and Carmarthen Bay and Estuaries SACs, and it is likely that otters present at a particular site are part of the wider population, with no site completely isolated. Of relevance to this assessment is the emphasised link between the coastal SACs and both Tywi and Cleddau river SACs, both of which fall within Carmarthenshire's boundary

This indicates otters are highly mobile between the aforementioned SACs and as such are at risk of impacts as a result of the LDP, outside of SAC boundaries.

In light of this, this will be considered further in the screening of the rLDP allocations where each proposed allocation is individually screened, to identify any potential impacts on the use of suitable areas of land outside of the SAC boundary by otters.

f) Bottlenose Dolphin, Grey Seal and Harbour Porpoise

Bottlenose Dolphins are designated features of Cardigan Bay SAC, which lies 9.2km west of Carmarthenshire's boundary. Data on the sightings of Bottlenose dolphin species around the coast of Wales⁵ show that there have been no sightings of bottlenose dolphins utilising waterways directly within the plan area. **Therefore, direct impacts on bottlenose dolphins are considered unlikely and are screened out under this impact pathway.**

However, upstream water quality issues within the river Teifi have the potential to negatively impact on the species within Cardigan Bay SAC. **Issues associated with water quality will be addressed in more detail under the heading 'effects associated with development – water quality' and will be therefore not be considered further under this effect pathway.**

Grey seal are features of both Cardigan Bay SAC and Pembrokeshire Marine SAC, and a small number have been observed in the Carmarthen Bay area⁶. It is unlikely that the LDP will have any direct impacts on Grey seal species as there are no Grey seal haul outs within the Bay area, however there is the potential for increased recreational use of Carmarthen Bay,

⁵ NBN Atlas Bottlenose dolphin occurrence records, Accessed 06/03/19:

<https://species.nbnatlas.org/species/NBNSYS0000005179>

⁶ NBN Atlas Grey seal occurrence records Accessed 07/03/19:

https://species.nbnatlas.org/species/NBNSYS0000005137#tab_mapView

such as boating and fishing as a result of development which may have impacts. Upstream water quality issues within the rivers Cleddau or Teifi, as well as the Tywi, may also have the potential to negatively impact on Grey seal within Cardigan Bay SAC and Pembrokeshire Marine SAC, as well as their natural prey.

However, issues associated with recreation will be addressed under the heading 'species disturbance effects'. Issues associated with water quality will be addressed under the heading 'effects associated with development' and will be therefore not be considered further under this effect pathway.

A network of eight sites have been identified within UK waters for the protection of harbour porpoise (*Phocoena phocoena*). Two of these sites have the potential to be indirectly impacted by the LDP, namely Bristol Channel Approaches SAC and West Wales Marine SAC.

Seasonal differences in the relative use of the sites have been identified based on the analyses of Heinänen and Skov (2015)⁷. Bristol Channel Approaches has been designated because of its importance to harbour porpoise in the winter months (October to March), whereas West Wales Marine has been designated because of its importance to harbour porpoise in both the summer and winter months.

Potential impacts on these sites include upstream water quality issues within the rivers Cleddau or Teifi, as well as the Tywi. There is also the potential for increased recreational use of Carmarthen Bay, such as boating and fishing, as a result of development which may have impacts.

Issues associated with recreation will be addressed under the heading 'Species disturbance effects'. Issues associated with water quality will be addressed under the heading 'effects associated with development' and will be therefore not be considered further under this effect pathway.

g) SPA Bird Assemblages

Elenydd-Mallaen SPA is designated for breeding Merlin, Red Kite and Peregrine. Of the national population, the SPA is known to support 0.5% of breeding Merlin, 9.3% of breeding Red Kite, and 1.3% of breeding Peregrine. To assess whether there are processes or pathways by which the plan may influence the site's qualifying interests, it is important to consider the distances that some species may travel beyond the boundaries of their SPAs. In line with the precautionary principle, the maximum foraging range of each species has been considered. For breeding Merlin, this range is 5km, for breeding Red Kite 6km and for breeding Peregrine up to 18km⁸.

In light of this, detailed screening will need to be undertaken in the screening of the rLDP allocations to identify any allocations which may impact on the use of suitable areas of foraging habitat outside the SAC boundary by Elenydd-Mallaen SPA qualifying bird species. For Merlin, this will be considered within 5km of the SPA boundary, for Red Kite 6km and for Peregrine within 18km of the SPA boundary.

The listed bird species of the Burry Inlet and Carmarthen Bay SPAs are also considered as 'mobile', as at high tide many of the wading species are likely to seek refuge in supporting habitat outside of the SPA boundary. This is due to habitats above mean high water becoming too crowded or disturbed by roosting birds, when birds that utilise intertidal habitats are forced out by the incoming tide. Therefore, the birds will, at certain time, be required to utilise supporting habitats outside of the SPA, which often include arable land or recreational playing fields. In absence of any evidence to the contrary, any suitable land within 1km inshore of the

⁷ Heinänen, S. and Skov H. 2015, The identification of discrete and persistent areas of relatively high harbour porpoise density in the wider UK marine area, JNCC Report 544, ISSN 0963 8091

⁸ Scottish Natural Heritage. Assessing Connectivity with Special Protection Areas (SPAs). Guidance. Version 3 – June 2016. <https://www.nature.scot/assessing-connectivity-special-protection-areas>

SPAs may be used as supporting habitat by bird species at high tide or during inclement weather.

Bird records will need to be checked to inform the screening of any such areas that are considered for development and will be considered in the screening of the rLDP allocations where each proposed allocation is individually screened.

Table 7 Summary of generic level screening of sites identified as vulnerable to effects on mobile species.

Sites with mobile species as designated features	Distance outside CCC boundary	Potentially impacted Species	Further assessment required?
Within CCC boundary			
River Tywi SAC	N/A	Twaite shad	Yes
		Allis shad	Yes
		Sea lamprey	Yes
		River lamprey	Yes
		Otter	Yes
River Teifi SAC	N/A	Twaite shad	Yes
		Allis shad	Yes
		Sea lamprey	Yes
		River lamprey	Yes
		Otter	Yes
		Atlantic salmon	Yes
Cleddau Rivers SAC	N/A	River lamprey	Yes
		Sea lamprey	Yes
Carmarthen Bay and Estuaries SAC	N/A	Twaite shad	Yes
		Allis shad	Yes
		Sea lamprey	Yes
		River lamprey	Yes
		Otter	Yes
Caeau Mynydd Mawr SAC	N/A	Marsh Fritillary Butterfly	Yes
Carmarthen Bay SPA	N/A	Bird Assemblage	Yes
Burry Inlet SPA/Ramsar	N/A	Bird Assemblage	Yes
Elenydd – Mallaen SPA	N/A	Bird Assemblage	Yes
Bristol Channel Approaches SAC	N/A	Harbour Porpoise	No
Outside CCC boundary			
Cardigan Bay SAC	9.2km	Bottlenose dolphin	No
		Grey seal	No
		Sea lamprey	Yes
		River lamprey	Yes
Pembrokeshire Marine SAC	4.7km	Grey seal	No
		Sea lamprey	Yes
		River lamprey	Yes
		Allis shad	Yes
		Twaite shad	Yes
		Otter	Yes
River Wye	1.7km	Twaite shad	Yes
		Allis shad	Yes
		Sea lamprey	Yes
		River lamprey	Yes
		Otter	Yes
		Atlantic salmon	Yes
River Usk	0.2km	Twaite shad	Yes
		Allis shad	Yes
		Sea lamprey	Yes
		River lamprey	Yes
		Otter	Yes
		Atlantic salmon	Yes
West Wales Marine SAC	9.2km	Harbour porpoise	No

North Pembrokeshire Woodlands	9km	Barbastelle Bat	Yes
Pembrokeshire bat sites	6.9km	Greater Horseshoe Bat	Yes
		Lesser Horseshoe Bat	Yes
		Otter	Yes
Yerbeston Tops	8.8km	Marsh fritillary butterfly	No
Rhos Lawr-cwrt	7.5km	Marsh fritillary butterfly	No
Preseli	0.5km	Marsh fritillary butterfly	Yes
Gower Commons	4km	Marsh fritillary butterfly	No

Recreational Effects

The effects of recreational pressure on SACs and SPAs are primarily related to damage to habitats and disturbance to species for which the site is designated. Damage to habitats usually arise as a result of trampling, which over a period of time can cause paths and tracks to become established and subsequently widened. The wearing of paths from use can also cause or accelerate erosion leading to further habitat damage. Increased access can also increase the likelihood of invasive, non-native species being introduced into the SAC.

Disturbance and/or impacts on species in SACs and SPAs are largely as a result of increased use of the sites, which can lead to an increase in activities such as dog walking, recreational fishing, as well as eco-tourism activities, recreational boating and pollution associated with anthropogenic use of a site. Such recreational effects on species will be addressed in more detail under the heading 'Species disturbance effects'.

Section 9 of the rLDP Preferred Strategy states that the strategic growth option on which the strategy is based would result in a population change of + 15,115, which represents a population growth of +8.1% over the plan period. Unless development occurs in very close proximity to a European site it can be assumed, on a precautionary basis, that LDP allocations can only result in a maximum proportional 8.1% increase in visitor numbers over the plan period.

Nine sites are identified as being potentially sensitive to recreational pressures. It is considered that in relation to the potential effects from recreation associated with overall population growth, current management of site activities will be able to ensure that sites are able to absorb the anticipated overall increase of approx. 0.54% in visitor numbers per year without any likely significant effects to conservation objectives **and so effects of overall plan growth are screened out from further consideration.**

Site specific disturbance effects associated with recreation will be addressed under the heading 'Species disturbance effects' and therefore all sites are screened out under this effect pathway.

A summary of the preliminary screening of European sites identified as potentially vulnerable to effects of recreation are shown in Table 8.

Table 8 Summary of generic level screening of sites identified as vulnerable to recreational effects.

Sites identified as vulnerable	Further screening required?	Summary of generic level screening
SAC		
River Teifi	No	Identify allocations in close proximity to sites identified as vulnerable to recreational pressures.
River Tywi	No	
Carmarthen Bay and Estuaries	No	

Carmarthen Bay Dunes	No	
Cernydd Carmel	No	
Cwm – Doethie – Mynydd Mallaen	No	
SPA/Ramsar		
Burry Inlet SPA	No	Identify allocations in close proximity to sites identified as vulnerable to recreational pressures.
Carmarthen Bay SPA/Ramsar	No	
Elenydd – Mallaen SPA	No	

Effects as a result of development: water abstraction

Development places an increased demand on water supplies and the potential impacts of increased abstraction rates on surface water and groundwater levels can represent likely significant effects on European sites.

Water supply for new development can be abstracted from a source at some distance from the actual development location. As a result the potential effects of development through increased abstraction must be informed by the Dwr Cymru Welsh Water (DCWW) Water Resource Management Plan (WRMP)

Abstraction is licenced by Natural Resources Wales (NRW), who are the competent authority under the Habitats Regulations, and therefore it is primarily the responsibility of NRW to avoid adverse effects on European sites as a result of abstraction. However, the HRA of the Deposit Plan must recognise that the consenting and management options available to NRW are limited by water availability. Welsh Water has a duty to supply new development and there is a tension within the HRA if it assumes the NRW can simply consent any associated increases in abstraction in such a way to avoid adverse effects on European Sites.

It is the responsibility of the HRA of the deposit plan to ensure that the allocation of housing as a result of the Deposit LDP is done in such a way that there are viable options available to both NRW and DCWW to meet water supply demands and avoid adverse effects on the integrity of any European sites.

The water resources requirements for Carmarthenshire are supplied entirely by DCWW, and the county lies within the Tywi conjunctive use system (Tywi WRZ). The most recent DCWW Resource Management Plan⁹ predicts that the Tywi WRZ will be in surplus throughout the period of the LDP, based on a projected increase in household numbers within Carmarthenshire of 14.6% between 2014 and 2039, with an predicted increase from 82,751 to 89,532 between 2018 and 2033. This overall growth forecast exceeds the growth provided for in the LDP deposit plan of 8.1%.

NRW and the EA undertook a detailed review of a DCWW abstraction licences and concluded that there were twenty one sites where potential adverse effects upon protected species could not be discounted. However the WRMP states that the required amendments to abstraction licences have been agreed in order to ensure that there are at sustainable levels now, and in the future, and have been built in to the baseline deployable output calculations.

DCWW were also responsible for undertaking a Habitats Regulations Assessment of the most recent Water Resources Management Plan¹⁰. This included consideration of the abstraction licence review undertaken by EA and NRW and concluded that 'the WRMP will have no adverse effects, alone or in combination on any European sites' at the plan level. On the basis of the detailed HRA assessment undertaken by DCWW, which was informed by the NRW and

⁹ DCWW Final Water Resources Management Plan Technical Report, March 2019.

¹⁰<https://www.dwrcymru.com/-/media/Files/My-Water/Water-Resources/WRMP19/Reports/WRMP-HRA.pdf>

EA review of consents work and subject to a wide consultation with the statutory agencies, it is reasonable for Carmarthenshire to adopt the conclusions for the purpose of the HRA of the Deposit plan. Further work would be a duplication of work undertaken by NRW and DCWW and as the most appropriate authorities in relation to the potential effects connected with water supply, any further work by Carmarthenshire is not considered to be appropriate or necessary.

Therefore, it is concluded that the deposit LDP will have no likely significant effect on any European site in respect of effects associated with water supply. Such effects can be excluded on the basis of the objective information available through the EA and NRW review of consents work and the most recent HRA of the DCWW Water Resources Management Plan.

A summary of the generic screening of European sites identified as potentially vulnerable to effects of abstraction have been provided in Table 9.

Table 9 Summary of generic level screening of sites identified as vulnerable to increased water abstraction.

Sites identified as vulnerable	Further screening required?	Summary of generic level screening
SAC		
River Teifi	No	Screened out of further consideration based on most recent HRA of DCWW Water Resources Management Plan.
River Tywi	No	
Cleddau Rivers	No	
Caeau Mynydd Mawr	No	
Cardigan Bay	No	
Carmarthen Bay and Estuaries	No	
Carmarthen Bay Dunes	No	
Cernydd Carmel	No	
Cwm Doethie – Mynydd Mallaen	No	
Mynydd Epynt	No	
Preseli	No	
River Wye	No	
River Usk	No	
Yerbeston Tops	No	
Pembrokeshire Bat Sites and Bosherton Lakes	No	
Pembrokeshire Marine	No	
Gower Commons	No	
SPA/Ramsar		
Burry Inlet SPA/Ramsar	No	Screened out of further consideration based on most recent HRA of DCWW Water Resources Management Plan.
Carmarthen Bay SPA	No	

Effects as a result of development: discharge of wastewater

Development will generate wastewater which needs to be treated prior to disposal. The preferred option for the disposal of wastewater is via connection to the mains sewerage network and treatment at the relevant wastewater treatment works (WWTW).

Discharge of wastewater by DCWW is licenced by NRW, who is also a competent authority under the Habitats Regulations. Whilst the avoidance of any adverse effects on European Sites as a result of discharge consents is principally the responsibility of NRW, the HRA of the

Deposit Plan must recognise that the consenting and management options available to NRW are limited by both capacity within infrastructure and the existing pollutant levels in the receiving environment. DCWW has a duty to accept wastewater from new development, when connection to the mains sewer system is viable; there is a tension within the HRA if it assumes either that DCWW can accept any associated increases in wastewater irrespective of limitations in capacity, or that such capacity issues can be resolved by NRW consenting options which avoid adverse effects on European sites.

DCWW are under a general duty under section 94 of the Water Industry Act 1991 to effectually drain the area. If additional capacity is required in the existing systems then they are legally obliged to provide it through their normal funding mechanisms. This general duty extends to sewerage systems as well as sewage treatment works.

It is the purpose of the HRA to ensure that the allocation of housing as part of rLDP Deposit Plan is done in such a way as to ensure that there are viable options available to both NRW and DCWW to meet wastewater drainage demands, without adverse effects on the integrity of any European sites.

Under Regulation 63 of the Habitats Regulations, Natural Resources Wales (NRW) are responsible for ensuring potential effects from treated wastewater on European Designated sites are considered as part of a Review of all existing Consents (RoC). Under the RoC, discharge consents and water abstraction licences will have been considered to ensure that there were no detrimental impacts on the conservation interests in designated sites a result of these consents. Where allocations can be accommodated within the post-RoC discharge consent limits, it can be considered that there will be no likely significant effects on European Designated sites.

If the allocated development might exceed available permitted capacity, then a new or modified permit is likely to be required at the waste water treatment works in question to provide for the increased demand, and the HRA would need to consider whether it would be feasible for such additional capacity to be provided without any adverse effects on the integrity of any European Sites.

Table 10 Summary of generic level screening of sites identified as vulnerable to effects on water quality.

Sites identified as vulnerable	Further screening required?	Summary of generic level screening
SAC		
River Teifi	Yes	Further information required from NRW regarding RoC. Screened at site level.
River Tywi	Yes	
Cleddau Rivers	Yes	
Carmarthen Bay and Estuaries	Yes	
Pembrokeshire Marine	Yes	
Cardigan Bay	Yes	
West Wales Marine	Yes	
Bristol Channel Approaches	Yes	
SPA/Ramsar		
Burry Inlet SPA/Ramsar	Yes	Further information required from NRW regarding RoC. Further consideration required in detailed assessment.
Carmarthen Bay	Yes	

Effects as a result of development: effects of air pollution

Air quality is influenced by levels of pollutants such as sulphur dioxide (SO₂), nitrogen oxides (NO_x), ammonia (NH₃) and ozone (O₃), as well as persistent organic compounds (POPs), heavy metals and particulate matter (PM₁₀).

Carmarthenshire currently has three Air Quality Management Areas (AQMA's), in Llandeilo (NO₂), Llanelli (NO₂) and Carmarthen (NO₂). AQMA's also exist in some neighbouring counties; Swansea (NO₂), Neath Port Talbot (PM₁₀) and two in Pembrokeshire (NO₂).

Housing development tends to be linked with increased traffic and therefore increased traffic related emissions. Emissions from traffic have been shown to have impacts on vegetation within 200m of the road edge¹¹¹². Beyond 200m, no significant adverse effects associated with traffic emissions (including deposition) have been observed in scientific studies. This is likely due to the fact that at this distance, pollutants contribute to background levels of atmospheric pollution, and disperse to an extent that they have no observable impacts on ground level vegetation at a local scale.

On this basis, it is considered that there will be no likely significant effects on any sites more than 200m outside of Carmarthenshire's boundary.

However, additional contributions that may arise from increased traffic could be significant where the site is known to be sensitive to such effects and where appropriate critical loads and levels are either exceeded or approaching exceedance. The Air Pollution Information Service (APIS) data shows that current air quality levels already exceed the critical loads set for many of the habitat types at European sites in Carmarthenshire (Appendix 2).

All other sites considered sensitive to air pollution will be considered in the screening of the rLDP allocations where each proposed allocation is individually screened, however further consideration of potential effects is required only where site allocations may lead to increased traffic emissions within 200m of identified sites. This is summarised in Table 11.

Table 11 Summary of generic level screening of sites identified as vulnerable to effects on air quality.

Sites identified as vulnerable	Further screening required?	Summary of generic level screening
SAC		
Afon Teifi	Yes	Identify allocations within 200m of these sites
Caeau Mynydd Mawr	Yes	
Carmarthen Bay and Estuaries	Yes	
Carmarthen Bay Dunes	Yes	
Cernydd Carmel	Yes	
Cleddau Rivers	Yes	
Cwm Doethie – Mynydd Mallaen	Yes	
Gower Ash Woods	No	Screened out of further consideration as sites are more than 200m outside Carmarthenshire boundary
Gower Common	No	
Gweunydd Blaencleddau	No	
Mynydd Epynt	No	

¹¹ Natural England Commissioned Report NECR200: Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites. 2016

¹² English Nature Research report 580: The ecological effects of diffuse air pollution from road transport. 2004.

Pembrokeshire Bat Sites	No	
Pembrokeshire Marine	No	
Preseli	No	
Rhos Llawr-cwrt	No	
North Pembrokeshire Woodlands	No	
Yerbeston Tops	No	

Effects of species disturbance, noise and light pollution effects

Effects of this nature are largely associated with the physical proximity of development to a sensitive European site. Such effects include visual and noise disturbance associated with issues such as construction, lighting and the presence of development, and will be considered further in detailed assessment of site allocations. **It is considered that the LDP is not likely to have significant effects on sites outside of Carmarthenshire's boundary that do not contain mobile species and so these sites are screened out of further consideration.**

All other sites considered sensitive to species disturbance, noise and light pollution effects will be considered in the screening of the rLDP allocations where each proposed allocation is individually screened.

Sites sensitive to effects of species disturbance, noise and light pollution and the result of the generic level screening assessment is summarised in Table 12.

Table 12 Summary of generic level screening of European sites identified as vulnerable to disturbance, noise or light pollution effects.

Sites identified as vulnerable	Further screening required?	Summary of generic level screening
SAC		
Afon Teifi	Yes	Further consideration required in detailed assessment
Afon Tywi	Yes	
Cleddau Rivers	Yes	
Carmarthen Bay and Estuaries	Yes	
North Pembrokeshire Woodlands	Yes	
River Wye	Yes	
River Usk	Yes	
Cardigan Bay	No	Outside of Carmarthenshire boundary
Gower Commons	No	
Gower Ash Woods	No	
Pembrokeshire Marine	No	
Pembrokeshire Bat sites	No	
SPA/Ramsar		
Carmarthen Bay	Yes	Further consideration required in detailed assessment
Burry Inlet SPA/Ramsar	Yes	
Elenydd Mallaen	Yes	

Generic Screening – Summary

Having considered each of the potential effect mechanisms and considered them at a generic level in relation to the overall growth provided for within the rLDP Deposit Plan, the conclusions for further detailed screening work in relation to individual allocations are detailed in Table 13.

Table 13 Summary of generic level screening of sites.

Potential Effect Mechanism	Summary of generic level screening	Further screening requirements in detailed screening of specific allocations
Aquatic Environment	Effects only likely where development is in close proximity to a water course that flows into/out of a site.	To identify such allocations
Marine and coastal Environment	Effects considered unlikely, but screened in on precautionary basis	To ensure no such effects occur
Mobile Species	<ul style="list-style-type: none"> Marsh Fritillary Butterfly - Any potential development within 2km of Preseli SAC as well as any development with potential habitat fragmentation impacts on Caeau Mynydd Mawr SAC are subject to further assessment. Barbastelle Bat – Any potential development within 16km radius of Pengelli Forest should be subject to further assessment. Greater and Lesser Horseshoe Bats – Presence records should be considered to inform screening of site allocations. European Otters – Any land suitable for use by otters that may support SAC populations will need to be considered SPA Bird Assemblages – Any suitable land 1km inshore of Burry Inlet and Carmarthen Bay SPA should be subject to further assessment SPA Bird Assemblages - Any suitable foraging land within 5km for breeding Merlin, 6km breeding Red Kite and 18 km for breeding Peregrine, of Elenydd-Mallaen SPA 	To identify such allocations
Recreation	Recreational effects associated with development in close proximity to a European site, will require further assessment.	To identify such allocations
Development: Abstraction	Effects associated with water supply have been screened out based on HRA of DCWW water resources management plan	No further screening required
Development: Waste water	Effects associated with waste water discharges require further information from NRW on the post-RoC capacity. Only allocated development might exceed available permitted capacity will be considered to have LSE.	To identify such allocations

Development: Air pollution	Development which leads to increased traffic on roads within 200m of identified sensitive sites. Consideration will also be given to any potential impacts from intensive agriculture and other industrial sources.	To identify any such allocations
Disturbance, noise and light pollution	Only development in close proximity to a European Site requires further consideration	To identify such allocations

Five sites identified in Task 1 have been screened out of further detailed assessment as all potential impact pathways have been screened out at this generic screening stage. This is summarised in Table 14.

