

LOCAL DEVELOPMENT PLAN UP TO 2021  
STRATEGIC ENVIRONMENTAL  
ASSESSMENT/SUSTAINABILITY  
APPRAISAL

Document 5

Habitats Regulations Assessment of the LDP  
(incorporating Appropriate Assessment)

CYNLLUN DATBLYGU LLEOL HYD AT 2021

ASESIAD AMGYLCHEDDOL  
STRATEGOL/GWERTHUSIAD  
CYNALADWYEDD

Dogfen 5

Asesiad Rheoliadau Cynefinoedd y CDLI  
(yn ymgorffori'r Asesiad Addas)



**Caerphilly County Borough Council  
Local Development Plan**

**Habitats Regulations Assessment Report  
(Incorporating Appropriate Assessment)**

Produced by

**Enfusion**

**For Caerphilly County Borough Council**





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**EXECUTIVE SUMMARY**

- 0.1 Caerphilly County Borough Council (CCBC) is preparing its Local Development Plan in accordance with Part 6 of the Planning and Compulsory Purchase Act, 2004. The Deposit LDP forms the statutory development plan for CCBC until 2021. The Deposit LDP includes: a vision and strategic objectives; the development strategy which is based on three broad areas [The Heads of the Valleys Regeneration Area, the Northern Connections Corridor and the Southern Connections Corridor]; countywide policies and area specific policies as relevant to the three identified development areas.
- 0.2 Habitats Regulations Assessment (HRA) of spatial development plans is a requirement of the Habitats Directive (92/43/EEC) as set out in the amended Habitats Regulations (2007). Enfusion was appointed by CCBC to undertake Habitats Regulations Assessment of the Deposit LDP and this assessment work is being undertaken alongside the Authority's Sustainability Appraisal/ Strategic Environmental Assessment.
- 0.3 This report details the HRA including the Screening and Appropriate Assessment stages for CCBC's Deposit LDP - it sets out the methods and