Table 14 Summary of generic level screening of sites where no likely significant effects have been identified.

European site	Designation	Scanned In	Screened Out
Yerbeston Tops	SAC	Mobile Species – Marsh Fritillary Butterfly	More than 2km outside of the direct influence of Carmarthenshire's LDP
		Abstraction	Based on no LSE being identified in most recent HRA of DCWW Water Resources Management Plan.
		Air pollution	More than 200m outside Carmarthenshire boundary
Rhos Llawr-cwrt	SAC	Mobile Species – Marsh Fritillary	More than 2km outside of the direct influence of Carmarthenshire's LDP
		Air pollution	More than 200m outside Carmarthenshire boundary
Gower Ash Woods	SAC	Air pollution	More than 200m outside Carmarthenshire boundary
		Recreation	Effects only considered likely in close proximity. Site outside of Carmarthenshire boundary
Gower Commons	SAC	Mobile Species – Marsh Fritillary Butterfly	More than 2km outside of the direct influence of Carmarthenshire's LDP
		Abstraction	Based on no LSE being identified in most recent HRA of DCWW Water Resources Management Plan.
		Air pollution	More than 200m outside Carmarthenshire boundary
		Species disturbance	Effects only considered likely in close proximity. Site outside of Carmarthenshire boundary
Mynydd Epynt	SAC	Air pollution	More than 200m outside Carmarthenshire boundary

Screening of the revised LDP Deposit Plan

The Carmarthenshire revised Deposit LDP sets the long term vision for growth and development in Carmarthenshire (excluding that area within the Brecon Beacons National Park) and the strategic objectives and the strategic land use policies to deliver that vision.

In order to assess the revised Deposit LDP, this HRA adopts the approach set out in Part F of the Habitats Regulations Assessment Handbook 'Practical Guidance for the Assessment of Plans'. Section F.6.3 introduces 'screening categories' against which each policy within a plan should be assessed. The screening categories are as follows:

Category	Description	Screening Outcome
A	General statements of policy/general aspirations.	Screen Out
B	Policies listing general criteria for testing the acceptability/sustainability of proposals.	Screen Out
C	Proposal referred to but not proposed by the plan	Screen Out
D	Environmental protection/site safeguarding policy	Screen Out
E	Policies or proposals which steer change in such a way as to protect European sites from adverse effects	Screen Out
F	Policy that cannot lead to development or other change	Screen Out
G	Policy or proposal that could not have any conceivable effect on a site	Screen Out
H	Policy or proposal the (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in combination with other aspects of this or other plans or projects)	Screen Out
I	Policy or proposal with a likely significant effect on a site alone	Screen In
J	Policy or proposal with an effect on a site but not likely to be significant alone, so need to check for likely significant effects in combination.	Check for in combination effects and re-categorised as K or L
K	Policy or proposal not likely to have significant effect either alone or in combination.	Screen out after in combination test
L	Policy or proposal likely to have a significant effect in combination	Screen in after in combination test
M	Bespoke area, site or case specific policies or proposals intended to avoid or reduce harmful effects on a European site	Screened In

Chapters 1-5 and 9-10 of Deposit LDP

For completeness, the Chapters 1-6 and 9-10 are comprised of introductory and contextual text and cannot possibly have any effects on any European Sites. **They are therefore screened out of further assessment and are not considered further.**

Chapters 6 and 7 of the Deposit LDP – Vision and Strategic Objectives

Chapter 6 outlines the draft vision for Carmarthenshire and is reported below:

One Carmarthenshire

Carmarthenshire 2033 will be a place to start, live and age well within a healthy, safe and prosperous environment, where its rich cultural and environmental qualities (including the Welsh language) are valued and respected for residents and visitors alike.

It will have prosperous, cohesive and sustainable communities providing increased opportunities, interventions and connections for people, places and organisations in both rural and urban parts of our County.

It will have a strong economy that reflects its position as a confident and ambitious driver for the Swansea Bay City Region.

The vision sets out a general aspiration and is not considered to result in any significant effects upon European sites. **The vision is therefore screened out under category A.**

Chapter 7 discusses the development of the strategic objectives, which are categorised under the following themes in alignment with Carmarthenshire's well-being objectives:

- Healthy Habits – People have a good quality of life and make healthy choices about their lives and environments
- Early Intervention – To make sure that people have the right help at the right time; as and when they need it
- Strong Connections – Strongly connected people, places and organisations that are able to adapt to change
- Prosperous People and Places – To maximise opportunities for people and places in both urban and rural parts of the county

The objectives listed against each of the themes and their assessment under this HRA are detailed in Appendix 3. **All of the objectives are considered to be screened out of the need for further assessment.** The category against which each objective is considered to be screened out is given in brackets after each objective.

Chapter 8 of the Deposit LDP – Growth and Spatial Strategy

Chapter 8 sets out a high level growth and spatial framework for development and as such could be a driver of potential impacts on European sites. **However, the implications of change provided for by this framework are more appropriately assessed under later, more specific, policies through which growth will be implemented.** Therefore, the growth and spatial strategies are screened out of the need for further assessment in accordance with the guidance provided at section F.6.2.3 of the HRA Handbook which states that *'even if they are the driver of a potential effect, it is likely that the plan will contain a more specific policy or proposal that would be the better target for assessment'*.

Chapter 11 of the Deposit LDP – Strategic and Specific Policies

Strategic Policies

There are 19 individual Strategic policies, and the screening conclusions for each policy are set out in Appendix 4.

Screening of the Strategic Policies concluded that they are unlikely to have significant effects on European sites alone, as the majority seek the protection/enhancement of cultural heritage and the natural environment or set out design criteria for development proposals.

In the case of policies SP1, SP3, SP4, and SP6, it was considered that potential impacts would be more appropriately assessed under specific policies that would be a better target for assessment, in line with guidance provided in section F.6.2.3 of the HRA Handbook and were therefore screened out of the need for further assessment.

A number of policies do not necessarily propose development, but support certain types of development which have the potential to impact on European designated sites. Policy SP13 – Protection and Enhancement of the Natural Environment – seeks to ensure development does not impact negatively on the natural environment, provides some mitigation to help minimise the impacts on European sites.

Table 15 summarises the screening outcome of the Strategic Policies

Table 15 Screening of rLDP Strategic Policies

Policy	Screening Category	Initial Screening Outcome
SP1 – Strategic Growth	G	Screened Out
SP2 – Retail and Town Centres	B	Screened Out
SP3 – Providing New Homes	G	Screened Out
SP4 – Affordable Homes	G	Screened Out
SP5 – Strategic Sites	C	Screened Out
SP6 – Employment and the Economy	G	Screened Out
SP7 – Welsh Language and Culture	F	Screened Out
SP8 - Infrastructure	B	Screened Out
SP9 – Gypsy and Traveller Provision	H	Screened Out
SP10 – The Visitor Economy	B	Screened Out
SP11 – Placemaking, Sustainability and High Quality Design	B	Screened Out
SP12 – Rural Development	A	Screened Out
SP13 – Protection and Enhancement of the Natural Environment	D	Screened Out
SP14 – Protection and Enhancement of the Built and Historic Environment	D	Screened Out
SP15 – Climate Change	B	Screened Out
SP16 – Sustainable Distribution – Settlement Framework	B	Screened Out
SP17 – Transport and Accessibility	B	Screened Out
SP18 – Mineral resources	G	Screened Out
SP19 – Waste Management	B	Screened Out

Specific Policies

Chapter 11 of the Deposit LDP sets out the specific plan policies. These policies are screened in Appendix 5 in accordance with the screening categories introduced above.

Screening of the strategic policies concluded that all policies are screened out of the need for further assessment, apart from Policy SG3 Pembrey Peninsula. This policy directs growth to an area that is immediately adjacent to the Carmarthen Bay and Estuaries European Marine Site. There is no wording in the policy or the supporting text to acknowledge the potential risks and identify the potential need for a project level HRA.

Policy SG3 Pembrey Peninsula is identified on a precautionary basis as having a likely significant effect ‘alone’ on the Carmarthen Bay and Estuaries Marine Site in respect of potential effects associated with species disturbance, noise and light pollution effects.

The screening conclusions for the sites listed in Policies SG1 Regeneration and Mixed Use Sites, SG2 Reserve Sites, HOM1 Housing Allocations and EME3 Employment Proposals on Allocated Sites are set out in the following section, Screening of rLDP Allocations.

Screening of rLDP Allocations

This section will be completed with a HRA screening of all allocated sites.

Reference should however be made to section 1.4 of this report where it is clarified that there is no requirement to re-assess allocations under the provisions of the Regulations where they have already been found to be acceptable by the Council as the competent authority, at a project level, in consultation with NRW.

3.3 Task 3 Consideration of effects in combination with other plans, programmes and projects

It is a requirement of Article 6(3) of the Habitats Directive that HRA examines the potential for plans and projects to have a significant effect either individually or 'in combination' with other plans, programmes & projects (PPPs). The effects of the Deposit Plan 'in combination' with other plans or projects are the cumulative effects which will, or might, result from the addition of the effects of other relevant plans or projects to the effects of the Deposit Plan identified in the earlier sections. This is required to inform the decision whether it can be ascertained that the Deposit Plan will not, in combination, have a likely significant effect on a European site. Combined effects may be additive, or synergistic, or a combination of both.

When considering other PPPs attention was focused on the following stages:

- a. Applications lodged but not yet determined;
- b. Projects subject to periodic review e.g. annual licences, during the time that their renewal is under consideration;
- c. Refusals subject to appeal procedures and not yet determined;
- d. Projects authorised but not yet started;
- e. Projects started but not yet completed;
- f. Known projects that do not require external authorisation;
- g. Proposals in adopted plans;
- h. Proposals in finalised draft plans formally published or submitted for final consultation, examination or adoption.

To avoid unnecessary or excessive assessment the in combination steps should be carefully scoped to relate only to relevant stages of other plans or projects and only to those which could make the possible adverse effects of the subject plan more likely or more significant, or both, by way of additive or synergistic effects. If such scoping demonstrates that there are in fact no other plans or projects with effects which could operate in this way in combination with those of the subject plan, the assessment need proceed no further, and the subject plan can proceed to adoption.

As set out in Part F.6.3.11 of the HRA Handbook, only policies which are identified as having some effect on a European site, but where the effect is not likely to be significant 'alone' (category J) need to be screened for in combination effects. Where a policy has no effect on a site at all (screening categories A-H), it does not need to be screened for in combination effects as it has no effect which might act in combination with other plans and projects. Where a site has a likely significant effect alone (category I) it does not need to be screened for in combination effects as the regulations state that likely significant effects should be determine either alone or in combination and not both.

With reference to Appendices 4 and 5, all the policies (apart from those that refer to allocated sites) have been screened under categories A-H or identified to have potential likely impacts alone (category J) and so the requirement to consider in combination effects is therefore limited to Policies SG1, SG2, HOM1 and EME3.

Once these policies have been screened, if any are considered to have some effect on a European site, but that effect is not likely to be significant 'alone' (Category J) then only such plans or projects that would act in combination with the Deposit Plan in such a way as to make such effects either more likely or more significant need to be considered. A list of relevant plans to be considered are detailed in Appendix 6:

This will be updated in due course once site allocations have been screened in full.

3.4 Task 4 Screening Assessment Summary

3.4.1 In line with the screening requirement of the Habitats Regulations, an assessment was undertaken to determine the potential significant effects of the revised Carmarthenshire Deposit LDP on the integrity of the 25 European sites that lie outside and within the plan/proposal boundaries. The screening decision was informed by:

- The information gathered on the European sites – Appendix 1;
- The review of the rLDP Deposit Plan and its likely impacts ; which included an analysis of the potential environmental impacts generated by the development activities directed by the LDP and; - Appendix 4 and 5;
- The review of other relevant plans and programmes – Appendix 6; and
- WG guidance which indicates that HRA for plans is typically broader and more strategic than project level HRA and that it is proportionate to the available detail of the plan.

The detail of the screening of rLDP policies is set out in Appendices 4 and 5. In summary, the screening assessment found that only one of the policies has the potential to have significant effects on European sites either alone or in combination. Chapter 4 will carry out an Appropriate Assessment of Policy SG3 Pembrey Peninsula, and look at in more detail the potential effects on the conservation objectives of the Carmarthen Bay and Estuaries European Marine Site.

In addition, on a precautionary basis, potential significant effects on the following will also be screened in for Appropriate Assessment:

- Wastewater disposal from development in the absence of confirmation of the extent to which the growth provided for in the rLDP can be accommodated within the existing (post review) discharge consent limits, in particular potential effects upon the Carmarthen Bay and Estuaries European Marine Site.
- The potential for impacts on Caeau Mynydd Mawr SAC as a result of supporting habitat fragmentation due to the levels of growth proposed in the area (most notably Principal Centre 3 Ammanford/Cross Hands).

4. Appropriate Assessment

4.1 Summary of Screening Conclusion

Following a screening exercise, it is identified that there is a potential for a likely significant effects in respect of:

Species disturbance, noise and light pollution effects as a result of Policy SG3 directing growth towards the Pembrey Peninsula with potential effects on Carmarthen Bay and Estuaries European Marine Site.

- Wastewater disposal from development in the absence of confirmation of the extent to which the growth provided for in the rLDP can be accommodated within the existing (post review) discharge consent limits, in particular potential effects upon the Carmarthen Bay and Estuaries European Marine Site.
- The potential for impacts on Caeau Mynydd Mawr SAC as a result of supporting habitat fragmentation due to the levels of growth proposed in Principal Centre 3 Ammanford/Cross Hands.

4.2 Incorporation of mitigation measures to avoid adverse effects

As referred to in the case of *NANT v Suffolk Coastal District Council* (2015), the Court of Appeal ruled that ‘the important question... is not whether mitigation measures were considered at the stage of Core Strategy in as much detail as the available information permitted, but whether there was sufficient information at that stage to enable the Council to be duly satisfied that the proposed mitigation measures could be achieved in practice’.

As such, at this stage in the HRA of the Deposit Plan, the Council (as the competent authority) needs to be satisfied that mitigation measures to avoid adverse effects upon the integrity of the European site could be achieved in practice. It is not reasonable to seek to set out all the technical details associated with such measures; matters of detail will be considered in subsequent project level HRA when sufficient information is available concerning the nature of proposed development to enable such details to be subject to an appropriate level of scrutiny.

The potential mitigation measures which might be relied upon to avoid adverse effects are considered in Table 14 below:

Table 16 Table summarising effects and possible mitigation measures

Effect	Options for mitigation
Species disturbance, noise and light pollution effects on CBEEMS	<p>Any effects associated with development within the Pembrey Peninsula as a result of policy SG3 Pembrey Peninsula could be minimised if the potential sensitivities of the CBEEMS were directly referenced within the supporting text of the policy.</p> <p>The following mitigation measures would be sufficient to provide the necessary confidence that the policy will not adversely affect the integrity of the CBEEMS:</p> <ul style="list-style-type: none">• the inclusion of specific wording to acknowledge the sensitivity of CBEEMS to increased recreational pressure, disturbance, noise and light pollution within the policy itself and the supporting text to ensure that the risks to CBEEMS are fully recognised in the development of this area. Suggested text is provided below: <p><i>‘Development in this location will need to demonstrate compliance with Policies SP13 Maintaining and Enhancing the Natural Environment and NE2 Biodiversity. A Habitats Regulations Assessment will be required to fully assess potential effects upon Carmarthen Bay and Estuaries European Marine Site.’</i></p>

Wastewater disposal (general)	<p>At the present time, there has been no confirmation from DCWW that sufficient capacity is available to accommodate the allocated growth proposed in the rLDP, and therefore the potential for likely significant effects has not been screened out. However, Carmarthenshire County Council continue to be in close consultation with DCWW and, following the confirmation of the rLDP's projected growth and proposed housing allocations (as opposed to commitments, as these have been through the planning process and their capacity needs already considered), both parties are working towards confirming that sufficient capacity exists. On a precautionary basis, this appropriate assessment will explore the options for mitigation in the event that capacity is not available for the allocations proposed.</p> <p>In the instances where capacity is not available, developers have the option of waiting for the necessary reinforcement works to be delivered through future AMP programmes or alternatively to fund the works themselves. Water network reinforcement works can be progressed via the requisition provisions of the WIA 1991. Wastewater Treatment Works (WwTW) reinforcement works can be progressed via s106 of the Town & Country Planning Act (1990).</p> <p>It is not possible to foresee whether developers will wait for AMP funding to deliver the necessary reinforcement works, or fund the works themselves. If a developer did choose to fund the work themselves, it is also unclear as to whether the reinforcement works would trigger any variations or modification to the existing consent but, adopting a precautionary approach, it is reasonable to anticipate that the reinforcement works might be accompanied by such a modifications or variation.</p> <p>In this regard it is relevant to note that consent modifications and variations that are considered necessary to provide for further growth will be subject to a full Habitats Regulations Assessment by NRW, and that DCWW must be willing to implement mitigation measures required.</p> <p>In the unlikely event that NRW are unable to identify permitting options which can be relied upon to avoid adverse effects to Natura 2000/Ramsar sites, a Nutrient Management Plan approach to cover the catchment in question would provide the necessary reassurance that the development provided for could be delivered in a manner which would avoid adverse effects to the Natura 2000/Ramsar site.</p>
Wastewater disposal to CBEEMS	<p>Whilst DCWW have confirmed there is capacity to accommodate the rLDP growth that drains to the Llanelli WwTW catchment, they have raised concerns that the connection of foul flows generated by new development introduces the risk of deterioration in the water quality of the CBEEMS. This is because the majority of the sewer system in this area is combined (surface and foul flows). Introducing additional foul flow can lead to overloading to the WwTW, as well as an increasing the frequency of discharges from storm sewerage overflows out to the CBEEMS during significant rainfall. DCWW are therefore requesting that a scheme of compensatory surface water be taken forward.</p> <p>A plan level HRA carried out on the Adopted LDP (2006 – 2021)¹³ concluded that in the absence of any evidence to the contrary a precautionary approach be taken and therefore that there was potential for likely significant effects on CBEEMS as a result of water quality degradation via WwTW discharges. To mitigate for this potential impact, a Memorandum Of Understanding (MOU)¹⁴ was identified which implemented compensatory surface water removal across the Llanelli WWTW catchment area.</p> <p>This MOU has since been superseded by a number of events, most importantly targeted investment and phosphate stripping initiatives at Llanelli, Gowerton, Pontyberem and Parc Y Splott WwTW as well as the publication of a technical</p>

¹³ Carmarthenshire Local Development Plan. Habitats Regulations Assessment (HRA) Volume 1: Main Text. November 2014. <https://www.carmarthenshire.gov.wales/media/3732/hra-vol-1-main-text-27nov14.pdf>

¹⁴ Safeguarding the Environment of the Carmarthen Bay and Estuaries European Marine

	<p>research report, compiled by the Institute of Estuarine and Coastal Studies (2012)¹⁵ which concluded that there is no clear evidence that water or sediment pollution is related to cockle mortalities within CBEEMS.</p> <p>It is therefore concluded that issues related to spill frequency from storm sewage outfalls are now driven by the requirements of the Urban Wastewater Treatment Directive and the Water Framework Directive and not the Habitats Directive. Whilst this does not in any way minimise the significance of such spills, it is important that the drivers behind the need for any compensatory surface water removal are clearly recognised. The intermittent nature of storm sewage overflows, together with the elevated flows through the estuary during periods of high rainfall mean that such events do not represent a significant threat (both alone or in combination) to the integrity of the conservation objectives of the CBEEMS.</p>
Habitat fragmentation effects on Caeau Mynydd Mawr SAC	<p>The Caeau Mynydd Mawr Special Area of Conservation (CMMSAC) is designated for the Marsh Fritillary Butterfly <i>Euphydryas</i> (<i>Eurodryas</i>, <i>Hypodryas</i>) <i>auriana</i> and the supporting habitat of <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>). The revised Conservation Objectives for the site recognise the importance of the maintenance of an extensive and well connected network of suitable habitat, both within and outside of the SAC for the long term security and resilience of the Marsh Fritillary butterfly population. This forms the wider 'core landscape' for the meta-population.</p> <p>Development within the area (notably Principal Centre 3 Ammanford and Crosshands) has the potential to result in habitat fragmentation of the wider core landscape, and as such mitigation is required to ensure no significant effects on the conservation objectives of the SAC.</p> <p>In order to address this, the rLDP has prepared Supplementary Planning Guidance, which requires development within the delineated SPG area to either provide on-site mitigation in the form of habitat creation to satisfy the HRA as part of seeking planning permission, or, should a developer be unable to provide the required mitigation, provides a mechanism by which developers can provide a contribution to the Council's Caeau Mynydd Mawr project. The Caeau Mynydd Mawr project will then deliver the mitigation on the developer's behalf by delivering an integrated habitat management plan, in accordance with the conservation objectives of the SAC. The SPG builds upon the provisions of a specific policy – NE4.</p> <p>The adoption of this SPG should result in any Tests of Likely Significant Effect (TLSE) conducted by the Council for developments within the SPG area to be concluded that there will be no likely significant effect (alone or in combination) on the SAC features and their conservation objectives. Further information can be found in the Caeau Mynydd Mawr SPG, and accompanying supporting evidence.</p>

¹⁵ Burry Inlet Cockle Mortalities Investigation 2009-2011. Technical Report to Environment Agency Wales Institute of Estuarine and Coastal Studies, University of Hull. January 2012.

Carmarthenshire Revised Local Development Plan (LDP)

**Habitats Regulations Assessment (HRA) of the Deposit LDP
Appendices**

November 2019

Appendix 1 Conservation Objectives of Natura 2000 sites identified within the 15km buffer around Carmarthenshire

Appendix 2 Nitrogen Deposition Data for SACs/SPAs within 15km Buffer Zone of Carmarthenshire

Appendix 3 HRA Screening of rLDP Strategic Objectives

Appendix 4 HRA Screening of rLDP Strategic Policies

Appendix 5 HRA Screening of rLDP Specific Policies

Appendix 6 Plans and Programmes to be considered for potential in-combination effects.

Appendix 7 Consultation Responses to HRA Screening Report of Preferred Strategy

Appendix 1 Conservation Objectives of Natura 2000 sites identified within the 15km buffer around Carmarthenshire

Site name : Afon Tywi/ River Tywi SAC Location Grid Reference: SN687263 JNCC Site Code: UK0013010 Size: 363.45 ha			
	Qualifying Features	Condition Assessment	Conservation Objectives
Annex II species primary reason for selection	Otter <i>Lutra lutra</i>	Favourable: Maintained	<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.
	Twaite Shad <i>Alosa fallax</i>	Unfavourable: Unclassified (May 2012)	<ul style="list-style-type: none"> The conservation objective for the watercourse as defined here XX must be met 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.
Annex II species qualifying feature	Sea lamprey <i>Petromyzon marinus</i>	Unfavourable: Unclassified (Jan 2011)	
	River lamprey <i>Lampetra fluviatili</i>	Unfavourable: Unclassified (Jan 2011)	
	Brook lamprey <i>Lampetra planeri</i>	Unfavourable: Unclassified (Jan 2011)	
	Allis shad <i>Alosa alosa</i>	Unfavourable: Unclassified (May 2012)	
	Bullhead <i>Cottus gobio</i>	Unfavourable: Unclassified (Jan 2012)	

Site name : Caeau Mynydd Mawr SAC
 Location Grid Reference: SN575121
 JNCC Site Code: UK0030105
 Size: 25.06 ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats qualifying feature	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils <i>Molinia caerulea</i>	Unfavourable: Unclassified (Sept 2015)	<ul style="list-style-type: none"> • Extent should be stable in the long term, or where appropriate increasing • Quality (including in terms of ecological structure and function) should be being maintained, or where appropriate improving. • Populations of the habitat's typical species must be being maintained or where appropriate increasing. • Factors affecting the extent and quality of the habitat and its typical species (and thus affecting the habitat's future prospects) should be under appropriate control.
Annex II species primary reason for selection	Marsh fritillary butterfly <i>Euphydryas aurinia</i>	Unfavourable: Unclassified (Sept 2015)	<ul style="list-style-type: none"> • The size of the population should be stable or increasing, allowing for natural variability, and sustainable in the long term. • The distribution of the population should be being maintained or where appropriate increasing. • There should be sufficient habitat, of sufficient quality, to support the population in the long term. • Factors affecting the population or its habitat should be under appropriate control.

Site name : Cernydd Carmel SAC
Location Grid Reference: SN592161
JNCC Site Code: UK0030070
Size: 361.14 ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitat primary reason for selection	Turloughs	Favourable: Unclassified (Sept 2011)	<ul style="list-style-type: none"> The turlough will fill and empty according to the natural seasonal fluctuations in the underlying aquifer. It will typically fill with water in the autumn-spring period and empty during the summer months. A natural pattern of vegetation zones will be apparent during the dry phase of the turlough, as determined by micro-topographical variation in the turlough basin in relation to the main swallow hole. The following vegetation zones, together with typical associated species, will be present: hydrophytic bryophyte zone; <i>Equisetum fluviatile</i> zone; <i>Carex vesicaria</i> zone; <i>Phalaris arundinacea</i> zone; <i>Salix cinerea</i>-<i>Galium palustre</i> woodland zone. Alien plant species such as <i>Crassula helmsii</i>, <i>Hydrocotyle ranunculoides</i>, <i>Myriophyllum aquaticum</i> and <i>Azolla filiculoides</i> will be absent All factors affecting the achievement of the above conditions, including water quality, water levels and scrub development, will be under control.
Annex I habitat qualifying feature	North Atlantic wet heaths with <i>Erica tetralix</i>	Favourable: Unclassified (Sept 2016)	<ul style="list-style-type: none"> Northern Atlantic wet heath will occupy at least 6ha of Cernydd Carmel SAC. The wet heath will have a high cover (>25%) of dwarf shrubs, including heather <i>Calluna vulgaris</i>, cross-leaved heath <i>Erica tetralix</i> and bilberry <i>Vaccinium myrtillus</i>. Typical associates will include western gorse <i>Ulex galli</i> and <i>Molinia caerulea</i>, but not high cover. Bog mosses <i>Sphagnum</i> spp. will be prominent in the sward. Scrub and bracken will be largely absent. All factors affecting the achievement of these conditions, including grazing and scrub/bracken encroachment, are under control.
	European dry heaths	Destroyed: Partially (Sept 2016)	<ul style="list-style-type: none"> European dry heath will occupy at least 19ha of Cernydd Carmel SAC. The dry heath will be dominated by varying mixtures of heather <i>Calluna vulgaris</i>, bilberry <i>Vaccinium myrtillus</i> and western gorse <i>Ulex gallii</i>, although <i>U.gallii</i> itself should not exceed 50% cover. Scrub, bracken, bramble, thistles, tall rushes, large docks and nettles will be largely absent. Bare ground will not exceed 10% cover. All factors affecting the achievement of these conditions, including grazing and scrub/bracken encroachment, are under control.
	Active raised bogs	Unfavourable: Unclassified (Jul 2016)	<ul style="list-style-type: none"> Active raised bog will cover at least 13ha of Cernydd Carmel SAC. At least five raised bog peatland units will be present, occupying a series of peaty depressions within the Millstone Grit ridge. The mires will support a specialist bog flora including heather <i>Calluna vulgaris</i>, cross-leaved heath <i>Erica tetralix</i>, deergrass <i>Scirpus cespitosus</i>, hare's-tail cotton grass <i>Eriophorum vaginatum</i> common cotton-grass <i>E.angustifolium</i>, bog asphodel <i>Bartheicum ossifragum</i> and round-leaved sundew <i>Drosera rotundifolia</i>.

			<ul style="list-style-type: none"> • Bog mosses <i>Sphagnum</i> spp. Will be abundant, while purple moor-grass <i>Molinia caerulea</i> and other grasses will be scarce. • The mire surfaces will display a characteristic hummock and hollow topography, with lawns of <i>Sphagnum</i> moss dominating the wet hollows. • Scrub and bracken will be largely absent. • All factors affecting the achievement of these conditions, including water levels, nutrient levels and grazing, will be under control.
	Tilio-Acerion forests of slopes, screes and ravines	Favourable: Unclassified (Jul 2013)	<ul style="list-style-type: none"> • Tilio-Acerion woodland will occupy approx. 44ha of Cernydd Carmel SAC. • The Tilio-Acerion woodland will occur as a patchwork of small woods with areas of grassland between, forming a characteristic element of the historic landscape pattern of Cernydd Carmel. The distribution of woods will mirror the pattern of woodland mapped in 1994. • Within the high forest areas, between 10 and 25% of the woodland will comprise open glades or canopy gaps, although the location of glades/canopy gaps may vary over time. • Trees and shrubs of a wide range of ages and sizes should be present, including functionally mature canopy trees, young trees and an active shrub layer. • Regeneration of locally native trees/shrubs will be plentiful • The canopy will comprise varying mixtures of locally native species including ash <i>Fraxinus excelsior</i>, oak <i>Quercus</i> spp., goat willow <i>Salix caprea</i>, yew <i>Taxus baccata</i> and wych elm <i>Ulmus glabra</i>. Typical shrub layer species will include hazel <i>Corylus avellana</i>, hawthorn <i>Crateagus monogyna</i>, blackthorn <i>Prunus spinosa</i>, spindle <i>Euonymus europaeus</i> and dogwood <i>Rhamnus catharticus</i>. Non-native species including sycamore <i>Acer pseudoplatanus</i> and beech <i>Fagus sylvatica</i> will be largely absent. • The field layer will comprise a rich mixture of woodland herbs including <i>Ranunculus ficaria</i>, <i>Circaea lutetiana</i>, <i>Galium odoratum</i>, <i>Allium ursinum</i>, <i>Hyacinthoides non-scripta</i>, <i>Mercurialis perennis</i>, <i>Conopodium majus</i>, <i>Paris quadrifolia</i>, <i>Lamium galeobdolon</i>, <i>Conopodium majus</i>, <i>Phyllitis scolopendrium</i>, <i>Arum maculatum</i> and <i>Anemone nemorosa</i>. • Dense bramble will be largely absent. • Within the high forest areas, dead wood will be present in the form of standing and fallen trunks/limbs. • All factors affecting the achievement of the above conditions, including grazing and browsing, will be under control.

Site name : Carmarthen Bay Dunes SAC

Location Grid Reference: SN285074

JNCC Site Code: UK0020019

Size: 1206.32 ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats primary reasons for selection	Embryonic shifting dunes	Favourable: Maintained (Jul 2007)	<ul style="list-style-type: none"> Natural processes will be allowed to determine the time and place when the strandline and embryonic dunes exist. These processes will not be impeded by direct or indirect human intervention. A strandline will be present at least one year in every five within the areas identified Embryonic dunes will be present on the seaward side of the mobile frontal dune ridge at least one year in every three All of the factors affecting the feature are under control
	"Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")"	Favourable: Maintained (Jul 2007)	<ul style="list-style-type: none"> Shifting dunes will exist as part of the dynamic natural processes which create the dune systems. There will be an interaction between the three dune systems such that the natural process of erosion in some parts and accretion in others will continue without direct or indirect human disturbance. Shifting dunes will comprise a significant part of the dune system but will increase and decrease in extent and location as natural processes determine the landscape of the dune systems At least two of the three sites in the SAC satisfy the limits outlined in the performance indicator below. All of the factors affecting the feature are under control.
	"Fixed coastal dunes with herbaceous vegetation ("grey dunes")"	Unfavourable: Unclassified (Jan 2015)	<ul style="list-style-type: none"> Fixed dunes with herbaceous vegetation (grey dunes) will occur where older, shifting dunes become more stabilised and in early successional stages become colonised by lichens and other species indicative of the transition from less mobile habitat. The habitat will encompass a range of successional stages throughout the area, determined by patterns of natural factors and grazing. Grey dunes will comprise a significant part of the dune system but will increase and decrease in extent and location as natural processes determine the landscape of the dune systems All factors are under management control.
	Dunes with Salix repens ssp. Argentea (Salicion arenariae)	Unfavourable Unclassified (Aug 2007)	<ul style="list-style-type: none"> Dunes with Salix repens and humid dune slacks will occur as part of the dune system, their location will be determined by natural processes and appropriate grazing management A range of successional stages will be found in both features Factors affecting the features will be under control
	Humid dune slacks	Unfavourable: Unclassified (Jan 2015)	

Annex II Species primary reason for selection :	Narrow-mouthed whorl snail	Unfavourable: Unclassified (Sept 2016)	<ul style="list-style-type: none"> • Sufficient suitable habitat is present to support the populations • The factors affecting the feature are under control
	Petalwort	Unfavourable: Unclassified (May 2016)	<ul style="list-style-type: none"> • The species will be found where conditions are suitable in sufficient numbers to form a viable and sustainable population • The population will vary from year to year depending on conditions, especially in drier years, but the long term population will remain steady and sustainable • Suitable dune slacks will have patches of bare ground that is being colonised by jelly lichens (<i>Collema</i> spp.) and <i>Barbula</i> mosses. • The factors affecting the feature are under control
	Fen orchid	Unfavourable: Unclassified (Oct 2014)	<ul style="list-style-type: none"> • Sufficient suitable habitat is present to support the populations • The factors affecting the feature are under control

Site name : Afon Teifi SAC
Location Grid Reference: SN515508
JNCC Site Code: UK0012670
Size: 715.58 ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats primary reasons for selection	Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation.	Favourable: Unclassified (Sept 2012)	<ul style="list-style-type: none"> The conservation objective for the water course as defined above must be met. 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. The typical species are defined with reference to the species composition of the appropriate JNCC river vegetation type for the particular river reach, unless differing from this type due to natural variability when other typical species may be defined as appropriate.
Annex I habitats qualifying feature	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoetes-Nanojuncetea	Favourable: Unclassified (Sept 2003)	<ul style="list-style-type: none"> The conservation objective for the water course as defined must be met The Littorelletea uniflorae 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 Littorelletea 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 Littorelletea 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.
Annex II species	Sea lamprey <i>Petromyzon marinus</i>	Unfavourable: Unclassified (Jan 2016)	<ul style="list-style-type: none"> The conservation objective for the water course as defined must be met 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.
Annex II Species primary reason for selection	Brook lamprey <i>Lampetra planeri</i>	Favourable: Unclassified (Oct 2013)	
	River lamprey <i>Lampetra fluviatilis</i>	Favourable: Unclassified (Oct 2013)	
	Atlantic salmon <i>Salmo salar</i>	Favourable: Unclassified (Jan 2016)	

	Bullhead <i>Cottus gobio</i>	Unfavourable: Unclassified (Jan 2012)	
	Otter <i>Lutra lutra</i>	Favourable: Maintained (Mar 2010)	<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 <i>Luronium natans</i>	Favourable: Unclassified (Sept 2012)	<ul style="list-style-type: none"> • The conservation objective for the water course as defined must be met. • The floating water-plantain populations will be viable throughout their current distribution in the SAC (maintaining themselves on a long-term basis). Each floating water-plantain population must be able to complete sexual and/or vegetative reproduction successfully. Potential for genetic exchange between floating water-plantain populations, in and/or outside the SAC, must be evident in the long-term. Dispersal of floating water-plantain must be unhindered. • The SAC will have sufficient suitable habitat to support floating water-plantain populations within their current distribution. There will be no contraction of the current floating water-plantain distribution in the SAC.

Site name : Afonydd Cleddau/ Cleddau Rivers SAC

Location Grid Reference: SM938249

JNCC Site Code: UK0030074

Size: 751.71 ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats qualifying feature	Water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-Batrachium vegetation.	Unfavourable: Unclassified (Jan 2012)	<ul style="list-style-type: none"> The conservation objective for the watercourse as defined in 4.1 above must be met 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. The typical species are defined with reference to the species composition of the appropriate JNCC river vegetation type for the particular river reach, unless differing from this type due to natural variability when other typical species may be defined as appropriate.
	Active raised bogs	Unfavourable: Unclassified (Oct 2012)	<ul style="list-style-type: none"> On the mire expanse there are at least 3 of Calluna vulgaris, Erica tetralix, Eriophorum angustifolium, E.vaginatum & Trichophorum cespitosum constant, with a combined cover not exceeding 80% · No single species > 50% cover · At least one of Andromeda polifolia, Drosera rotundifolia, Empetrum nigrum, Narthecium ossifragum and Vaccinium oxycoccos occurs at least frequently · On the mire expanse only there are at least 2 of the following spp. constant, with a combined cover > 20%: Sphagnum capillifolium, S. magellanicum, S. papillosum, S. tenellum · No reduction in extent of microtopographic features (e.g. bog pools).
	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnus incanae, Salix albae)	Unfavourable: Unclassified (Nov 2012)	<ul style="list-style-type: none"> The canopy is dominated by single stands of alder Alnus glutinosa or willow Salix spp. In alluvial woods with free draining soils there may be ash or oak in the canopy, but in the wetter alluvial woodlands ash Fraxinus excelsior is more likely to be limited to areas of relatively drier ground The structure of alluvial woodland is recognised as being dynamic therefore the presence of over mature trees is desirable but not essential The river itself should be dynamic to allow for areas of outwash and deposition that trees can regenerate on. Lying or standing deadwood (> 20cm diameter and > 1m length) is present at all sites The feature should support alluvial ground flora including two of the following: meadowsweet Filipendula ulmaria, yellow flag Iris pseudacorus, nettle Urtica dioica, common reed Phragmites australis, greater tussock sedge Carex paniculata, opposite-leaved golden saxifrage Chrysosplenium oppositifolium, rushes Juncus spp, tufted hair-grass Deschampsia cespitosa, hemlock water-dropwort Onoclea crocata, and wild angelica Angelica sylvestris.

Annex II Species primary reason for selection	Brook Lamprey lampetra planeri	Unfavourable: Recovering (Jan 2012)	<ul style="list-style-type: none"> The conservation objective for the watercourse as defined is met 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.
	River lamprey Lampetra fluviatilis	Unfavourable: Recovering (Jan 2012)	<ul style="list-style-type: none"> 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. The close proximity of different habitats facilitates movement of fish to new preferred habitats with age.
	Bullhead Cottus gobio	Unfavourable: Unclassified (Nov 2006)	<ul style="list-style-type: none"> The conservation objective for the watercourse as defined must be met 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. The close proximity of different habitats facilitates movement of fish to new preferred habitats with age.
	Otter Lutra lutra	Favourable: Maintained (Mar 2010)	<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 long term 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.
Annex II Species qualifying feature	Sea lamprey Petromyzon marinus	Unfavourable: Unclassified (Jan 2012)	<ul style="list-style-type: none"> The conservation objective for the watercourse as defined in 4.1 above is met. 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. The close proximity of different habitats facilitates movement of fish to new preferred habitats with age.

Site name : Carmarthen Bay and Estuaries SAC

Location Grid Reference: SS357991

JNCC Site Code: UK0020020

Size: 66092.05

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats primary reasons for selection	Sandbanks which are slightly covered by seawater all the time	Unfavourable: Declining (Nov 2006)	<p>Range: The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing.</p> <p>Structure and function: The physical biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded. Important elements include; geology, sedimentology, geomorphology, hydrography and meteorology, water and sediment chemistry, biological interactions.</p> <p>This includes a need for nutrient levels in the water column and sediments to be:</p> <ul style="list-style-type: none"> at or below existing statutory guideline concentrations within ranges that are not potentially detrimental to the long term maintenance of the features species populations, their abundance and range. <p>Contaminant levels in the water column and sediments derived from human activity to be:</p> <ul style="list-style-type: none"> at or below existing statutory guideline concentrations below levels that would potentially result in increase in contaminant concentrations within sediments or biota below levels potentially detrimental to the long-term maintenance of the feature species populations, their abundance or range. <p>For Atlantic saltmeadows this includes the morphology of the saltmarsh creeks and pans.</p> <p>Typical Species: The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded. Important elements include: species richness population structure and dynamics, physiological health, reproductive capacity recruitment, mobility range</p> <p>As part of this objective it should be noted that:</p> <ul style="list-style-type: none"> populations of typical species subject to existing commercial fisheries need to be at an abundance equal to or greater than that required to achieve maximum sustainable yield and secure in the long term the management and control of activities or operations likely to adversely affect the habitat feature is appropriate for maintaining it in favourable condition and is secure in the long term.
	Estuaries	Favourable: Maintained (Nov 2006)	
	Mudflats and sandflats not covered by seawater at low tide	Favourable: Maintained (Nov 2006)	
	Large shallow inlets and bays	Favourable: Maintained (Nov 2006)	
	Salicornia and other annuals colonizing mud and sand	Unfavourable: Unclassified (Oct 2006)	
	Atlantic salt meadows (Glauco-Puccinellietalia maritima)	Unfavourable: Unclassified (Jan 2012)	

Annex II Species primary reason for selection	Twaite Shad <i>Alosa fallax</i>	Unfavourable: No change (Nov 2006)	<p>Population: The population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include:</p> <ul style="list-style-type: none"> • population size • structure, production • condition of the species within the site. <p>As part of this objective it should be noted that;</p> <ul style="list-style-type: none"> • Contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression
Annex II Species qualifying feature	Sea lamprey <i>Petromyzon marinus</i>	Unfavourable: Unclassified (Apr 2005)	<p>Range: 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.</p> <p>As part of this objective it should be noted that:</p>
	River lamprey <i>Lampetra fluviatilis</i>	Unfavourable: Unclassified (Apr 2005)	<ul style="list-style-type: none"> • Their range within the SAC and adjacent inter-connected areas is not constrained or hindered. • There are appropriate and sufficient food resources within the SAC and beyond. • The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing. <p>Supporting habitats and species: 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> <p>Important considerations include;</p> <ul style="list-style-type: none"> • distribution • extent • structure • function and quality of habitat • prey availability and quality. <p>As part of this objective it should be noted that;</p>
	Allis shad <i>Alosa alosa</i>	Unfavourable: No change (Nov 2006)	<ul style="list-style-type: none"> • The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term. • The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.
	Otter <i>Lutra lutra</i>	Favourable: Unclassified (Mar 2010)	<ul style="list-style-type: none"> • Contamination of potential prey species should be below concentrations potentially harmful to their physiological health. • Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour. • For otter there are sufficient sources within the SAC and beyond of high quality freshwater for drinking and bathing.

Site name : Cwm Doethie - Mynydd Mallaen SAC

Location Grid Reference: SN747458

JNCC Site Code: UK0030128

Size: 4121.73ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats primary reasons for selection	Old sessile oak woods with Ilex and Blechnum in the British Isles	Unfavourable: Unclassified (Aug 2012)	<ul style="list-style-type: none">• Old sessile oak woodlands remain a significant and conspicuous feature of the upland valley sides within the plan area. Those in the Elan and Claerwen valleys and Rhayader area, the Dinas and Gwenffrwd area of the upper Tywi valley and the Cothi valley to the north of Mynydd Mallaen are particularly well developed and extensive.• The boundary between the woodland and adjacent upland habitat is often a flexible one where trees regenerate on to open ground. At many locations oak woodland forms patches in 'ffridd' areas where there is less grazing pressure on the upland fringe.• The oak woodland has of a variety of different structures and its character varies from place to place, ranging from long standing closed canopy areas to largely open wood pasture.• The dominant trees are sessile oaks, but in places birch is more conspicuous. Rowans and other trees occur as a minor component while at the foot of slopes where the oak woodland grades into wet woodland, there are some alders and willows. Non-native trees such as beech and sycamore will be present only in small numbers are generally scarce.• Under-storey shrubs are generally quite sparse, but scattered groups of hazel or holly will be found in some woods.• Ground cover varies widely. Parts will be bracken covered, others grassy, others again have a wider range of flowering plants and ferns and are often carpeted with bluebells in spring. On thin soils in shaded moist situations there are luxuriant carpets of mosses and liverworts, with or without under-shrubs like heather and bilberry.• The larger trees support a variety of lichens on their trunks and branches.• In each woodland block, trees in most age classes are present and veteran trees are prominent in some areas, particularly where there is wood pasture.• In all areas except wood pasture, there is evidence of actual regeneration in the form of seedlings and saplings or potential for regeneration, while in some wood pasture areas the planting and protecting of young trees, especially oak, may be appropriate.• Dead wood is well distributed and sometimes abundant, both lying on the woodland floor and occurring as standing dead trees or branches of trees.• The majority of the oak woodland has a closed canopy, but there are some clearings and much larger areas that are effectively wood pasture. These conditions should be sympathetic to the important populations of mosses and liverworts on the one hand and lichens on the other.• The oak woods support a characteristic assemblage of birds, such as wood warbler, pied flycatcher and redstart.• The pattern and distribution of grazed and un-grazed woods may change over time as different conservation needs arise.• All factors affecting the achievement of these conditions are under control.

Annex I habitats qualifying feature	European dry heaths	Unfavourable: Recovering (Sept 2012)	<ul style="list-style-type: none"> • The extent, quality and diversity of heath vegetation within the constituent sites is maintained and, where possible, degraded heath is restored to good condition. • · The main heathland areas have a varied age structure with a mosaic of young heath, mature heath and degenerate heath. • · Sunny slopes in certain areas support vegetation that includes bell heather and western gorse and steep north and east facing slopes have a rich variety of mosses and liverworts beneath the dwarf shrub canopy, including bog mosses in some areas. • · Populations of uncommon plants, such as lesser twayblade, are stable or increasing. • · The larger heathland areas provide suitable habitat for breeding birds, including red grouse and merlin. • · All factors affecting the achievement of these conditions are under control
-------------------------------------	---------------------	---	---

Site name : Cardigan Bay SAC
Location Grid Reference: SN214641
JNCC Site Code: UK0012712
Size: 4121.73ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats qualifying feature	Sandbanks which are slightly covered by sea water all the time	Not Assessed	<p>Range: The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing.</p> <p>For the reef feature these include; Intertidal bedrock reefs Intertidal cobble, pebble with Sabellaria alveolata (biogenic) reefs Subtidal bedrock reefs Subtidal pebble, cobble and boulder reefs Sea caves</p> <p>Structure and Function: The physical biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded. Important elements include; geology, sedimentology, geomorphology, hydrography and meteorology, water and sediment chemistry, biological interactions</p> <p>This includes a need for nutrient levels in the water column and sediments to be:</p> <ul style="list-style-type: none"> • at or below existing statutory guideline concentrations • within ranges that are not potentially detrimental to the long term maintenance of the features species populations, their abundance and range. <p>Contaminant levels in the water column and sediments derived from human activity to be:</p> <ul style="list-style-type: none"> • at or below existing statutory guideline concentrations • below levels that would potentially result in increase in contaminant concentrations within sediments or biota • below levels potentially detrimental to the long-term maintenance of the feature species populations, their abundance or range taking into account bioaccumulation and biomagnification. <p>Typical species: The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded. Important elements include</p> <ul style="list-style-type: none"> • species richness: • population structure and dynamics, • physiological health, • reproductive capacity • recruitment, • mobility • range <p>As part of this objective it should be noted that:</p> <ul style="list-style-type: none"> • populations of typical species subject to existing commercial fisheries need to be at an abundance equal to or greater than that required to achieve maximum sustainable yield and secure in the long term • the management and control of activities or operations likely to adversely affect the habitat feature is appropriate for maintaining it in favourable condition and is secure in the long term.
	Reefs	Not Assessed	
	Submerged or partially submerged sea caves	Favourable: Maintained (Nov 2006)	

Annex II Species primary reason for selection	Bottlenose dolphin Tursiops truncatus	Favourable: Maintained (Jan 2007)	<p>Populations: The population is maintaining itself on a long-term basis as a viable component of its natural habitat.</p> <p>Important elements include:</p> <ul style="list-style-type: none"> • population size • structure, production • condition of the species within the site. <p>As part of this objective it should be noted that for bottlenose dolphin and grey seal;</p> <ul style="list-style-type: none"> • Contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression <p>For grey seal populations should not be reduced as a consequence of human activity</p> <p>Range: 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.</p> <p>As part of this objective it should be noted that for bottlenose dolphin and grey seal</p> <ul style="list-style-type: none"> • Their range within the SAC and adjacent inter-connected areas is not constrained or hindered • There are appropriate and sufficient food resources within the SAC and beyond • The sites and amount of supporting habitat used by these species are accessible and their • extent and quality is stable or increasing
	Sea lamprey Petromyzon marinus	Unfavourable: Unclassified (April 2005)	<p>Supporting habitats and species: 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> <p>Important considerations include;</p> <ul style="list-style-type: none"> • distribution • extent • structure • function and quality of habitat • prey availability and quality. <p>As part of this objective it should be noted that;</p> <ul style="list-style-type: none"> • The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term. • The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term. • Contamination of potential prey species should be below concentrations potentially harmful to their physiological health. • Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour <p>Restoration and recovery: As part of this objective it should be noted that for the bottlenose dolphin populations should be increasing.</p>
Annex II Species qualifying feature	River lamprey Lampetra fluviatilis	Unfavourable: Unclassified (April 2005)	
	Grey seal Halichoerus grypus	Favourable: Maintained (Jan 2007)	

Site name : North Pembrokeshire Woodlands/Coedydd Gogledd Sir Benfro SAC
 Location Grid Reference: SN046345
 JNCC Site Code: UK0030227
 Size: 4121.73ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats primary reasons for selection	Old sessile oak woods with Ilex and Blechnum in the British Isles	Unfavourable: Recovering (May 2010)	<ul style="list-style-type: none"> • The majority of the SAC will be covered by oak woodland. • There will be no measurable, permanent loss of semi-natural woodland. • The trees will be locally native, with a dominance of oak in the canopy, and include ash and rowan. • No more than 5% of the canopy forming trees will consist of non-native species. • Each woodland will include trees of a wide range of age classes, including veteran trees. • Between 10-25% of the woodland area will comprise a dynamic, shifting pattern of gaps: in the long-term, most of these will be created by natural processes. • There will be sufficient natural regeneration to replace the canopy in these gaps over time. • There will be abundant dead and dying trees with holes and hollows, rot columns, torn off limbs and rotten branches. Dead wood, both standing and fallen, will be retained to provide habitats for other species, and will represent at least 10% (by volume) of the total timber. • Veteran trees will be favoured during any silvicultural management because they support a wide variety of species, including lichens. • Old forest lichen species will be found throughout the site, especially on well-lit trees around woodland edges and glades. • Invasive alien species, such as rhododendron, laurel and Japanese knotweed, will eventually be eradicated from the site, or restricted to very low cover. • There will be a well-developed shrub layer throughout the SAC, including hazel and holly. • The field layer will be diverse and include broad-buckler fern, greater wood-rush, bluebell, honeysuckle, wood-sorrel, dog's-mercury, opposite-leaved golden-saxifrage, bilberry, bracken, bramble and violets. • The woodlands will support populations of butterflies, birds and mammals. • All factors affecting the achievement of the foregoing conditions will be under control.

Annex I Habitat qualifying feature	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>)	Unfavourable: Unclassified (June 2016)	<ul style="list-style-type: none"> • At least 2% of the SAC will be covered by alluvial woodland. • The canopy will consist of locally native trees, with an overall dominance of alder. At least 90% of the canopy trees will be wet woodland species. There will be no non-native trees present in the canopy. • In the long-term, each woodland will include trees of a broad range of age classes, including saplings and veteran trees. • At any given time, around 30% of the woodland area will consist of a dynamic, shifting pattern of canopy gaps, maintained by natural processes. • There will be sufficient natural regeneration in the gaps (from seed or vegetative) to replace the canopy, 90% of which will be alder or willow. • There will be abundant dead and dying trees with holes and hollows, rot columns, torn off limbs and rotten branches. Dead wood, both standing and fallen, will be retained to provide habitats for other species, and will represent at least 10% (by volume) of the total timber. • There will be no evidence of alder disease. • Veteran trees will be favoured during any silvicultural management because they support a wide variety of species, including lichens. Old forest lichen species will be found throughout the sites, especially on well-lit trees around woodland edges and glades. • Invasive alien species, such as rhododendron, laurel and Japanese knotweed, will be eradicated from the site, or subject to a control programme of eradication. • The field layer will be diverse and dominated by alluvial species. Indicators of drying out (bramble) and over-grazing (creeping buttercup) will be scarce. • All factors affecting the achievement of the foregoing conditions will be under control.
------------------------------------	--	--	---

Annex II species primary reasons for selection	Barbastelle Bat <i>Barbastella barbastellus</i>	Favourable: Maintained (Aug 2012)	<ul style="list-style-type: none"> • There will be no loss of ancient semi-natural woodland at the site. • Canopy gaps will be present throughout the site, with two or more young trees growing in each. • Canopy cover will be 50-90% throughout the site (except in Hawthorn fields). • A well-developed shrub layer with holly will be present throughout the woodland, to provide a favourable micro-climate for roosting barbastelles. • A minimum of 4 trees per hectare will be allowed to die standing, will not be removed or cut down. These will be distributed across the site and will include trees with splits, fallen, leaning trees and hollow trees. • Ivy will be allowed to grow on trees throughout the site, to provide roosting opportunities. • There will be no overall loss of open water. • There will be no increase in disturbance (eg paths or rides) near any of the roosting sites. • No roosting sites will be lost as a result of human intervention. • Barbastelle bat passes will be detected on at least 4 out of 6 transects between 25 July and 7 September. • There will be contiguous suitable foraging habitat within a 16km radius around Pengelli Forest, including wooded stream valleys, low and overgrown hedgerows, scrub, overgrown pastures, bracken stands and woodland (which can include conifer plantations). • Roosts outside the SSSI boundary will be left undisturbed, with no woodland management within 50m of a barbastelle roost, and no clearance of the shrub layer. Over-mature trees in any of the woodlands within 2km of Pengelli should be left undisturbed except where they pose a risk to public safety, in which case minimal trees surgery can be permitted. • All factors affecting the achievement of the foregoing conditions will be under control.
--	---	--	---

Site name : Yerbeston Tops SAC
Location Grid Reference: SN057099
JNCC Site Code: UK0030305
Size: 18.6ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I Habitat qualifying feature	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	Unfavourable: Unclassified (Sept 2017)	<ul style="list-style-type: none"> • Molinia meadows will cover at least 4ha • The following plants will be common in the Molinia meadows: purple moor-grass <i>Molinia caerulea</i>; small sedges including <i>Carex pulicaris</i> and <i>hostiana</i>, and devil's bit scabious <i>Succisa pratensis</i>. • Soft rush <i>Juncus effusus</i> and species indicative of agricultural modification, such as perennial rye grass <i>Lolium perenne</i> and white clover <i>Trifolium repens</i> will be largely absent from the Molinia meadows. • Scrub species such as willow <i>Salix</i> and birch <i>Betula</i> will also be largely absent from the Molinia meadows • All factors affecting the achievement of these conditions will be under control
Annex II species primary reasons for selection	Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i>	Unfavourable: Unclassified (Sept 2017)	<ul style="list-style-type: none"> • Density of larval webs during sampling is at least 200 per hectare of optimal breeding habitat • There are at least 10ha of Good Condition (optimal breeding) habitat on or within 2 km radii of the SSSI • There are at least 50ha of Suitable Condition habitat on or within 2km radii of the SSSI • Optimal breeding habitat comprises grassland, with <i>Molinia</i> abundant, where the vegetation height is within the range of 10 to 20 cm, and where, for at least 80% of sampling points, <i>Succisa pratensis</i> is present within a 1 m radius. Scrub (>1 metre tall) covers no more than 10% of area. • The factors influencing the breeding habitat are under control. • Trees, bracken, scrub and saplings are of no more than scattered occurrence within the marshy grassland. • A range of characteristic wetland plants and insects are present. • Species indicating agricultural improvement are rare or absent.

Site name : Rhos Llawr-cwrt SAC
 Location Grid Reference: SN411497
 JNCC Site Code: UK0012680
 Size: 45.95ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex II species primary reasons for selection	Marsh fritillary butterfly Euphydryas (Eurodryas, Hypodryas) aurinia	Unfavourable: Recovering (Aug 2012)	<ul style="list-style-type: none"> The SAC will continue to support a nationally important population of the marsh fritillary butterfly. Although, numbers of adult butterflies and larvae will fluctuate annually in response to a parasitic wasp and weather conditions, the population will be robust, resilient and viable in the long term. During peak years, a visitor taking a walk through the site on a sunny day in June will see several hundreds of adult butterflies. In these years the caterpillars, feeding communally in silken webs on their food plant devil's bit scabious, will be found in their thousands throughout the SAC. The SAC population will be the core of the Rhos Llawr Cwrt marsh fritillary metapopulation. The metapopulation will consist of the SAC population, plus populations breeding on land outside the SAC, within the Rhos Llawr Cwrt National Nature Reserve and elsewhere in the immediate vicinity (research indicates that a marsh fritillary metapopulation requires at least 50 hectares of available habitat to be viable in the long term). The population will breed throughout all 4 SAC units, where it will be a key species driving the management of each unit. Rosettes of devil's bit scabious will be both very numerous and widespread throughout the SAC, growing amongst a short turf of grasses, sedges and flowering herbs with scattered tussocks of purple moor grass and rushes providing shelter for the caterpillars in wet weather. This colourful wet grassland mosaic will extend throughout all the management units and some of the NNR fields outside the SAC and other non-designated areas nearby. Dense mixed hedges of hawthorn, hazel, mountain ash and other locally native species will grow around the external and internal boundaries and offer vital shelter to the breeding adult butterflies during poor weather in what is otherwise a very exposed landscape with little shelter. All factors affecting the achievement of the foregoing conditions will be under control.

Annex II species qualifying species	Slender green feather-moss Drepanocladus (Hamatocaulis) vernicosus	Unfavourable: unclassified (Oct 2005)	<ul style="list-style-type: none"> • Slender green feather moss will be common across the Bwdram and Clettwr valley bottoms, with more than five populations of plants, appearing as groups of uniform dark green 'patches' scattered amongst the marshy grassland and fen vegetation communities. • The populations of moss will grow in a series of flushes, old peat cuttings and shallow excavations, where ground conditions are wet throughout the year, the water table being at, or near the surface. This habitat will have an open, relatively short sward and scrub will be confined to hedge banks on old field boundaries. • Groundwater across the valley bottom will range from slightly acid to slightly basic. • Associated site-specific herbs, grasses and sedges will grow in close proximity to the moss populations. These plants share the habitat requirements of the moss; they include Lesser Spearwort, Sharp-flowered Rush, Purple Moor Grass, Star Sedge, Carnation Sedge, Devil's-bit Scabious, Lesser Skullcap, Large Birdsfoot Trefoil, Bogbean, Common marsh-bedstraw, Common Cotton Sedge, Bottle Sedge, Common Sedge, Common Yellow Sedge, Velvet Bent and Flea Sedge. • The site will continue to be summer-grazed by cattle; this will maintain the short open sward conditions favoured by the moss. • All factors affecting the achievement of the foregoing conditions will be under control.
-------------------------------------	--	---------------------------------------	---

Site name : Pembrokeshire Bat Sites and Bosherton Lakes /
 Safleodd Ystlum Sir Befro a Llynnoedd Bosherton SAC
 Location Grid Reference: SR966954
 JNCC Site Code: UK0014793
 Size: 121.26ha

Annex I habitat primary reasons for selection	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	Unfavourable: No Change (Dec 2011)	<ul style="list-style-type: none"> • Submerged Chara beds (mainly Chara hispida in places up to a metre long) will form the predominant submerged macrophyte vegetation throughout most of Central and Western Arms and Central Lake of Bosherton Lakes (unit 1a) and may be present in the Eastern Arm (unit 1b). • Chara will occur at more than 50% frequency along regular surveillance transects within the Western and Central arms. • Chara species (not necessarily hispida) will be present in other embayments and pools, including the Eastern Arm of Bosherton Lakes (unit 1b) and pools in the Mere Pool Valley (unit 1d). • The Western and Central Arms are spring-fed, so nutrient levels here remain low. One of the main nutrients (phosphorous) will reach no more than 25 micrograms per litre in regular sampling areas. Nitrogen levels in the water will be low (less than 1 milligram per litre) and declining or stable. • The Western Arm, Central Arm and Central Lake water will be fairly clear, but well vegetated with submerged and marginal plants. In natural openings (e.g. over springs) within otherwise dense Chara beds, a sechii disk will be viewable on the lakebed. • Water depth will vary from about 3.5 metres OD (winter maximum) to about 0.5 metres or less in places in summer. • Fringing the Chara beds, are beds of white water lilies Nymphaea alba. They will remain fairly abundant in the Western and Central Arms, with smaller populations in Central Lake. • Reed and swamp and fringing burr-reed will be restricted to shallow zones – covering not more than 10 % of the site. • All factors affecting the achievement of these conditions are under control.
---	---	---	---

Annex II species primary reasons for	Greater horseshoe bat Rhinolophus ferrumequinum	Favourable: Maintained (Aug 2012)	<ul style="list-style-type: none"> • The greater horseshoe bat population will be capable of maintaining itself on a long-term basis as a viable component of its natural habitats. • The natural range of greater horseshoe bats will neither be reduced nor will be likely to be reduced for the foreseeable future, and • There will be sufficient habitat to maintain its populations on a long-term basis. • At least three SSSI maternity roosts will be occupied annually by adult greater horseshoe bats and their babies: <ul style="list-style-type: none"> • Stackpole Courtyard Flats and Walled Garden SSSI • Slebech Stable Yard Loft, Cellars and Tunnels SSSI • Felin Llwyngwair SSSI • Carew Castle SSSI will continue to be used as an intermediate greater horseshoe bat roost, during the spring and autumn, as a male summer roost and an autumn/spring mating roost. • The greater horseshoe bat population at the component SSSI's will be stable or increasing. • There will be a sufficiently large area of suitable habitat surrounding these roosts to support the bat population, including continuous networks of sheltered, broadleaved woodland, tree lines and hedgerows connecting the various types of roosts with areas of insect-rich grassland and open water. • All factors affecting the achievement of these conditions are under control.
Annex II species qualifying features	Lesser horseshoe bat Rhinolophus hipposideros	Unfavourable: Declining (Aug 2012)	<ul style="list-style-type: none"> • The Lesser horseshoe bat population will be capable of maintaining itself on a long-term basis as a viable component of its natural habitats. • The natural range of lesser horseshoe bats will be neither being reduced nor will be likely to be reduced for the foreseeable future, and • There will be sufficient habitat to maintain its populations on a long-term basis. • At least four SSSI maternity roosts will be occupied annually by adult lesser horseshoe bats and their babies: <ul style="list-style-type: none"> • Beech Cottage, Waterwynch SSSI, • Orielton Stable Block and Cellars SSSI, • Park House Outbuildings SSSI, • Stackpole Courtyard Flats and Walled Garden SSSI • The lesser horseshoe bat population at the component SSSI's will be stable or increasing. • There will be a sufficiently large area of suitable habitat surrounding these roosts to support the bat population, including continuous networks of sheltered, broadleaved woodland, tree lines and hedgerows connecting the various types of roosts with areas of insect-rich grassland and open water. • All factors affecting the achievement of these conditions are under control.

	Otter Lutra lutra	Favourable: Unclassified (Mar 2010)	<ul style="list-style-type: none"> • The Otter population will be capable of maintaining itself on a long-term basis as a viable component of its natural habitats. • The natural range of otters will neither be reduced nor will be likely to be reduced for the foreseeable future, and • There will be sufficient habitat to maintain its populations on a long-term basis. • The otter population will be stable or increasing. • There will be a sufficiently large area of suitable habitat to support an otter breeding population, including: <ul style="list-style-type: none"> • Open water with sufficient food resources (notably eels and other fish species) and • a continuous network of undisturbed sheltered resting places along the lake shoreline – including swamp, broadleaved woodland and calcareous scrub. • All factors affecting the achievement of these conditions are under control.
--	-------------------	--	---

Site name : Gower Ash Woods SAC
Location Grid Reference: SS574882
JNCC Site Code: UK0030157
Size: 233.15ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitat primary reasons for selection	Tilio-Acerion forests of slopes, screes and ravines	Unfavourable: Unclassified (May 2016)	<ul style="list-style-type: none"> The steep sided valleys found across most of the site will be covered with woodland dominated by ash. The rocky slopes will be covered with a rich ground flora including species such as dog's mercury, hart's tongue fern and ramsons. Fallen trees left on the ground will provide homes for invertebrates and fungi. The steep slopes will prevent the canopy trees reaching full size. Amongst the canopy ash will dominate, with other species like field maple, oak and sycamore also present. A shrub layer of hazel, hawthorn, spindle and saplings of ash will fill the spaces between the ground flora and the canopy. Mosses and hart's tongue fern will cover limestone boulders that pepper the ground. The ground flora on the slopes and on the flatter ground will be full of colour in the spring, with bluebells and ransoms providing a haze of blue and white. Mature rotting trees will be found standing and fallen. Young trees will grow in the ground flora and shrub layer ready to take the place of a fallen tree. Some uncommon vascular plants will be found in the woods these include herb Paris, purple gromwell, butcher's broom and spurge laurel. On the flatter areas fallen planted conifers will support mosses and ferns and ash trees will grow up from between the fallen conifers. Old conifer and beech plantations will support developing ash woodland. All factors affecting the achievement of these conditions will be under control.
Annex I habitat qualifying features	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	Unfavourable: Unclassified (Jun 2016)	<ul style="list-style-type: none"> Alongside the Pennard Pill and the Ilston stream alluvial woodland will grow in the silts from the river, Alder will dominate these areas but hazel and elder will also grow here, Creeping buttercup, nettles and meadowsweet will dominate the ground flora. There will be no signs of disturbance such as over-grazing or fly-tipping and no non-native species will grow in these areas. Young saplings of alder and hazel will be numerous and waiting to fill the spaces left by fallen trees. All other factors will be under control.

Site name : Pembrokeshire Marine SAC
Location Grid Reference: SM503093
JNCC Site Code: UK0013116
Size: 138038.50ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitat primary reason for selection	Estuaries	Unfavourable: Declining (Nov 2006)	<p>Range: The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing. For the inlets and bays feature these include;</p> <ul style="list-style-type: none"> • The embayment of St.Brides Bay • The ria of Milford Haven • Peripheral embayments and inlets <p>For the coastal lagoons feature this is subject to the requirements for maintenance of the artificial impoundment structure and maintenance of the lagoons for the original purpose or subsequent purpose that pre-dates classification of the site.</p> <p>Structure and Function: The physical biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded. Important elements include; geology, sedimentology, geomorphology, hydrography and meteorology, water and sediment chemistry, biological interactions.</p> <p>This includes a need for nutrient levels in the water column and sediments to be:</p> <ul style="list-style-type: none"> • at or below existing statutory guideline concentrations • within ranges that are not potentially detrimental to the long term maintenance of the features species populations, their abundance and range. <p>Contaminant levels in the water column and sediments derived from human activity to be:</p> <ul style="list-style-type: none"> • at or below existing statutory guideline concentrations • below levels that would potentially result in increase in contaminant concentrations within sediments or biota • below levels potentially detrimental to the long-term maintenance of the features species populations, their abundance or range. <p>Restoration and recovery: As part of this objective it should be noted that; the Milford Haven waterway complex would benefit from restorative action, for example through the removal of non-natural beach material, and the removal, replacement or improved maintenance of rock filled gabions.</p>
	Large shallow inlets and bays	Unfavourable: Declining (Nov 2006)	
	Reefs	Unfavourable: Declining (Jul 2008)	
Annex I habitats qualifying features	Sandbanks which are slightly covered by sea water all the time	Unfavourable: No change (Dec 2006)	
	Mudflats and sandflats not covered by seawater at low tide	Unfavourable: Declining (Nov 2006)	
	Coastal lagoons	Favourable: Maintained (Nov 2006)	

	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)	Unfavourable: Unclassified (Oct 2006)	<p>There is also need for some restoration of the populations of several typical species of the Milford Haven waterway complex that are severely depleted with respect to historical levels as a consequence primarily of human exploitation.</p> <p>In the Milford Haven waterways complex inputs of nutrients and contaminants to the water column and sediments derived from human activity must remain at or below levels at the time the site became a candidate SAC.</p> <p>For the lagoons feature this is subject to the requirements for maintenance of the artificial impoundment structures of coastal lagoons and maintenance of the lagoons for their original purpose or subsequent purpose that pre-dates classification of the site.</p> <p>For the inlets and bays features this includes the need for some restoration of the populations of several typical species which are severely depleted with respect to historical levels as a consequence, primarily of human exploitation.</p> <p>In the Milford Haven waterways complex inputs of nutrients and contaminants to the water column and sediments derived from human activity must remain at or below levels at the time the site became a candidate SAC.</p>
	Submerged or partially submerged sea caves	Favourable: Maintained (Nov 2006)	<p>Typical Species: The presence, abundance, condition and diversity of typical species are such that habitat quality is not degraded. Important elements include species richness, population structure and dynamics, physiological health, reproductive capacity, recruitment, mobility, range.</p> <p>As part of this objective it should be noted that:</p> <ul style="list-style-type: none"> • populations of typical species subject to existing commercial fisheries need to be at an abundance equal to or greater than that required to achieve maximum sustainable yield and be secure in the long term • the management and control of activities or operations likely to adversely affect the habitat feature is appropriate for maintaining it in favourable condition and is secure in the long term.
Annex II species primary reason for selection	Grey seal <i>Halichoerus grypus</i>	Favourable: Maintained (Nov 2006)	<ul style="list-style-type: none"> • Populations: 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. <p>As part of this objective it should be noted that for otter and grey seal;</p> <ul style="list-style-type: none"> • Contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression <p>For grey seal, populations should not be reduced as a consequence of human activity</p>
	Shore dock <i>Rumex rupestris</i>	Favourable: Maintained (Feb 2006)	<p>Range: 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.</p> <p>As part of this objective it should be noted that for otter and grey seal</p> <ul style="list-style-type: none"> • Their range within the SAC and adjacent inter-connected areas is not constrained or hindered • There are appropriate and sufficient food resources within the SAC and beyond • The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing <p>Supporting Habitats and Species: The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations</p>

Annex II species qualifying features	Sea lamprey <i>Petromyzon marinus</i>	Unfavourable: Declining (Apr 2005)	<p>dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; distribution, extent, structure, function and quality of habitat, prey availability and quality.</p> <p>As part of this objective it should be noted that;</p> <ul style="list-style-type: none"> • The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term. • The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term. • Contamination of potential prey species should be below concentrations potentially harmful to their physiological health. • Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour • For otter there are sufficient sources within the SAC and beyond of high quality freshwater for drinking and bathing. <p>Restoration and recovery: In the Milford Haven waterways complex inputs of nutrients and contaminants to the water column and sediments derived from human activity must remain at or below levels at the time the site became a candidate SAC.</p> <p>As part of this objective it should be noted that for the otter, populations should be increasing.</p>
	River lamprey <i>Lampetra fluviatilis</i>	Unfavourable: No change (Apr 2005)	
	Allis shad <i>Alosa alosa</i>	Not Assessed	
	Twaite shad <i>Alosa fallax</i>	Not Assessed	
	Otter <i>Lutra lutra</i>	Favourable: Unclassified (Mar 2010)	

Site name : Gower Commons / Tiroedd Comin SAC
 Location Grid Reference: SS497900
 JNCC Site Code: UK0012685
 Size: 1775.29ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitat primary reason for selection	Northern Atlantic wet heaths with Erica tetralix	Unfavourable: Unclassified (Sept 2016)	<ul style="list-style-type: none"> • The wet heath will be found on moist and generally acidic soils across the commons. • The wet heath will be characterised by western gorse growing amongst cross-leaved heath and purple moor grass. The gorse will be low growing and does not seem to dominate the heath. The yellow of the gorse and the pink of the cross-leaved heath make a spectacular display. Pink lousewort will be seen growing amongst the mixture of gorse and heath, with grasses and sedges weaving their way through the mix of species such as cotton grass, heath bedstraw, heath milkwort, flea sedge and carnation sedge. • Sphagnum mosses grow beneath the heath, holding moisture like a sponge. Plants capable of growing in certain very wet areas associated with wet heath like bog asphodel and the insect eating sundews will also be found as you walk around the wet heath. • The wet heath is not poached by grazing animals, but is evenly and sensitively grazed. There are no invasive species like Rhododendron or Japanese Knotweed growing in the wet heath and willow and birch are found only very thinly scattered throughout the site, mainly on the edges. • All factors affecting the achievement of these conditions are under control.

	European dry heaths	Unfavourable: Unclassified (Sept 2008)	<ul style="list-style-type: none"> • Dry heath is found on the free-draining parts of the commons. In some parts of the SAC dry heath grows in large continuous areas like at Rhossili Down, in other parts of the SAC, the dry heath grows in mosaics with wet heath and acid grassland. Bell heather and cross-leaved heath grow along side European and western gorse. There is a lack of purple moor grass and sphagnum mosses which tell us that the heath is drier. Heath milkwort, tormentil and heath bedstraw are seen regularly decorating the dry heaths. • Scrub like birch and overgrown gorse is rare with the dry heaths, except where island of scrub provide some shelter for grazing animals. These islands will be accepted within the heathland landscape. • Bracken is present within the dry heath and grows around the edges but bracken never dominates stands of dry heath and does not encroach on the dry heath. • Burning of the heath is only carried out as a controlled management technique to create a mosaic of different ages of heath. There are no signs of burning causing damage or causing bracken to spread.
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	Unfavourable: Unclassified (Sept 2016)	<p>On the wettest ground, marshy grassland will be found; it will often be found growing in a mosaic with wet heath.</p> <ul style="list-style-type: none"> • The marshy grassland will be dominated by tussocks of purple moor grass. The tussocks will provide little sheltered areas where flowers grow and help to provide some shelter for the marsh fritillary butterfly. • The tussocks are uneven in size, but there will always be young purple moor grass coming through each spring. Only a few of the tussocks will have old and 'rank' purple moor grass growing on them. • Devil's bit scabious, the food plant for the larvae of marsh fritillary butterflies will be found commonly growing amongst the purple moor grass. Whorled caraway and soft leaved sedge are both scarce plants that will be commonly found in the marshy grassland areas. • Often heathy plants like cross-leaved heath and gorse will be found in marshy grassland – this is a transition area between the two habitats.

Annex II species primary reason for selection	Southern damselfly <i>Coenagrion mercuriale</i>	Unfavourable: Unclassified (Jul 2017)	<ul style="list-style-type: none"> • Seepages and runnels at Rhossili Down, Cefn Bryn and Sluxton Marsh will be well maintained, clear and pollution free. • They will support good numbers of native aquatic plants. • On summer days each year southern damselflies will be seen darting over the seepages and runnels. • Each year the population of southern damselflies will stay the same or increase.
	Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i>	Unfavourable: Unclassified (Sept 2009)	<ul style="list-style-type: none"> • The site will contribute towards supporting a sustainable metapopulation of the marsh fritillary on Gower. This will require a minimum of 50ha of suitable habitat, of which at least 10ha must be in good condition. Some will be on nearby land within a radius of about 2km. • The population will be viable in the long term, acknowledging the extreme population fluctuations of the species. • Habitats on the site will be in optimal condition to support the metapopulation. • At least 50ha of the total site area within the SAC & associated SSSI will be marshy grassland suitable for supporting marsh fritillary, with <i>Succisa pratensis</i> present and only a low cover of scrub. • At least 10ha will be good marsh fritillary breeding habitat in good condition, dominated by purple moor-grass <i>Molinia caerulea</i>, with <i>S. pratensis</i> present throughout and a vegetation height of 10-20cm over the winter period. • Suitable marsh fritillary habitat is defined as stands of grassland where <i>Succisa pratensis</i> is present and where scrub more than 1 metre tall covers no more than 10% of the stands • Optimal marsh fritillary breeding habitat will be characterised by grassland where the vegetation height is 10-20 cm, with abundant purple moor-grass <i>Molinia caerulea</i>, frequent “large-leaved” devil’s-bit scabious <i>Succisa pratensis</i> suitable for marsh fritillaries to lay their eggs and only occasional scrub. In peak years, a density of 200 larval webs per hectare of optimal habitat will be found across the site. (Fowles 20042) • The marshy grassland will be well sheltered by hedgerows and mature trees. • All factors affecting the achievement of the foregoing conditions are under control.

Site name : River Wye / Afon Gwy SAC
 Location Grid Reference: SO109369
 JNCC Site Code: UK0012642
 Size: 2147.64ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats primary reason for selection	Water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-Batrachium vegetation	Unfavourable: Unclassified (Jan 2012)	<ul style="list-style-type: none"> The conservation objective for the water course as defined must be met 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.
Annex I habitat qualifying feature	Transition mires and quaking bogs	Unfavourable: Declining (Jul 2012)	<ul style="list-style-type: none"> The conservation objective for the water course as defined must be met 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.

Annex II species primary reason for selection	White-clawed (or Atlantic stream) crayfish <i>Austropotamobius pallipes</i>	Unfavourable: Unclassified (Sept 2016)	<ul style="list-style-type: none"> The conservation objective for the water course as defined must be met 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.
	Otter <i>Lutra lutra</i>	Favourable: Recovered (Mar 2010)	<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.
	Sea lamprey <i>Petromyzon marinus</i>	Unfavourable: Unclassified (Jan 2012)	<ul style="list-style-type: none"> The conservation objective for the water course as defined must be met 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.
	Brook lamprey <i>Lampetra planeri</i>	Unfavourable: Unclassified (Jan 2012)	
	River lamprey <i>Lampetra fluviatilis</i>	Unfavourable: Unclassified (Jan 2012)	
	Twaite shad <i>Alosa fallax</i>	Unfavourable: Unclassified (Jan 2012)	
	Atlantic salmon <i>Salmo salar</i>	Unfavourable: Unclassified (Jan 2012)	
	Bullhead <i>Cottus gobio</i>	Unfavourable: Unclassified (Dec 2016)	
Annex II species qualifying features	Allis shad <i>Alosa alosa</i>	Unfavourable: Unclassified (Jan 2012)	

Site name : Gweunydd Blaencleddau SAC
Location Grid Reference: SN155317
JNCC Site Code: UK0030144
Size: 149.13ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats qualifying features	Northern Atlantic wet heaths with Erica tetralix	Unfavourable: Unclassified (Jul 2016)	<ul style="list-style-type: none"> Wet heath will occupy at least 6% of the total site area. The following plants will be common in the wet heath: heather <i>Calluna vulgaris</i>; cross-leaved heath <i>Erica tetralix</i>; purple moor-grass <i>Molinia caerulea</i>; bog asphodel <i>Narthecium ossifragum</i>; short sedges <i>Carex</i> species; mosses including bog moss <i>Sphagnum</i> species; devil's bit scabious <i>Succisa pratensis</i>. Competitive species indicative of under-grazing, particularly purple moor-grass <i>Molinia caerulea</i> and western gorse <i>Ulex gallii</i> will be kept in check. Bracken, and scrub species such as willow <i>Salix</i> and birch <i>Betula</i> will also be largely absent from the wet heath.
	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>)	Unfavourable: Unclassified (Jul 2016)	<ul style="list-style-type: none"> <i>Molinia</i> meadows will occur as small patches around the site. The following plants will be common: purple moor-grass <i>Molinia caerulea</i>; small sedges including <i>Carex pulicaris</i> and <i>hostiana</i>, and devil's bit scabious <i>Succisa pratensis</i>. Soft rush <i>Juncus effusus</i> and species indicative of agricultural modification, such as perennial rye grass <i>Lolium perenne</i> and white clover <i>Trifolium repens</i> will be virtually absent. · Scrub species such as willow <i>Salix</i> and birch <i>Betula</i> will also be largely absent. · All factors affecting the achievement of these conditions will be under control.
	Blanket bogs	Unfavourable: Unclassified (Jul 2016)	<ul style="list-style-type: none"> Blanket bog will occupy at least 4% of the total site area. The following plants will be common in the blanket bog: hare's-tail cotton grass <i>Eriophorum vaginatum</i>; heather <i>Calluna vulgaris</i>; cross-leaved heath <i>Erica tetralix</i> and bog moss <i>Sphagnum</i> species. Competitive species indicative of under-grazing, particularly purple moor-grass <i>Molinia caerulea</i> will be kept in check. Bracken, and scrub species such as willow <i>Salix</i> and birch <i>Betula</i> will also be largely absent from the blanket bog.
	Transition mires and quaking bogs	Unfavourable: Unclassified (Jul 2016)	<ul style="list-style-type: none"> Transition mire and quaking bog will occupy at least 2% of the total site area. Bottle sedge should be abundant over carpets of bog mosses, 'brown' mosses or swamp species such as marsh cinquefoil Competitive species indicative of under-grazing, particularly soft rush <i>Juncus effusus</i> and purple moor-grass <i>Molinia caerulea</i> will be kept in check. Scrub species such as willow <i>Salix</i> and birch <i>Betula</i> will also be largely absent.

	Alkaline fens	Unfavourable: Unclassified (Jul 2017)	<ul style="list-style-type: none"> • Flushes will occupy at least 10% of the total site area. • The majority of the flushes will naturally support carpets of bog moss below a canopy of tall rushes or sedges. • A proportion (at least 15%) should support short, open vegetation rich in small mosses, sedges and wildflowers characteristic of less acidic conditions. This type of flush corresponds to the Alkaline Fen feature of European interest. • Many of the flushes will have short, open vegetation to suit the requirements of the southern damselfly. • Competitive species indicative of under-grazing, particularly soft rush <i>Juncus effusus</i> and purple moor-grass <i>Molinia caerulea</i> will be kept in check. • Scrub species such as willow <i>Salix</i> and birch <i>Betula</i> will also be largely absent.
Annex II species primary reason for selection	Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i>	Unfavourable: Unclassified (Jul 2016)	<ul style="list-style-type: none"> • Density of larval webs during sampling will be at least 200 per hectare of Good Condition habitat • There are at least 50ha of Suitable habitat on the site or within a 2km radius around it. • At least 10ha of the suitable habitat is Good Condition habitat • Good Condition habitat comprises grassland, with <i>Molinia</i> abundant, where the vegetation height is within the range of 10 to 20 cm, and where, for at least 80% of sampling points, <i>Succisa pratensis</i> is present within a 1 m radius. Scrub (>1 metre tall) covers no more than 10% of area. • Suitable marshy grassland comprises grassland where <i>Succisa pratensis</i> is present at lower frequencies but still widely distributed throughout the habitat patch and in which scrub (>1 metre tall) covers no more than 20% of area. Alternatively, <i>Succisa</i> may be present at high density in close-cropped swards. • The factors influencing the breeding habitat are under control
Annex II species qualifying feature	Southern damselfly <i>Coenagrion mercuriale</i>	Unfavourable: Unclassified (Jul 2016)	<ul style="list-style-type: none"> • Density of adult males during sampling is at least 1 male per 10 square metres of breeding habitat • The extent of breeding habitat is at least 1500 square metres. • Breeding habitat will be mapped where patches of oviposition plants are present as more than 20% cover over areas greater than 0.5 square metres and no more than 20% of the total cover consists of <i>Apium nodiflorum</i> greater than 15cm tall. Southern damselfly females lay their eggs into the tissue of emergent aquatic plants and in Wales the key species are <i>Menyanthes trifoliata</i> (bog-bean), <i>Hypericum elodes</i> (marsh St. John's wort), <i>Potamogeton polygonifolius</i> (bog pondweed) and <i>Apium nodiflorum</i> (fool's watercress). • The factors influencing the flush habitat are under control

Site name : Preseli SAC
Location Grid Reference: SN110320
JNCC Site Code: UK0012598
Size: 2701.68ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats qualifying features	Northern Atlantic wet heaths with <i>Erica tetralix</i>	Unfavourable: Unclassified (Jun 2012)	<p>Wet heath will cover at least 11%3 of the site and display a range of plant species typical of the habitat. Most of the wet heath will have a mixture of tussocks of purple moor-grass, separated by closely grazed patches rich in deer grass, bog mosses and heathers such as cross-leaved heath. A proportion should also have a range of short sedges and flowering plants such as round leaved sundew.</p> <ul style="list-style-type: none"> The following plants will be common in the wet heath: heather <i>Calluna vulgaris</i>; cross-leaved heath <i>Erica tetralix</i>; purple moor-grass <i>Molinia caerulea</i>; bog asphodel <i>Narthecium ossifragum</i>; short sedges <i>Carex</i> species; mosses including bog moss <i>Sphagnum</i> species; devil's bit scabious <i>Succisa pratensis</i>. Competitive species indicative of under-grazing, particularly Purple Moor Grass <i>Molinia caerulea</i> and Western Gorse <i>Ulex gallii</i> will be kept in check. Bracken, and scrub species such as willow <i>Salix</i> and birch <i>Betula</i> will also be largely absent from the wet heath.
	European dry heaths	Unfavourable: Unclassified (Jun 2012)	<ul style="list-style-type: none"> Dry heath will cover at least 11%2 of Mynydd Preseli SSSI and display a range of plant, insect and bird species typical of the habitat. The following plants will be common in the dry heath: heather <i>Calluna vulgaris</i>; bell heather <i>Erica cinerea</i> and western gorse <i>Ulex gallii</i>. Competitive species indicative of under-grazing, particularly bracken <i>Pteridium aquilinum</i>, purple moor-grass <i>Molinia caerulea</i> and western gorse <i>Ulex gallii</i> will be kept in check.
	Depressions on peat substrates of the Rhynchosporion	Unfavourable: Declining (Aug 2012)	<p>Depressions on peat substrates is a habitat type which typically occurs in complex mosaics with wet heath and flush habitats. The vegetation will be open, and have an abundance of species such as white beak-sedge <i>Rhynchospora alba</i>, the bog moss <i>Sphagnum auriculatum</i>, marsh clubmoss <i>Lycopodiella inundata</i> and round-leaved sundew <i>Drosera rotundifolia</i>. The amount of this habitat on the site has not been clearly defined yet, but is thought to be around 1-2% of the total site area.</p> <ul style="list-style-type: none"> Depressions on peat substrates of the Rhynchosporion will occupy roughly 1-2% of the SAC, and be present in at least two management units (currently units 2 and 3). The following plants will be common: white beaked sedge <i>Rhynchospora alba</i>, the bog moss, <i>Sphagnum denticulatum</i>, round-leaved sundew <i>Drosera rotundifolia</i> and, in relatively base-rich sites, brown mosses such as <i>Drepanocladus revolvens</i> and <i>Scorpidium scorpioides</i>. The vegetation in these areas will be typically very open and competitive species indicative of under-grazing, particularly purple moor-grass <i>Molinia caerulea</i>, will be kept in check. Scrub species such as willow <i>Salix</i> and birch <i>Betula</i> will also be largely absent.

	Alkaline fens	Favourable: Unclassified (Dec 2004)	<p>Alkaline fen will be present in patches across the site and display a range of plant and insect species typical of the habitat, including the southern damselfly. The flushes supporting this specific habitat will comprise short, open vegetation rich in small mosses, sedges and plants characteristic of less acidic conditions.</p> <ul style="list-style-type: none"> • Alkaline fens will be present in 8 out of the 10 pink areas as shown on map. • Characteristic flush species such as <i>Menyanthes trifoliata</i>, <i>Triglochin palustre</i>, <i>Anagallis tenella</i>, <i>Pedicularis palustris</i> and <i>Pinguicula vulgaris</i> will be present • Species indicative of negative change, such as <i>Juncus squarrosus</i>, will be absent. • Scrub species such as willow <i>Salix</i> and birch <i>Betula</i> will also be largely absent.
Annex II habitats qualifying features	Southern damselfly <i>Coenagrion mercuriale</i>	Unfavourable: Unclassified (Jul 11)	<ul style="list-style-type: none"> • The density of adult males, during sampling, will be at least 1 male per 10 square metres of breeding habitat • • There will be at least 3500 square metres of breeding habitat • • All factors affecting the feature will be under control
	Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i>	Unfavourable: No change (Sept 2011)	<p>A healthy population of the marsh fritillary butterfly will be present on and around the SAC. There will be sufficient suitable and good condition habitat to support viable meta-populations of the butterfly which is dependent here on marshy grassland and flush, with tussocks of purple moor-grass and plenty of the caterpillar's main food-plant, devil's bit scabious. The swards will vary in height so that there are short 'lawn' areas for the caterpillars to sun themselves on, and taller tussocky areas to provide shelter. For each of the two Meta-populations present within the SAC</p> <ul style="list-style-type: none"> • • There should be at least 200 larval webs per hectare of Good Condition habitat • • There should be at least 50ha of Suitable habitat on the SAC or within a 2km radius around it. • • At least 10ha of this suitable habitat should be Good Condition Habitat • All factors affecting the feature must be under control
	Slender green feather-moss <i>Drepanocladus</i> (<i>Hamatocaulis</i>) <i>vernicosus</i>	Favourable: Maintained (Feb 2006)	<p>Slender green feather moss is a qualifying feature in the SAC, but has been found to be considerably more frequent and abundant both within Preseli SAC, and indeed in a number of other sites in Wales than was previously thought. In the light of this, it has been decided to treat the feature as part of the Rare mosses on damp ground SSSI feature.</p>

Site name : Mynydd Epynt SAC
 Location Grid Reference: SN883400
 JNCC Site Code: UK0030221
 Size: 40.11ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex II species primary reason for selection	Slender green feather-moss <i>Drepanocladus</i> (<i>Hamatocaulis</i>) <i>vernicosus</i>	Favourable: Unclassified (Aug 2009)	<ul style="list-style-type: none"> • There is a thriving population of varnished hook-moss in the mildly base-rich flushes, at six different locations spread throughout the site. • Around 1.5 ha of suitable flush vegetation will continue to occur at Mynydd Epynt at the six different locations and the moss will continue to be present and maintain its distribution throughout the suitable areas of flush in at least ten separate locations overall. • The water table is maintained at or near to the surface for most of the year within the flushes. • The flushes are open in character with no woody shrubs present. • The flushes are not dominated by rushes, purple moor-grass or bog-mosses (<i>Sphagnum</i> spp.). • The following plants are typically found in the flushes scattered amongst the moss carpet but not dominant: carnation sedge <i>Carex panicea</i>, star sedge <i>C. echinata</i>, common sedge <i>C. nigra</i>, purple moor-grass <i>Molinia caerulea</i> and rushes <i>Juncus acutifolius</i> and <i>J. articulatus</i>. • Species indicative of agricultural modification, such as perennial rye grass <i>Lolium perenne</i> and white clover <i>Trifolium repens</i> are absent from the flushes and the surrounding areas of SSSI/SAC in the six locations. • All six locations continue to be grazed by sheep at a level which maintains the short open sward of the flushes without poaching. • All six locations are free from physical damage such as trampling/poaching caused by livestock, troop activity, passage of agricultural/other vehicles, or impact damage from weapons practice. • The population of varnished hook-moss is stable and is sustainable in the long term with its range not contracting and all factors that may affect the species are under control.

Site name : River Usk / Afon Wysg SAC
Location Grid Reference: SO301113
JNCC Site Code: UK0013007
Size: 967.97ha

	Qualifying Features	Condition Assessment	Conservation Objectives
Annex I habitats qualifying features	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	Unfavourable: Unclassified (Jan 2012)	<ul style="list-style-type: none"> The conservation objective for the water course as defined in 4.1 above must be met 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. The typical species are defined with reference to the species composition of the appropriate JNCC river vegetation type for the particular river reach, unless differing from this type due to natural variability when other typical species may be defined as appropriate.
Annex II species primary reason for selection	Otter <i>Lutra lutra</i>	Favourable: Recovered (Mar 2010)	<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.
	Sea lamprey <i>Petromyzon marinus</i>	Unfavourable: Unclassified (Nov 2012)	<ul style="list-style-type: none"> The conservation objective for the water course as defined in 4.1 above must be met 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.
	Brook lamprey <i>Lampetra planeri</i>	Unfavourable: Unclassified (Nov 2012)	
	River lamprey <i>Lampetra fluviatilis</i>	Unfavourable: Unclassified (Nov 2012)	
	Twaite shad <i>Alosa fallax</i>	Unfavourable: Unclassified (Jan 2012)	
	Atlantic salmon <i>Salmo salar</i>	Unfavourable: Unclassified (Jan 2012)	
	Bullhead <i>Cottus gobio</i>	Unfavourable: Unclassified (Jan 2012)	
Annex II species qualifying feature	Allis shad <i>Alosa alosa</i>	Unfavourable: Unclassified (Jan 2012)	

Special Protection Areas and Ramsar sites		
Site name : Elenydd-Mallaen SPA Location Grid Reference: JNCC Site Code: UK9014111 Size: 30022.14ha		
Qualifying Features	Condition Assessment	Conservation Objectives
Breeding Red Kite <i>Milvus milvus</i>	Favourable: Unclassified (Jun 2000)	<ul style="list-style-type: none"> The SPA area continues to support at least 15 pairs of breeding red kites, or 0.5% of the British population. Traditional nest sites within the SPA continue to be used. The extent of suitable semi-natural feeding habitat within the SPA is maintained. Availability of carrion within the SPA is maintained. Roosting sites within the SPA are maintained. All factors affecting the achievement of these conditions are under control.
Breeding Merlin <i>Falco columbaris</i>	Favourable: Unclassified (Jun 2003)	<ul style="list-style-type: none"> The SPA area continues to support at least 7 pairs of breeding merlins, or 0.5% of the British population. Traditional nest sites within the SPA continue to be used. The extent of suitable semi-natural feeding habitat within the SPA is maintained. All factors affecting the achievement of these conditions are under control.
Breeding Peregrine <i>Falco peregrinus</i>	Favourable: Maintained (2006)	<ul style="list-style-type: none"> The SPA area continues to support at least 15 pairs of breeding peregrines, or 0.5% of the British population. Traditional nest sites within the SPA continue to be used. The extent of suitable semi-natural feeding habitat within the SPA is maintained. All factors affecting the achievement of these conditions are under control.
Site name : Carmarthen Bay SPA Location Grid Reference: JNCC Site Code: UK9014091 Size: 30022.14ha		
Common scoter <i>Melanitta nigra</i> .	Not Assessed	<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 the numbers of all SPA bird species. 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>Supporting habitats for bird species of the Burry Inlet SPA include:</p> <ul style="list-style-type: none"> •Estuaries •Mudflats and sandflats not covered by seawater at low tide •Atlantic salt meadows •Salicornia and other annuals colonising mud and sand <p>'Large shallow inlets and bays' are the supporting habitat for the common scoter of the Carmarthen Bay SPA.</p>

		<ul style="list-style-type: none"> The management and control of activities or operations likely to be of significant effect to the oystercatchers, is appropriate for maintaining the feature at FCS and is secure in the long-term.
Site name : Burry Inlet SPA/Ramsar Location Grid Reference: JNCC Site Code: Size: 6627.99		
Curlew <i>Numenius arquata</i>	Favourable: Unclassified (Mar 2004)	<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 the numbers of all SPA bird species. 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. Supporting habitats for bird species of the Burry Inlet SPA include: <ul style="list-style-type: none"> •Estuaries •Mudflats and sandflats not covered by seawater at low tide •Atlantic salt meadows •Salicornia and other annuals colonising mud and sand <p>‘Large shallow inlets and bays’ are the supporting habitat for the common scoter of the Carmarthen Bay SPA.</p> <ul style="list-style-type: none"> The management and control of activities or operations likely to be of significant effect to the oystercatchers, is appropriate for maintaining the feature at FCS and is secure in the long-term.
Dunlin <i>Calidris alpina alpina</i>	Favourable: Unclassified (Mar 2004)	
Grey plover <i>Pluvialis squatarola</i>	Favourable: Unclassified (Mar 2004)	
Knot <i>Calidris canutus</i>	Favourable: Unclassified (Mar 2004)	
Oystercatcher <i>Haematopus ostralegus</i>	Favourable: Unclassified (Mar 2004)	
Pintail <i>Anas acuta</i>	Favourable: Unclassified (Mar 2004)	
Redshank <i>Tringa tetanus</i>	Favourable: Unclassified (Mar 2004)	
Shelduck <i>Tadorna tadorna</i>	Favourable: Unclassified (Mar 2004)	
Shoveler <i>Anas clypeata</i>	Favourable: Unclassified (Mar 2004)	
Teal <i>Anas crecca</i>	Favourable: Unclassified (Mar 2004)	
Turnstone <i>Arenaria interpres</i>	Not Assessed	<ul style="list-style-type: none"> The management and control of activities or operations likely to be of significant effect to the oystercatchers, is appropriate for maintaining the feature at FCS and is secure in the long-term.
Wigeon <i>Anas penelope</i>	Favourable: Unclassified (Mar 2004)	

Appendix 2 Nitrogen Deposition Data for SACs/SPAs within 15km Buffer Zone of Carmarthenshire

Site	Designated features	Critical Load Class	Critical Load (kg N/ha/yr)	Site Average (kg N/ha/yr)
Afon Teifi	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoeto-Nanojuncetea	Permanent oligotrophic waters: Softwater lakes	3 - 10	14.2
	Luronium natans – Floating water-plantain		3 - 10	14.2
Caeau Mynydd Mawr	Marsh fritillary butterfly - Euphydryas (Eurodryas, Hypodryas) aurinia	Non-mediterranean dry acid and neutral closed grassland	10	22
		Sub-atlantic semi-dry calcareous grassland	15	22
		Moist and wet oligotrophic grasslands: Molinia caerulea meadows	10	22
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	Moist and wet oligotrophic grasslands: Molinia caerulea meadows	15	22.0
Carmarthen Bay and Estuaries	Atlantic salt meadows Salicornia and other annuals colonising mud and sand	Pioneer, low-mid, mid-upper salt marshes	30	11.1
Carmarthen Bay and Dunes	Fixed coastal dunes with herbaceous vegetation (grey dunes)	Coastal stable dune grasslands - acid type	8	12.7
		Coastal stable dune grasslands - calcareous type	10	12.7
	Humid dune slacks	Moist to wet dune slacks – acid type	10	12.7
		Moist to wet dune slacks – calcareous type	15	12.7
	Fen Orchid – Liparis loeselii	Moist to wet dune slacks	10-15	12.7
	Petalwort - Petalophyllum ralfsii			
	Dunes with Salix repens ssp argentea (Salicion arenariae)			

	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes") Embryonic shifting dunes	Shifting coastal dunes	10	12.7
Cernydd Carmel	Active raised bogs	Raised and blanket bogs	5	21.1
	Northern Atlantic wet heaths with <i>Erica tetralix</i>	Northern wet heath: <i>Erica tetralix</i> dominated wet heath	10	21.1
	European dry heaths	Dry heaths	10	21.1
	Tilio-Acerion forests of slopes, screes and ravines	Meso- and eutrophic <i>Quercus</i> woodland	15	31.3
Cleddau Rivers	Active raised bogs	Raised and blanket bogs	5	19.2
Cwm Doethie	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Acidophilous <i>Quercus</i> -dominated woodland	10	21.5
	European dry heaths	Dry heaths	10	13.8
Gower Ash Woods	Tilio-Acerion forests of slopes, screes and ravines	Meso- and eutrophic <i>Quercus</i> woodland	15	17.3
Gower Commons	Northern Atlantic wet heaths with <i>Erica tetralix</i> Southern damselfly <i>Coenagrion mercuriale</i>	Northern wet heath: <i>Erica tetralix</i> dominated wet heath	10	11.9
	European dry heaths	Dry heaths	10	11.9
	Marsh fritillary butterfly	Non-mediterranean dry acid and neutral closed grassland	10	11.9
		Sub-atlantic semi-dry calcareous grassland	15	11.9
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>)	Moist and wet oligotrophic grasslands: <i>Molinia caerulea</i> meadows	10	11.9
Gweunydd Blaencleddau	Blanket bogs	Raised and blanket bogs	5	21.3
	Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i>	Non-mediterranean dry acid and neutral closed grassland	10	21.3
		Sub-atlantic semi-dry calcareous grassland	15	21.3

		Moist and wet oligotrophic grasslands: <i>Molinia caerulea</i> meadows	10	21.3
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>)			
	Transition mires and quaking bogs	Valley mires, poor fens and transition mires	10	21.3
	Northern Atlantic wet heaths with <i>Erica tetralix</i> Southern damselfly <i>Coenagrion mercuriale</i>	Northern wet heath: <i>Erica tetralix</i> dominated wet heath	10	21.3
	Alkaline fens	Rich fens	15	21.3
Mynydd Epynt	Slender green feather-moss <i>Drepanocladus (Hamatocaulis) vernicosus</i>	Valley mires, poor fens and transition mires	10	14.9
Pembrokeshire Bat Sites and Bosherton Lakes	<i>Rhinolophus hipposideros</i> - Lesser horseshoe bat <i>Rhinolophus ferrumequinum</i> - Greater horseshoe bat	Broadleaved deciduous woodland	10	18.1
Pembrokeshire Marine	Shore Dock – <i>Rumex rupestris</i>	Moist to wet dune slacks	10	8.9
	Coastal lagoons	Pioneer, low-mid, mid-upper saltmarshes	30	5.8
	Atlantic salt meadows		30	8.9
	Estuaries		30	8.9
Preseli	Marsh fritillary butterfly – <i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i>	Non-mediterranean dry acid and neutral closed grassland	10	18.9
		Sub-atlantic semi-dry calcareous grassland	15	18.9
		Moist and wet oligotrophic grasslands: <i>Molinia caerulea</i> meadows	10	18.9
	Depressions on peat substrates of the <i>Rhynchosporion</i>	Valley mires, poor fens and transition mires	15	18.9
	Slender green feather-moss - <i>Drepanocladus (Hamatocaulis) vernicosus</i>		15	18.9
	European dry heaths	Dry heaths	10	18.9
	Northern Atlantic wet heaths with <i>Erica tetralix</i>	Northern wet heath: <i>Erica tetralix</i> dominated wet heath	10	18.9
	Southern damselfly – <i>Coenagrion mercuriale</i>		10	18.9
	Alkaline Fens	Rich fens	15	18.9
Rhos Llawr-cwrt		Non-mediterranean	10	19.9

	Marsh fritillary butterfly - Euphydryas (Eurodryas, Hypodryas) aurinia	dry acid and neutral closed grassland		
		Sub-atlantic semi- dry calcareous grassland	15	19.9
		Moist and wet oligotrophic grasslands: Molinia caerulea meadows	10	19.9
	Slender green featherella- moss - Drepanocladus (Hamatocaulis) vernicosus	Valley mires, poor fens and transition mires	15	19.9
North Pembrokeshire Woodlands	Old sessile oak woods with Ilex and Blechnum in the British Isles	Acidophilous Quercus- dominated woodland	10	28.6
	Barbastelle Bat - Barbastella barbastellus	Broadleaved deciduous woodland	10	28.6
Yerbeston Tops	Marsh fritillary butterfly - Euphydryas (Eurodryas, Hypodryas) aurinia	Non- mediterranean dry acid and neutral closed grassland	10	17.4
		Sub-atlantic semi- dry calcareous grassland	15	17.4
		Moist and wet oligotrophic grasslands: Molinia caerulea meadows	10	17.4
Burry Inlet SPA	Eurasian curlew – Numenius arquata	Moist and wet oligotrophic grasslands: Heath (Juncus) meadows and humid (Nardus stricta) swards	10- 20	11.7
		Pioneer, low-mid, mid-upper saltmarshes	20 - 30	11.7
		Low and medium altitude hay meadows	20 - 30	11.7
	Tringa tetanus (eastern Atlantic – wintering) – Common redshank	Pioneer, low-mid, mid-upper saltmarshes	20 - 30	11.7
	Calidris alpina alpina (Northern Siberia/Europe/Western Africa) DUnlin			11.7

Appendix 3 HRA Screening of rLDP Strategic Objectives

Objective		Assessment category	Screening Conclusion
Healthy Habits - People have a good quality of life and make healthy choices about their lives and environment			
SO1	To ensure that the natural environment, including habitats and species, are safeguarded and enhanced	D	Screened Out
SO2	To assist with widening and promoting wellbeing opportunities through access to community, leisure and recreational facilities as well as the countryside	A	Screened Out
SO5	To safeguarded and enhance the built and historic environment and promote the appropriate reuse of redundant buildings.	A	Screened Out
Early Intervention - To make sure that people have the right help at the right time; as and when they need it			
SO3	To assist in widening and promoting education and skills training opportunities for all.	A	Screened Out
SO4	To ensure that the principles of equal opportunities and social inclusion are upheld by promoting access to a high quality and diverse mix of public services, healthcare, shops, leisure facilities and work opportunities, as well as vibrant town centres.	A	Screened Out
Strong Connections - Strongly connected people, places and organisations that are able to adapt to change			
SO6	To ensure that the principles of spatial sustainability are upheld by directing development to sustainable locations with access to services and facilities and wherever possible encouraging the reuse of previously developed land.	A	Screened Out
SO7	To make a significant contribution towards tackling the cause and adapting to the effect of climate change, including promoting renewable energy and the efficient use and safeguarding of resources.	D	Screened Out

SO8	To contribute to the delivery of an accessible integrated and sustainable transport system, including links to alternative transport methods	A	Screened Out
Prosperous People and Places – To maximise opportunities for people and places in both urban and rural parts of our county			
SO9	To protect and enhance the diverse character, distinctiveness, safety and vibrancy of the County's communities by promoting a place making approach and a sense of place.	A	Screened Out
SO10	To make provision for an appropriate number and mix of quality homes across the County based around the principles of sustainable socio-economic development and equality of opportunities.	A	Screened Out
SO11	To assist in protecting, enhancing and promoting the Welsh Language and the County's unique cultural identity, assets and social fabric.	A	Screened Out
SO12	To encourage investment & innovation in rural and urban areas by making adequate provision to meet employment need and to contribute at a regional level to the delivery of the Swansea Bay City Deal.	A	Screened Out
SO13	To make provision for sustainable & high quality all year round tourism related initiatives.	A	Screened Out
SO14	To reflect the requirements associated with the delivery of new development, both in terms of hard and soft infrastructure (including broadband).	A	Screened Out

Appendix 4 HRA Screening of rLDP Strategic Policies

Policy	Screening Category	Justification and conclusion		Screening Outcome
SP1 – Strategic Growth	G	<p>This policy is an overarching policy which provides for residential and employment growth. As such it is a driver of potential impacts on European Sites. However, the implications of change provided for by SP1 are more appropriately assessed under specific policies through which such growth will be implemented.</p> <p>Therefore, <u>this policy is screened out of the need for further assessment in accordance with the guidance provided at section F.6.2.3 of the HRA Handbook.</u></p>		Screened Out
SP2 – Retail and Town Centres	B	<p>This policy relates specifically to town centre locations and maintaining the vibrancy, viability and attractiveness of Carmarthenshire's town, district, and local centres. Implementation of this policy would not lead directly to development, as they list general criteria for testing the acceptability of proposals.</p>	N/A	Screened Out

		<p><u>There would be no LSE on European sites as a result of implementation of this policy</u></p>		
SP3 – Providing New Homes	G	<p>This policy is an overarching policy which provides for residential and employment growth. As such it is a driver of potential impacts on European Sites. However, the implications of change provided for by SP1 are more appropriately assessed under specific policies through which such growth will be implemented.</p> <p>Therefore, <u>this policy is screened out of the need for further assessment in accordance with the guidance provided at section F.6.2.3 of the HRA Handbook.</u></p>		Screened Out
SP4 – Affordable Homes	G	<p>This policy is an overarching policy which provides for residential growth. As such it is a driver of potential impacts on European Sites. However, the implications of change provided for by SP4 are more appropriately assessed under specific policies through which such growth will be implemented.</p> <p>Therefore, <u>this policy is screened out of the need for further assessment in</u></p>		Screened Out

		<u>accordance with the guidance provided at section F.6.2.3 of the HRA Handbook.</u>		
SP5 - Strategic Sites	C	<p>This policy refers to specific proposals for projects that would progress irrespective of LDP adoption.</p> <p>Both proposals will be subject to HRA if required through the planning process.</p> <p><u>Therefore, it is determined that there will be no likely significant impacts on European sites as a result of the implementation of this policy.</u></p>		Screened Out
SP6 Employment and the Economy	G	<p>This policy is an overarching policy which provides for employment growth. As such it is a driver of potential impacts on European Sites. However, the implications of change provided for by SP6 are more appropriately assessed under specific policies through which such growth will be implemented.</p> <p>Therefore, <u>this policy is screened out of the need for further assessment in accordance with the guidance provided at section F.6.2.3 of the HRA Handbook.</u></p>		Screened Out

SP7 – Welsh Language and Culture	F	<p>This policy will not lead to any development and it relates to general safeguarding of Welsh language.</p> <p><u>There would be no LSE on European sites as a result of implementation of this policy</u></p>	N/A	Screened Out
SP8 – Infrastructure	B	<p>This policy sets out the general criteria for testing the suitability of development and cannot have any effect on a European Site. <u>Screened out.</u></p>	N/A	Screened Out
SP9 – Gypsy and Traveller Provision	H	<p>This policy identifies the need to address the accommodation needs of gypsies, travellers and travelling showpeople. The policy sets out the Council’s legal duty, but the policy itself does not allocate any sites. Given the likely small-scale nature of such sites, and their likely location adjacent to existing development, <u>it is considered unlikely that there would be LSE on European sites as a result of implementation of this policy.</u></p>		Screened Out
SP10 – The Visitor Economy	B	<p>This policy relates to supporting sustainable tourism within the County. Although SP10 supports new</p>	N/A	Screened Out

		<p>development, there are no specific sites allocated under this policy.</p> <p>The policy states that tourism related developments will be '<i>sustainably located</i>' and will '<i>preserve social, economic and environmental fabric for future generations</i>'.</p> <p><u>Given that the aim of this policy emphasises sustainable tourism, it is considered unlikely that there would be LSE on European sites as a result of this policy.</u></p>		
SP11 – Placemaking, Sustainability and High Quality Design	B	<p>This policy refers specifically to ensuring that development is considers placemaking, sustainability and high quality design, and proposed criteria to test plan proposals for their general acceptability.</p> <p>Therefore, <u>There would be no LSE on European sites as a result of implementation of this policy</u></p>	N/A	Screened Out
SP12 – Rural Development	A	<p>Although this policy does support development in rural areas, there are no</p>	N/A	Screened Out

		<p>specific areas or sites allocated under the policy.</p> <p>The policy does state that ‘the sustainability of the countryside and natural environment’ is ‘imperative’ and that ‘development would need to demonstrate that they accord with the provisions of national planning policies’.</p> <p><u>Given that this policy emphasises that the consideration of the sustainability of countryside and natural environment is imperative and that national planning policy must be adhered to, it is considered unlikely that there would be LSE on European sites as a result of this policy.</u></p>		
SP13 – Protection and Enhancement of the Natural Environment	D	<p>The direct purpose of this policy is the protection and enhancement of the natural environment.</p> <p>For this reason, <u>There would be no LSE on European sites as a result of implementation of this policy</u></p>	<p>In order to strengthen this policy the addition of the following wording is suggested:</p> <p><i>All development proposals should be considered in accordance with national policy (PPW and TAN5) where a proposal for development would result in a significant adverse effect on a European designated site.</i></p>	Screened Out

			<i>Development that would result in unacceptable adverse environmental effects will not be permitted.</i>	
SP14 – Protection and Enhancement of the Built and Historic Environment	D	<p>The direct purpose of this policy is the protection and enhancement of the built and historic environment.</p> <p>For this reason, <u>There would be no LSE on European sites as a result of implementation of this policy</u></p>	N/A	Screened Out
SP15 – Climate Change	B	<p>This policy relates specifically to ensuring development is resilient to climate change Implementation of this policy would not lead directly to development, as they list general criteria for testing the acceptability of proposals.</p> <p><u>There would be no LSE on European sites as a result of implementation of this policy</u></p>	N/A	Screened Out
SP16 – Sustainable Distribution – Settlement Framework	B	<p>This policy sets out a strategic approach to the allocation of housing and employment across the county. The specific location of the proposed allocation is considered in more detail in policy XX, and subject to separate screening.</p>		Screened Out

		<u>The overarching policy itself is simply referring to the strategic approach adopted and therefore cannot have any effect on a European Site and is screened out</u>		
SP17 – Transport and Accessibility	B	<p>This policy relates specifically to ensuring the plan contributes to the delivery of a sustainable transport system through sustainable location of development and does not directly provide for transport infrastructure</p> <p>Implementation of this policy would not lead directly to development, as they list general criteria for testing the acceptability of proposals.</p> <p><u>There would be no LSE on European sites as a result of implementation of this policy</u></p>	N/A	Screened Out
SP18 – Mineral Resources	G	<p>The distribution of mineral reserves in the county (which includes part of Cernydd Carmel SAC) are specifically protected through the national policy position that such resources should only be exploited in exceptional circumstances</p>	<p>Add in some policy wording specifically mentioning protection of European designations?</p>	Screened Out

<p>SP19 – Waste Management</p>	<p>B</p>	<p>This policy promotes change, but the wording of the policy includes reference to there being no significant, adverse effects upon the environment.</p> <p><u>There would be no LSE on European sites as a result of implementation of this policy</u></p>		<p>Screened Out</p>
---------------------------------------	-----------------	--	--	---------------------

Appendix 5 HRA Screening of rLDP Specific Policies

Policy	Screening Justification	Screening Decision
SG1 Regeneration and Mixed Use Sites	Sites assessed individually in Chapter X	
SG2 Reserve Sites	Sites assessed individually in Chapter X	
SG3 Pembrey Peninsula	This policy seeks to support development in the Pembrey Peninsula. The Pembrey Peninsula is immediately adjacent to Carmarthen Bay and Estuaries European Marine Site and although the fact that it is an 'ecologically sensitive area' is mentioned in the policy text, it cannot be assumed that there would be no likely significant effects upon Natura 2000/ Ramsar sites.	Screened In (Category I)
RTC1 Carmarthen Town Centre	This policy seeks to encourage retail proposals in Carmarthen Town Centre. The town centre identified is adjacent to the River Tywi SAC, however has no causal connection or link between them and the qualifying features of any European site and can therefore be screened out.	Screened Out (Category G)
RTC2 Protection of Local Shops	This policy lists general criteria to test the acceptability of retail proposals outside of town centres and therefore cannot have any effect on a European site and is therefore screened out	Screened Out (Category B)
RTC3 Retail in Rural Areas	This policy lists general criteria to test the acceptability of retail proposals in rural areas and therefore cannot have any effect on a European site and is therefore screened out	Screened Out (Category B)
HOM1 Housing Allocations	Sites assessed individually in Chapter X	
HOM2 Housing within Development Limits	This policy lists general criteria to test the acceptability of housing development on non-allocated sites and therefore cannot have any effect on a European site and is therefore screened out.	Screened Out (Category B)
HOM3 Homes in Rural Villages	This policy lists general criteria to test the acceptability of housing in Rural Villages and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
HOM4 Homes in Non-defined Rural	This policy lists general criteria to test the acceptability of housing in Non-Defined Rural Settlements and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)

HOM5 Conversion or Subdivision of Existing	This policy lists general criteria to test the acceptability of the conversion or subdivision of existing dwellings and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
HOM6 Specialist Housing	This policy lists general criteria to test the acceptability of specialist housing facilities proposals and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
HOM7 Renovation of Derelict or Abandoned	This policy lists general criteria to test the acceptability of the renovation of abandoned or derelict buildings and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
HOM8 Residential Caravans	This policy lists general criteria to test the acceptability of proposals for residential caravans and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
HOM9 Ancillary Residential Development	This policy lists general criteria to test the acceptability of proposals for ancillary residential development and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
AHOM1 Provision of Affordable Homes	This policy sets criteria for ensuring the delivery of affordable homes. Details of the locations for growth, including housing developments, are assessed under other policies.	Screened Out (Category B)
AHOM2 Affordable Homes Exception Sites	This policy sets criteria for ensuring the delivery of affordable homes. Details of the locations for growth, including housing developments, are assessed under other policies.	Screened Out (Category B)
EME1 Safeguarding of Employment Sites	This policy sets criteria under which employment sites can be used for other development and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
EME2 Employment – Extensions	This policy sets criteria under which proposals for extensions or intensification of employment can be used for other development and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
EME3 Employment Proposals on Allocated Sites	Sites assessed individually in Chapter X	
EME4 Employment Proposals on Non-Allocated Sites	This policy sets criteria under which proposals for extensions or intensification of employment can be used for other development and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)

EME5 Home Working	This policy sets criteria under which home working proposals will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
WLI The Welsh Language and New Development	This policy looks to protect Welsh Language interests in the County and therefore cannot have any conceivable on a European site and is screened out.	Screened Out (Category G)
INF1 Planning Obligations	This policy outlines where planning obligations will be sought as a result of development and therefore cannot have any conceivable on a European site and is screened out.	Screened Out (Category G)
INF2 Healthy Communities	This policy seeks to encourage and support healthy design features in development and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category F)
INF3 Broadband and Telecommunications	This policy is a statement of intent to help the broadband and telecommunications industry to deliver their investment plans to address any deficiencies in coverage.	Screened Out (Category A):
INF4 Llanelli Waste Water Treatment Surface Water Disposal	This policy has been included in the plan with the intension of avoiding or reducing effects on specific European site(s) whose qualifying features may otherwise be affected by the plan being implemented.	Screened In (Category M)
GTP1 Gypsy and Traveller Accommodation	This policy outlines the locations for an extension to an existing and a new gypsy traveller site. These sites have no causal connection or link between them and the qualifying features of any European site and can therefore be screened out.	Screened Out (Category G)
VE1 Visitor Attractions and Facilities	This policy sets criteria under which visitor attractions and facilities will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
VE2 Permanent Serviced or Self-catering Holiday	This policy sets criteria under which permanent holiday accommodation will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
VE3 Touring Caravan, Camping or Temporary	This policy sets criteria under which touring caravan, camping or temporary 'other' camping sites will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)

VE4 Static caravan and Chalet Sites and Perm 'other'	This policy sets criteria under which Static caravan and Chalet Sites and Perm 'other' will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
PSD1 Sustainability and High Quality Design	This policy sets criteria to which development should accord in order to result in high quality, sustainable design and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
PSD2 Masterplanning Principles	This policy sets criteria to which development should accord in proposals of over 100 homes in order to result in high quality, sustainable design and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
PSD3 Green Infrastructure Network	This policy seeks to encourage development to incorporate green infrastructure into its design and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category F)
PSD4 GI Trees Woodlands and Hedgerows	This policy is protective in nature and seeks to protect existing trees, woodland and hedgerows and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category D)
PSD5 Development and the Circular Economy	This policy outlines criteria for the submission of a natural materials management plan and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
PSD6 Community Facilities	This policy lists general criteria under which proposals for community facilities will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
PSD7 Protection of Open Space	This policy seeks to protect open space and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category D)
PSD8 Provision of New Open Space	This policy lists general criteria under which proposals must make provision for open space and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
PSD9 Advertisements	This policy lists general criteria under which advertisements will be allowed and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
PSD10 Extensions	This policy lists general criteria under which extensions will be allowed and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)

PSD11 Noise Pollution	This policy is protective in nature and the implementation of the policy is likely to protect rather than adversely affect European sites and would not undermine their conservation objectives.	Screened Out (Category D)
PSD12 Light and Air Pollution	This policy is protective in nature and the implementation of the policy is likely to protect rather than adversely affect European sites and would not undermine their conservation objectives.	Screened Out (Category D)
PSD13 Contaminated Land	This policy lists general criteria under which proposals must consider contaminated land and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
RD1 Replacement Dwelling in Open Countryside	This policy lists general criteria under which proposals for replacement dwellings in the open countryside will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
RD2 Conversion and Reuse of Rural for Resi	This policy lists general criteria under which proposals for the reuse of rural buildings will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
RD3 Farm Diversification	This policy lists general criteria under which proposals for farm diversification will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
RD4 Conversion and Reuse of Rural for Non-resi	This policy lists general criteria under which proposals for the reuse of rural buildings for non-residential uses will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
RD5 Equestrian Facilities	This policy lists general criteria under which proposals for equestrian facilities will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category D)
NE1 Regional and Local Designations	This policy is protective in nature and the implementation of the policy is likely to protect rather than adversely affect European sites and would not undermine their conservation objectives.	Screened Out (Category D)
NE2 Biodiversity	This policy is protective in nature and the implementation of the policy is likely to protect rather than adversely affect European sites and would not undermine their conservation objectives.	Screened Out (Category D)

NE3 Corridors, Networks and Features	This policy is protective in nature and the implementation of the policy is likely to protect rather than adversely affect European sites and would not undermine their conservation objectives.	Screened Out (Category D)
NE4 Development within CMM SPG Area	This policy has been included in the plan with the intention of avoiding or reducing effects on specific European site(s) whose qualifying features may otherwise be affected by the plan being implemented.	Screened In (Category M)
NE5 Coastal Management	This policy lists general criteria under which proposals for coastal management schemes will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
NE6 Coastal Development	This policy lists general criteria under which proposals for coastal development will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
NE7 Coastal Change Management Area	This policy lists general criteria under which proposals located within coastal change management areas should be dealt with in applications and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
BEH1 Listed Buildings and Conservation Areas	This policy is protective in nature and the implementation of the policy is likely to protect rather than adversely affect European sites and would not undermine their conservation objectives.	Screened Out (Category D)
BEH2 Landscape Character	This policy is protective in nature and the implementation of the policy is likely to protect rather than adversely affect European sites and would not undermine their conservation objectives.	Screened Out (Category D)
CCH1 Renewable Energy	This policy lists general criteria under which proposals for renewable energy will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
CCH2 Electric Vehicle Charging Points	This policy lists general criteria under which proposals for EV charging points will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
CCH3 Water Quality and Protection of Water	This policy is protective in nature and the implementation of the policy is likely to protect rather than adversely affect European sites and would not undermine their conservation objectives.	Screened Out (Category D)

CCH4 – Flood Risk Management and Avoidance	This policy lists general criteria under which proposals must consider flood risk management and avoidance and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
CCH5 – Renewable and Low Carbon Energy in New Dev	This policy lists general criteria under which proposals for renewable energy in development will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
CCH6 – Climate Change Woodland Planting	This policy is protective in nature and the implementation of the policy is likely to protect rather than adversely affect European sites and would not undermine their conservation objectives.	Screened Out (Category D)
SDI Development Limits	This policy lists general criteria under which proposals within development limits will be permitted and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
TRA1 Transport and Highways Infra Improvement	This policy lists general criteria under which proposals will be supported with regards to linking to transport networks and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
TRA2 Active Travel	This policy lists general criteria under which sites integrating active travel will be supported and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
TRA3 Gwili Railway	This policy seeks to safeguard the route of the Gwili Railway and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category G)
TRA4 Redundant Rail Corridors	This policy seeks to safeguard redundant rail corridors and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category G)
TRA5 Highways and Access Standards in Development	This policy lists general criteria under which proposals will be permitted where they accord with highways and access standards and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
MR1 Mineral Proposals	This policy lists general criteria under which proposals for mineral extraction will be permitted and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
MR2 Mineral Buffer Zones	This policy seeks to establish buffer zones around mineral extraction and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category G)

MR3 Mineral Safeguarding	This policy seeks to safeguard redundant rail corridors and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category G)
WM1 Waste Management Proposals	This policy seeks to ensure the provision of sustainable management of waste in new development and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category G)
WM2 Landfill Proposals	This policy lists general criteria under which proposals for landfill sites will be permitted and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)
WM3 Agricultural Land Disposal of Inert Waste	This policy lists general criteria under which proposals for the disposal of inert waste will be permitted and therefore cannot have any effect on a European site and is screened out.	Screened Out (Category B)

Appendix 6 Plans and Programmes to be considered for potential in-combination effects.

National	
People, Places, futures – The Wales Spatial Plan (WSP) (2008 update)	
Document Details	Potential 'in-combination' effects
<p>The Wales Spatial Plan (WSP) provides an overarching policy context for spatial planning and development in Wales by establishing cross-cutting national priorities.</p> <p>Carmarthenshire is situated within three of the six sub areas identified within the WSP.</p> <p>Carmarthen, is identified as playing a vital role between this area, Swansea Bay and Pembrokeshire; and Newtown, with a key role in the Severn Valley area, providing services to the surrounding settlements. These have all been identified by Wales Spatial Plan partners as primary settlements for the future development of Central Wales.</p>	<ul style="list-style-type: none"> • Direct loss of habitat and/or migratory routes through development, particularly localised hub & cluster development for specific sites • Housing and employment growth in rural areas may lead to increased transport movements - the potential for in-combination effect is greater where housing sites are in close proximity to Natura 2000 sites. • Added growth in rural communities require increased infrastructure - potential for land take, pollution increase, disturbance / fragmentation & severance of habitats and species. • Atmospheric pollution generated as a result of housing, employment and transport growth leading to further climate change impact. • Encouraging tourism and diversification in rural areas will open up the countryside and increase possibility of further pollution and disturbance to the European sites via noise and physical erosion through walking activities. <p><i>NOTE: Wales Spatial Plan does not set policy although, has considerable influence insofar as the Local Development Plan must have regard to the Plan.</i></p> <p>A HRA screening report of the Wales Spatial plan concluded that specific impacts could not be identified at this stage due to the lack of detail on the development</p>

<p>The Wales Spatial Plan Area of Pembrokeshire and western Carmarthenshire combines exemplary coast and countryside, with a history of development based on agriculture, tourism, defence and the Milford Haven Waterway.</p>	<p>that might occur under the plan but did identify the following potential impact pathways:</p> <ul style="list-style-type: none"> • Hydrology, water quality and water resources • Population pressure • Recreation pressure • Direct and indirect effects from transport
<p>The Wales Transport Strategy 2008</p>	
<p>Document Details</p>	<p>Potential ‘in-combination’ effects</p>
<p>The National Transport Plan (2008) sits alongside the Regional Transport Plans in delivering the Wales Transport Strategy. This Plan details the approach to putting transport onto a carbon reduction pathway, whilst at the same time ensuring that it can continue to support sustainable economic development and social inclusion.</p>	<p>Improving the efficient, reliable and sustainable movement of people and freight as well as reducing the contribution of transport to greenhouse gas emissions may help to mitigate or offset any increase in diffuse air pollution as a result of this Strategy.</p> <p>Supports investment travel infrastructure, which could, in turn, have negative effects on qualifying features within a European Site, through disturbance and habitat fragmentation.</p>
<p>Wales Coastal Tourism Strategy 2008</p>	
<p>Document Details</p>	<p>Potential ‘in-combination’ effects</p>
<p>The Coastal Tourism Strategy for Wales was launched in 2008. The purpose of the strategy was to identify a clear way forward for the development of Coastal Tourism, which realised and built on the economic potential of the coastline of</p>	<p>There is the potential for the following impacts on all coastal SACs and SPAs related to the plan area:</p>

<p>Wales whilst respecting its environmental quality and recognising the importance of achieving community benefits.</p> <p>Within the regions, seaside tourism is particularly important for South West Wales where it accounts for half of all tourism activity.</p> <p>Carmarthenshire has a number of coastal towns including Llanelli and Burry Port, which have not traditionally attracted much tourism activity, but the development of their coastal resources such as the Burry Port Harbour Development, Pembrey and the Millennium Coastal Parks provide opportunities for attracting a wider day visitor market as well as staying tourists.</p> <p>Tourism is an important contributor to the local economy, with villages attracting both staying and day visitors, as well as acting as service points for the surrounding rural areas. Most have an attractive environment and ambience for the visitor as well as specific heritage attractions, cultural or historic associations such as Laugharne, Llansteffan. Pendine and Pembrey</p> <p>.</p>	<ul style="list-style-type: none"> • Increased levels of tourism and employment may lead to increased transport movements, which could then result in increased noise/ disturbance and increased levels of atmospheric pollution. • Potential for increased recreational pressure and therefore disturbance through various activities such as water sports. • An increased level of waterborne transport and development along the coast has the potential to increase diffuse levels of water pollution.
<p>Welsh Government Strategy for Tourism 2013 – 2020</p>	
<p>Document Details</p>	<p>Potential ‘in-combination’ effects</p>
<p>This strategy sets the vision for the Welsh Government and the industry to work in partnership to increase visitor spend to Wales.</p> <p>The strategy focuses on 5 key areas:</p> <ul style="list-style-type: none"> • promoting the Brand • product Development 	<ul style="list-style-type: none"> • Potential for the plan to increase levels of disturbance through increased tourism and therefore recreational activity. • Increased levels of tourism and employment may lead to increased transport movements, which could then result in increased noise/ disturbance and increased levels of atmospheric pollution.

<ul style="list-style-type: none"> • people Development • profitable Performance • place building. <p>The strategy identifies a product-led approach to developing and marketing tourism in Wales. This means working with iconic, high quality, reputation-changing products and events. We will be focusing on:</p> <ul style="list-style-type: none"> • more luxury and branded hotels • more well-being facilities, such as spas • more heritage hotels that utilise historic and distinctive buildings • more all year round attractions, activities and cultural experiences • more innovative, unusual and distinctive products. <p>The Great Britain domestic market is the main market for Wales and will continue to be the main focus. Marketing activity will be increased in London and South East Midlands and Yorkshire, as well as within Wales itself for the first time. Overseas, the 3 key markets identified by the panel are Ireland, Germany and USA.</p>	
Active Travel Action Plan (2016)	
Document Details	Potential ‘in-combination’ effects
<p>The purpose of the Active Travel Plan (2016) is to set out:</p> <ul style="list-style-type: none"> • the Welsh Government’s vision for active travel and how it relates to wider aims • how WG will work with others to achieve the changes required • how WG will embed consideration of active travel across different portfolios 	<p>Supports investment in highway and active travel infrastructure, which could, in turn, have negative effects on qualifying features within a European Site, through disturbance and habitat fragmentation.</p>

<ul style="list-style-type: none"> how WG will monitor progress against these actions and the rates of active travel across Wales 	<p>Improving the efficient, reliable and sustainable movement of as well as reducing the contribution of transport to greenhouse gas emissions may help to mitigate or offset any increase in diffuse air pollution as a result of this Strategy.</p>
A Walking and Cycling Action Plan for Wales (2009 – 2013)	
Document Details	Potential ‘in-combination’ effects
<p>This Action Plan brings together the key initiatives which the Welsh Assembly Government and its partners are planning to undertake in support of walking and cycling in Wales. It replaces the previous Walking and Cycling Action Plan which ran from 2007 – 2013. The plans core objectives are to improve the health and well-being of the population and the environment by encouraging sustainable travel. This should be done by promoting walking and cycling and associated facilities in crosscutting policies, guidance and funding.</p>	<p>Promoting sustainable travel may influence infrastructure such as cycleways, paths, lighting which in turn may have a substantial negative effect to the qualifying features within a European Site.</p> <p>Improving the efficient, reliable and sustainable movement of as well as reducing the contribution of transport to greenhouse gas emissions may help to mitigate or offset any increase in diffuse air pollution as a result of this Strategy.</p>
Dwr Cymru Welsh Water – Water Resources Management Plan (2015-2040)	
Document Details	Potential ‘in-combination’ effects
<p>The Water Resources Management Plan (WRMP) up to 2035 sets out how Dwr Cymru Welsh Water (DCWW) intends to achieve the required balance between supply and demand. The aim is to do so efficiently so that water bills are no higher than they need to be and the impact on our environment is minimised. In order to develop the plan, DCWW have projected the future demand for water from our customers, we have calculated how much will be available from current sources, and, where there is a shortfall, looked at all the ways of increasing supply and reducing demand so as to arrive at the best overall package of solutions.</p>	<p>The Water Resource Management plan does not set out policy although gives prioritised direction and guidance on what achievements are required during the plan period to take consideration of water demand and water supply in the context of future challenges including that of climate change.</p> <p>A HRA of the WRMP concluded that no significant or adverse effects on any European sites as a result of its implementation (alone or in combination with</p>

	other plans and programmes), and that sufficient safeguards are in place to ensure this.
<u>Dwr Cymru Welsh Water – Draft Water Resources Management Plan 2019</u>	
Document Details	Potential ‘in-combination’ effects
In line with our 2050 strategy, this Plan describes the water resources risks that need to be overcome between 2020 and 2050, whether this be from the balance between our ability to supply water against the demand from our customers, the need to invest in our water resource infrastructure to maintain resilient water supplies or to meet the expectations of our regulators and customers.	<p>The Water Resource Management plan does not set out policy although gives prioritised direction and guidance on what achievements are required during the plan period to take consideration of water demand and water supply in the context of future challenges including that of climate change.</p> <p>The preliminary conclusion of the draft HRA for the draft Water Resources Management Plan (2019) found that the plan would have no adverse effects alone, or in combination. However, it is possible that some aspects of the plan (and therefore HRA conclusion) may change whilst the plan is in draft format and undergoing consultation.</p>
<u>Towards Zero Waste – One Wales One Planet: The Overarching Waste Strategy for Wales (2010)</u>	
Document Details	Potential ‘in-combination’ effects
This Strategy sets out a long term framework for resource efficiency and waste management up to 2050. It identifies the outcomes to achieve, sets high level targets and lays out the general approach to delivering these targets and other key actions. The Strategy identifies high level outcomes, policies and targets, and forms part of a suite of documents that comprise the national waste management plan for Wales. The Strategy is accompanied by a number of Sector plans - implementation plans that describe the role of the individual sector, the Welsh	<p>There are a number of potential impacts that a Waste development can have on qualifying features. These are summarised below:</p> <ul style="list-style-type: none"> • Consideration should be given to the presence of protected or rare species • Dust • Hours of operation / disturbance • Litter • Impact of landfill on existing nature conservation and archaeology • Noise

Assembly Government and others in delivering the outcomes, targets and policies in Towards Zero Waste.	<ul style="list-style-type: none"> • Odours • Protection of surface and groundwater • Transport and access • Visual impact <p>LDP is not proposing landfill sites so minimal impact on qualifying features.</p>
--	---

Regional	
The Swansea Bay City Region Economic Regeneration Strategy 2013 - 2030	
Document Details	Potential 'in-combination' effects
<p>Swansea Bay City Region Economic Regeneration Strategy represents an ambitious strategic framework to support South West Wales and its future economic development. The strategy contains 5 strategic aims:</p> <ul style="list-style-type: none"> • Business growth, retention and specialisation • Skilled and ambitious long-term success • Maximising job creation for all • Knowledge, economy and innovation • Distinctive places and competitive infrastructures 	<p>This strategy supports economic investment in the South West Wales area, including Carmarthenshire.</p> <p>This has the potential to result in increased growth and development and could result in the following, in combination effects:</p> <ul style="list-style-type: none"> • Hydrology, water quality and water resources • Population pressure • Recreation pressure • Direct and indirect effects from transport • Habitat fragmentation

Swansea Bay City Deal 2017

Document Details	Potential 'in-combination' effects
<p>The £1.3 billion Swansea Bay City Deal was signed in March 2017. It is claimed that the Deal will transform the economic landscape of the area, boost the local economy by £1.8 billion, and generate almost 10,000 new jobs over the next 15 years. There is reference to 11 major projects overall, with the following specific projects proposed for Carmarthenshire:</p> <ul style="list-style-type: none">• Wellness and Life Science Village in Llanelli• Creative industry project Yr Egin in Carmarthen <p>4 key themes of Economic acceleration, Life science and Well-being, Energy and Smart manufacturing. An enhanced Digital infrastructure and next generation wireless networks and the development of workforce skills and talent will underpin each.</p>	<p>The proposed Wellness and Life Science village in Llanelli is situated adjacent to the Carmarthen Bay and Estuaries European Marine Site. It has the potential to have the following in combination effects:</p> <ul style="list-style-type: none">• Effects on mobile species (bird assemblages and other populations)• Water Quality• Noise, disturbance• Recreation• Population pressure• Transport related air pollution

Joint Local Transport Plan for South West Wales (2015 – 2020)

Document Details	Potential 'in-combination' effects
<p>The joint local transport plan sets out a long term strategy for improvements to transport across four Local Authorities:</p> <ul style="list-style-type: none">• Carmarthenshire County Council• Neath Port Talbot County Borough Council• Pembrokeshire County Council• City and County of Swansea	<p>Potential to improve air quality through proposed mitigation</p> <p>Supports investment in travel infrastructure, which could, in turn, have negative effects on qualifying features within a European Site, through disturbance and habitat fragmentation.</p>

<p>Aims include: Economic Growth, Access to employment, tackling poverty, sustainable travel and safety and access to services.</p> <p>The plan lays out a programme of schemes to improve transportation across Carmarthenshire.</p>	
Lavernock Point to St Ann's Head Shoreline Management Plan 2 (2012)	
Document Details	Potential 'in-combination' effects
<p>A Shoreline Management Plan (SMP) provides a large-scale assessment of the risks associated with coastal erosion and flooding at the coast. It also presents policies to help manage these risks to people and to the developed, historic and natural environment in a sustainable manner.</p> <p>This document is the second generation Shoreline Management Plan (SMP2) for the shoreline between Lavernock Point (Vale of Glamorgan) in the east and St Ann's Head (Pembrokeshire) in the west, including the counties of Vale of Glamorgan, Bridgend, Neath Port Talbot, Swansea, Carmarthenshire and Pembrokeshire.</p> <p>The study area includes the Neath Estuary, the Tawe Estuary, the Loughor Estuary (Burry Inlet), the Three Rivers Estuarine Complex (Gwendraeth, Towy and Taf) and Milford Haven, as well as a number of smaller estuaries.</p>	<p>The overall conclusion of the Habitats Regulations Assessment for the Shoreline Management Plan was that its policies may lead to adverse effects on the Integrity of the following Natura 2000 sites:</p> <ul style="list-style-type: none"> • Pembrokeshire Marine Special Area of Conservation (SAC); • Carmarthen Bay and Estuaries SAC; • Burry Inlet Special Protection Area (SPA); and • Burry Inlet Ramsar Site. <ul style="list-style-type: none"> • Habitat loss • Surface water pollution <p>An 'in combination' assessment refers to the total effect of all influences acting on a feature from all plans and projects in the context of prevailing environmental conditions. No effects were identified that might, in combination with the Lavernock Point to St Ann's Head SMP2, adversely affect the integrity of the SAC, SPA or Ramsar designations present.</p>

Waste Planning Monitoring Report(s) for the South West Wales Region	
Document Details	Potential 'in-combination' effects
<p>The principal purpose of the Plan is to provide a land use planning framework which will assist in the provision of a comprehensive, integrated and sustainable network of new waste management facilities throughout the South West Wales Region to deal with the future waste forecast to be generated in the Region in 2013. The plan, which deals with all controlled waste, provides a sustainable land use planning framework for the Region for the next ten years.</p> <p>The Plan provides guidance on how the individual Authorities in the Region should plan for the future sustainable management of waste in their Unitary Development Plans. It does this by forecasting what waste will be generated in each Authority area as well as providing a broad commentary on the different waste management methods and facilities that are available. While not specifically allocating sites the Plan provides the relevant information to allow each Unitary Authority in the Region to allocate sites, or to come to cross border</p>	<p>Each of the Unitary Authorities in the Region have a duty to allocate within their own development plan an integrated and adequate network of waste management facilities to deal with the forecast waste generated within their own Local Authority area. In doing the HRA we need to be aware of neighbouring authority plans for waste management.</p> <p>Neighbouring planning authorities have the potential to cause 'in-combination' effects to the European sites within Carmarthenshire through their waste management policies and proposals.</p> <ul style="list-style-type: none"> • Consideration should be given to the presence of protected or rare species • Dust • Hours of operation / disturbance • Litter • Impact of landfill on existing nature conservation and archaeology • Noise • Odours • Protection of surface and groundwater • Transport and access • Visual impact <p>In combination effects may arise in the very nature of a waste management facility being developed either within the plan area or a neighbouring plan area</p> <p>The waste plans state "Where it is not possible / practicable for an Authority to deal with all forecast waste arising within its area, then that Authority's LDP shall identify how that particular element of waste generated within its area is to be managed by reference to cross boundary arrangements. The allocation of waste management facilities within the Region shall have a cumulative capacity that deals with all of the waste forecast to be generated in the Region. Any additional</p>

	capacity over and above the waste forecast to be generated in the Region will need to be fully justified.
Regional Technical Statement Regional Aggregate Working Parties (2014)	
Document Details	Potential 'in-combination' effects
<p>The main purpose of the statement is to set out the strategy for the provision of the aggregates in the North Wales region for the period until 2021. As appropriate, MPAs in South Wales will then include allocations for future aggregates provision in their area, as part of the UDP / LDP process. The RTS will therefore seek to:</p> <ul style="list-style-type: none"> • Maximise the use of secondary and recycled materials and mineral wastes. • Safeguard land-based minerals which may be needed in the long term. • Acknowledge that where the principles of sustainable development can be achieved, the extension of existing aggregate quarries is likely to be appropriate. • Where there is a need for new areas of aggregates supply, these should come from locations of low environmental constraint and take into account transport implications. • Maintain supply of marine aggregate consistent with the requirements of good environmental practice. 	<ul style="list-style-type: none"> • Loss of Habitat - land-take. • Loss of Supporting Habitat - land-take adjacent to European sites. • Habitat Fragmentation Impacts - land-take due. • increased levels of disturbance - acoustic, noise and light pollution; and • Impacts for Increased Use of Roads - Impacts from increased numbers of heavy vehicles: <ul style="list-style-type: none"> - increased noise impacts (volume, duration); - increased vehicular emissions; - increased road mortality; and - increased fragmentation impacts.

Local	
<u>Moving Forward in Carmarthenshire: the next 5 years (2018)</u>	
Document Details	Potential 'in-combination' effects

<p>The Council has identified almost 100 priority projects, schemes or services that it wants to deliver over the next five years to make Carmarthenshire <i>“the best place to live, work and visit”</i>. The Council will be investing in key areas as it strives to improve economic, environmental, social and cultural well-being in the county.</p>	<p>Has potential to deliver mitigating effects for some potential impacts, such as improvements to sewerage system may have positive effects, as well improvements to active travel routes which could contribute to improvements in air quality.</p> <p>A number of the projects outlined for delivery in this strategy are in proximity to European designated sites.</p> <p>Potential in combination impacts include:</p> <ul style="list-style-type: none"> • Air quality • Disturbance (noise, light, recreation) • Habitat fragmentation • Water quality • Water supply
<p><u>Transformations: A Strategic Regeneration Plan for Carmarthenshire – 2015 – 2030</u></p>	
<p>Document Details</p>	<p>Potential ‘in-combination’ effects</p>
<p>The economic landscape is evolving with Carmarthenshire’s position in the new Swansea Bay City Region for which the strategy has been adopted by the Council; “by 2030, Carmarthenshire will be a confident, ambitious and connected component of a European City Region.”</p> <p>Strategic regeneration sites highlighted include:</p>	<p>A number of the projects outlined for delivery in this plan are in proximity to European designated sites.</p> <p>Generic impacts associated with growth and development include:</p> <ul style="list-style-type: none"> • Air quality • Disturbance (noise, light, recreation) • Habitat fragmentation • Water quality • Water supply

Delta Lakes The Beacon Cross Hands Food Park Carmarthen Town Centre Llanelli Town Centre Ammanford Town Centre	
<u>Affordable Homes Delivery Plan 2016 – 2020: Delivering more homes for the people of Carmarthenshire – 2015 – 2030</u>	
Document Details	Potential ‘in-combination’ effects
<p>This sets out the Council’s five year vision for maximising the supply of affordable homes. Its purpose is to provide detail on how and where more homes will be delivered and what resources will be used and how more could potentially be accessed. It also outlines how an ambitious new build programme can be delivered.</p> <p>The programme will initially deliver over 1000 additional affordable homes over five years, with a total investment exceeding £60m.</p>	<p>Generic impacts associated with growth and development include:</p> <ul style="list-style-type: none"> • Air quality • Disturbance (noise, light, recreation) • Habitat fragmentation • Water quality • Water supply

[Carmarthenshire Destination Management Plan 2015 – 2020 \(June 2015\) – Carmarthenshire Destination Partnership](#)

Document Details	Potential 'in-combination' effects
The purpose of the Destination Management Plan (DMP) for Carmarthenshire is to clarify what is important to get right for the future, to shape policy and priorities, to steer resources and to form the basis for people, businesses and organisations to work together to achieve common goals.	<ul style="list-style-type: none">• Potential for the plan to increase levels of disturbance through increased tourism and therefore recreational activity.• Increased levels of tourism and employment may lead to increased transport movements, which could then result in increased noise/ disturbance and increased levels of atmospheric pollution.

[Local Flood Risk Management Strategy \(2013\)](#)

Document Details	Potential 'in-combination' effects
This document identifies the Risk Management Authorities within Carmarthenshire, the key requirements and contents of the strategy, and outlines the high level objectives and measures for implementing the strategy. In addition, this document identifies the potential sources which could fund the implementation of the measures. The document also discusses the context within which the strategy is required to achieve wider environmental benefits.	<p>No structural measures to control flood risk are proposed in this strategy and therefore there are unlikely to be in-combination effects. However the strategy does state that if requirements for structural measures do arise, that the strategy would be subject to a HRA and in-combination effects may be possible.</p> <p>These may include disturbance, barriers to migration and pollution.</p>

[Flood Risk Management Plan for the Western Wales River Basin District](#)

Document Details	Potential 'in-combination' effects
	The HRA of the FRMP concluded that the plan contained insufficient detail to ascertain significant effects and consequently the assessment for these measures have been deferred to lower tier plans or projects. Environmental Assessment and HRA will be undertaken of these lower tier plans or projects.

	<p>Sites a relevance to Carmarthenshire which likely significant effects could not be screened out include:</p> <ul style="list-style-type: none">• Burry Inlet• Elenydd – Mallaen• Cleddau Rivers• North Pembrokeshire Woodlands• Pembrokeshire Bat sites and Bosherton lakes• River Usk• River Wye <p>Sites were screened in for potential impacts on mobile species (birds, otters lamprey, bullhead, shad, bats)</p>
--	--

Appendix 7 Consultation Responses to HRA Screening Report of Preferred Strategy

Please Note: Text provided in red is text that has been added in response to the comments provided in this report.	
Organisation/Comment	Response/Action
Natural Resources Wales – Sharon Luke	
General Comments	
Reference is made to 2010 Regulations throughout the report this requires updating to The Conservation of Habitats and Species Regulations 2017.	Noted and amended throughout document.
Table 1 Habitats Regulation Assessment: Key Stages	
<ul style="list-style-type: none"> Under Purpose for Appropriate Assessment we would include the precautionary principal and that the plan will not adversely affect the integrity of the sites. 	<p>Agreed. Wording amended to read:</p> <p><u>To ensure that the plan will not adversely affect the integrity of sites.</u> Consideration of impacts on integrity of the site, either individually or in combination with other plans and projects, having regard to the site's structure, function and conservation objectives, <u>whilst applying the precautionary principle.</u> Where adverse impacts are identified <u>or remain unknown,</u> assess mitigation options to identify impacts on the integrity of the site. This stage should involve consultation. If mitigation options do not result in avoidance of adverse effects permission can only be granted if the remaining 2 stages are followed.</p>
1.3.1. We acknowledge that the HRA for the site-specific allocations will be carried out as part of the drawing up of the Deposit LDP.	Comments noted.
1.4.1. We advise the reference to Regulation 85B (3) is incorrect. Regulation 77 covers consultation with the relevant nature conservation body.	Amended.
2.2.1. This should refer to regulation 63 (1).	Amended.
2.3. This should refer to The Conservation of Habitats and Species Regulations 2017.	Amended throughout document.

3.1.1. Potential offsite impacts are listed here but not mentioned earlier in the report.	<p>Wording added to Table 1. Under Screening – Purpose, to describe how the screening stage must consider the potential for offsite impacts. Table now reads:</p> <p>Process for identifying impacts of a plan or project on a European site, either individually or in combination, and consideration of whether likely effects will be significant. <u>This will include consideration of the potential for direct, indirect and cross-boundary effects.</u></p>
3.1.3 The West Wales Marine Candidate Special Area of Conservation (cSAC) should be included.	Amended. Figure 1 has also been amended to include the West Wales Marine cSAC. Appendix 1 has also been updated to include information and the conservation objectives of the West Wales Marine cSAC.
3.2.3. We would amend this to read ‘features of the N2K sites’. We would also advise the inclusion of ‘The Plan must not undermine the conservation objectives of the sites’.	<p>Amended. Paragraph now reads:</p> <p>3.2.3 The scanning stage identifies <u>features of the N2K sites</u> that may be affected by the plan as far beyond as necessary for sites and identifying causal connections and links between the plan proposals and the qualifying features of the sites. <u>The Plan must not undermine the conservation objectives of the sites.</u></p>
3.2.8 Disturbance should be included.	This paragraph simply gives examples of the types of impacts that could be caused by development and is therefore not exhaustive. Table 2. Covers disturbance in more detail.
Table 2 Scanning and site selection lists for sites that could potentially be affected by the plan	
<ul style="list-style-type: none"> The Afon Tywi is not included under SAC’s under Section 2. 	Amended to include Afon Tywi.
<ul style="list-style-type: none"> Carmarthen Bay Dunes is entitled incorrectly under Section 3. 	Amended.
<ul style="list-style-type: none"> West Wales Marine Candidate Site needs to be added to Section 4. 	Amended to include West Wales Marine cSAC.
<ul style="list-style-type: none"> We would suggest the Afon Tywi and Carmel should be included in Section 6. 	Disagree. Neither the Management Plan nor Standard Data form for Afon Tywi or Cernydd Carmel reference recreation to be considered as a

	pressure or threat on the features of the SAC and therefore it is not included for consideration under this section.
<ul style="list-style-type: none"> We seek clarification as to how all sites have been screened out of Section 7 that could be affected by provision of new or extended transport or other infrastructure. These could be barriers to migratory fish, bats and otters. 	Agreed. This will be amended and considered further in the deposit HRA report.
<ul style="list-style-type: none"> We would add Elenydd-Mallaen to Section 7 sites that could be affected by increased deposition of air pollutants. This is as the diet and nesting habits of Merlin could be impacted by air pollution. 	Disagree. The management plan of Elenydd-Mallaen does not reference any sensitivity of Merlin or their prey to air quality issues in the conservation objectives or management requirements and therefore they are not included for consideration under this section.
<ul style="list-style-type: none"> Section 14 included Cwm Doethie which is not the sites full name, we would remove it from here as it does not include any mobile species. Elenydd Special Protection Area (SPA) should be added. 	Noted and amended. Cwm Doethie has been removed and Elenydd-Mallaen SPA has been added.
<ul style="list-style-type: none"> We would expect the same sites (again taking Cwm Doethie out) to be noted under Section 15 as in 14. 	Noted and amended accordingly as above.
<ul style="list-style-type: none"> Section 16 – We do not agree with the conclusion that no sites require further consideration. If there is potential to disturb species as noted in Section 14 of the table then potential exists to cause mortality. We would expect the same sites to be included in both sections. 	<p>Whilst we agree that if there is potential to disturb species noted in Section 14 then there is a risk of mortality, for the purposes of this HRA, it is considered that the effects of this category will be captured effectively via Section 14 of the table. Therefore, in order to avoid duplication, sites are screened out of this section.</p> <p>The following worded has been added to Section 16 as clarification:</p> <p><u>Potential for mortality as a result of disturbance, however to avoid duplication this is addressed under Section 14.</u></p>
<ul style="list-style-type: none"> Mobile features need to be considered outside the designated site boundaries. 	Mobile features outside of designated site boundaries are considered in Section 5 – Plans that could affect mobile species.
3.2.9. Effects associated with development should include effects of contaminated land run off.	<p>The effects of contaminated land run off will be considered under Section 2 – Plans that could affect the aquatic environment.</p> <p>The following wording has been added to Section 2 to provide clarification:</p>

	Sites upstream or downstream of the plan area in the case of river or estuary sites. <u>Effects considered include localised effects on surface/groundwater resources and quality, resulting from changes in run-off, sedimentation, erosion etc.</u>
Table 4, 5 and 6	
West Wales Marine Candidate SAC needs to be included.	Agreed. West Wales Candidate SAC has now been included.
Table 6 Preliminary screening of European Sites identified as vulnerable to effects on the coast.	
<ul style="list-style-type: none"> Consideration should be given to whether the title to this table should be mobile species as it includes Caeau Mynydd Mawr SAC. 	Agreed and amended.
<ul style="list-style-type: none"> All fish species have been screened out due to water quality although this is not clear; disturbance and barriers have not been included. 	Noted, however any impacts as a result of disturbance is considered separately under Section 14.
<ul style="list-style-type: none"> We question if Elenydd-Mallaen should be included for bird assemblage? 	Agreed, amended to include Elenydd - Mallaen
<ul style="list-style-type: none"> Clarification is required as to why Lesser Horseshoe Bats have been screened out when we have records and known roosts in Carmarthenshire. 	Agreed, Lesser Horseshoe Bat will be screened in on a precautionary basis.
3.2.19 This paragraph may be better placed before the screening table (6) to understand why fish species have been screened out.	Agreed, screening table now placed at the end of this section.
3.2.20 Requires updating with the new conservation objectives for the SAC.	<p>We acknowledge receipt of the updated objectives as part of NRW's representation to the HRA Screening report and have updated the conservation objectives in Appendix 1 and have been amended in the text</p> <p>Paragraph now reads:</p> <p>The conservation objectives for Caeau Mynydd Mawr SAC were updated by NRW in 2016, to reflect more current information and understanding of the site and its features. These updated conservation objectives state that to be viable in the long term, the Marsh Fritillary metapopulation requires <i>'at least 100ha of available habitat, with adequate connectivity linked to the core SAC units'</i>. The core SAC units have a requirement to provide a</p>

	minimum of 17.5ha of Available habitat towards this target, and to provide at least 6ha of good habitat within Caeau Mynydd Mawr SAC.
3.2.25 We agree detailed screening will be required as the species are known to be on the county border with Pembrokeshire in areas such as Cenarth.	Noted. This will be addressed in more detail at the detailed screening stage.
3.2.29 The distance from Carmarthenshire's border is given as 16km in this point whereas it states 6.9km in section 3.1.4. The addition of Lesser Horseshoe bats is required as there are records for Carmarthenshire, a roost (possibly maternity) was also found in the Llansteffan area during the last few years.	This has now been corrected in section 3.1.4 as the site is actually 23km outside of Carmarthenshire. Lesser Horseshoe Bats have now been screened in on a precautionary basis.
3.2.32 There is text missing from the end of this paragraph.	The 'Therefore,' to which this refers has now been deleted.
3.2.31- 3.2.36 European otters. Consideration should be given to breeding sites within this section.	<p>Reference is made to breeding sites in this paragraph:</p> <p>3.2.31 European otters are designated features of a number of European sites considered for screening within this document, including River Tywi, River Teifi, Cleddau Rivers, Carmarthenshire Bay and Estuaries, Pembrokeshire Bat Sites and Bosherton Lakes, Pembrokeshire Marine, River Wye and River Usk SACs. Management plans for all of the aforementioned sites highlight that otters 'may be affected by developments that affect resting and breeding sites outside of SAC boundaries'.</p> <p>The text has been amended to provide further clarity:</p> <p><u>3.2.36 In light of this, detailed screening will need to be undertaken to identify any site allocations which may impact on the use of suitable areas of land used for both breeding and resting outside the SAC boundary by otters.</u></p>

3.2.37 We do not agree that neither species utilise any of the waterways. Carmarthen Bay and Estuaries and the West Wales Marine Candidate SAC lie within the plan area.	This section has been renamed: <i>Bottlenose Dolphin, Grey Seal and Harbour Porpoise</i> so as to include the primary features of the Bristol Channel Approaches cSAC and the resulting paragraphs have been redrafted in light of NRW's comment.
3.2.38 Consideration for the Elenydd -Mallaen SPA is required under SPA Bird Assemblages and its mobile features notably Red kite, Merlin and Peregrine. The SPA is noted in Table 7.	Consideration is now given to Elenydd-Mallaen Bird Assemblages under this section.
Table 7 Preliminary screening of European Sites identified as vulnerable to recreational effects.	
• The River Tywi SAC is missing from this table. We suggest there are potential pressures from increased boating/kayaking etc.	Agreed. River Tywi is screened in based on the potential for increased disturbance to Otters
• We consider that Cernydd Camel SAC should also be included as potential for increased pressure from increased visitor numbers in the reserves.	Agreed. Although recreation is not listed as a threat on the Natura 2000 standard data form or the site's management plan, due to the proximity of Cernydd Carmel SAC to existing settlement limits and to the Crosshands growth area, it is screened in on a precautionary basis.
3.2.56 Refers to the Environment Agency, this should read NRW.	Amended.
3.2.59 Acronym for NRW is used in this section although NRW used before hand in the document.	Amended.
Table 9 Preliminary screening of European Sites identified as vulnerable to effects on water quality.	
• Carmarthen Bay Dunes SAC to be added due to slack habitat and petalwort features.	Amended to include Carmarthen Bay Dunes SAC. Table 2 has also been amended to reflect this.
3.2.68 Consideration needs to be given to mobile species such as bats and otters for sites outside Carmarthenshire's boundary.	Agreed. Pembrokeshire Bat Sites and Bosherton Lakes SAC screened in.
Table 11 Preliminary screening of European Sites identified as vulnerable to effects of disturbance, noise and light pollution effects.	
Cwm Doethie- Mynydd Mallaen SAC has no mobile species features listed so may be able to be screened out.	Amended. Cwm Doethie – Mynydd Mallaen SAC now screened out of this section.

Elenydd Mallaen SPA to be added and screened in.	Amended to include Elenydd Mallaen. Table 2 has also been amended to reflect this.
North Pembrokeshire Woodlands may require screening back in due to Barbastelle records on the County border and possible lighting and disturbance issues.	Agreed. Screened in on a precautionary basis.
Table 12 Summary of the preliminary screening based on overall growth projection of Preferred Strategy.	
<ul style="list-style-type: none"> Aquatic environment – Hydrological links also need to be considered. 	<p>Agreed. Generic level screening text now amended to read:</p> <p>Effects only likely where development is in close proximity to a water course that flows into/out of a site. <u>Hydrological links must also be considered.</u></p>
<ul style="list-style-type: none"> Mobile species – Requires addition of Lesser Horseshoe bats. 	Amended.
<ul style="list-style-type: none"> Mobile species – Requires addition of terrestrial SPA (Elenydd-Mallaen) 	Amended
<ul style="list-style-type: none"> Development: Air pollution – We do not agree with the generic screening level; intensive agriculture and other industrial sources have a potential to impact. 	<p>Agreed. Wording of generic screening level amended to address this. Text now reads:</p> <p>Development which leads to increased traffic on roads within 200m of identified sensitive sites. <u>Consideration will also be given to any potential impacts from intensive agriculture and other industrial sources.</u></p>
Table 14 Summary of preliminary screening of draft Strategic Policies.	
<ul style="list-style-type: none"> SP8 Infrastructure – Clarification is required as to why this has been screened out, we consider it could have potential impacts to sites and features. 	Agreed. Policy will be screened back in and will be considered further in light of specific policies and site allocations in order to determine likely significant effects. Screened in under Category I.
<ul style="list-style-type: none"> SP12 Rural development – Should we consider agricultural development under this? If so, it cannot be screened out. 	The Strategic Policy on Rural Development does not consider agricultural development. These matters are considered under existing national planning policy and legislation, and further detailed policies will be developed in the Deposit Plan.

<ul style="list-style-type: none"> SP17 Transport and Accessibility - Clarification is required as to why this has been screened out, we consider it could have potential impacts to sites and features. 	Agreed. Policy will be screened back in and will be considered further in light of specific policies and site allocations in order to determine likely significant effects. Screened in under Category I.
<ul style="list-style-type: none"> SP18 Mineral resources -This should not be screened out due to Cernydd Carmel SAC. 	Disagree. This policy is a safeguarding policy for mineral resources and does not facilitate the removal of mineral deposits. This policy essentially provides a second layer of safeguarding of the site from development and is therefore screened out as having likely significant impacts.
<ul style="list-style-type: none"> 3.4.2 Further Strategic Policies from Table 14, such as mineral resources, should added. 	This section will be updated accordingly.
<p>Appendix 1: Conservation objectives of sites identified as within 15km buffer zone of Carmarthenshire.</p> <ul style="list-style-type: none"> The updated conservation objectives for the sites can are in the appendices to this letter. 	Conservation objectives have been amended to reflect most up to date information provided by NRW in their representation.
<p>Appendix 2 Nitrogen Deposition Data for SAC's/SPA's within Carmarthenshire and 15km buffer</p> <ul style="list-style-type: none"> The Afon Tywi should be included. 	Noted. Appendix will be amended to include Afon Tywi.
<p>Appendix 3 Plans and Programmes with potential in-combination effects.</p> <ul style="list-style-type: none"> West Wales Tourism Strategy 2008 – West Wales Marine candidate SAC to be included. Welsh Government Strategy for Tourism 2013-2020 - West Wales Marine candidate SAC and the SPA's to be included due to disturbance. A walking and Cycling Action Plan for Wales (2009-2013) – Disturbance and erosion should be included as potential issues. The Swansea Bay City Region Economic Regeneration Strategy 2013-2030 - Disturbance and erosion should be included as potential issues. Carmarthenshire Designation Management Plan 2015 – 2020 – We would advise that there is potential for increased soil erosion from increased tourism and recreation activities. Flood Risk Management Plan for Western Wales River Basin District – The River Tywi and River Teifi are not included. 	Noted. This Appendix will be updated for the Deposit Plan HRA to include the documents suggested.

<ul style="list-style-type: none"> • Swansea Local Development Plan (2010-2025) – Burry Inlet RAMSAR site. 	
<p>Appendix 5 Preliminary screening of draft Strategic Policies.</p> <ul style="list-style-type: none"> • SP18 - Mineral Resources – We consider Cernydd Carmel should be screened back in. 	Disagree. As explained in response to comments made on SP18.
Pembrokeshire Coast National Park - Martina Dunne	
General Comments	
<p>The Conservation of Habitats and Species Regulations 2017</p> <p>Para 2.3 page 7. The Conservation of Habitats and Species Regulations 2017 consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments.</p>	Noted and amended throughout document.
<p>People Over Wind</p> <p>In April 2018 the Court of Justice of the European Union handed down their judgment in the case of People Over Wind. The court ruled that it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce harmful effects on a European site. It is suggested that the HRA Screening Report should make explicit mention of the judgment and describe how the HRA is incorporating the ruling. The Habitats Regulations Assessment Handbook (DTA Publications Limited) listed on page 7 has been updated to reflect the judgment.</p>	Noted. Reference to this judgement will be included in the deposit plan HRA.
<p>Sites and species of European importance</p> <p>It is suggested that the Preferred Strategy should include specific policy wording in regard to sites and species of European importance, as implied in the “specific policy restriction” identified as being required for several of the screened in elements. This policy wording might be included within policy SP13, or as an additional policy on sites and species of European importance. Screened-in elements of the Preferred Strategy may then be amended to cross-refer to this policy wording, e.g. ‘subject to there being no unacceptable adverse effects on Carmarthenshire’s environment (see SP13), including sites and species of European importance (see SP13 (and /</p>	Noted. Consideration will be given to the wording of a specific policy for inclusion in the Deposit plan.

or new policy reference))". This would complement the approach taken in Pembrokeshire Coast National Park Local Development Plan 2 and enhance the compatibility of the plans.	
Pembrokeshire Coast National Park Local Development Plan Page 36 and Appendix 3 – there is no mention of the Pembrokeshire Coast National Park Local Development Plan (adopted or LDP2).	Noted, this section will be updated to include reference to the Pembrokeshire Coast National Park LDP.
Typos "Bosherton" should be replaced by "Bosherston" wherever necessary. "Affects" should be replaced by "effects" where appropriate.	Noted and amended.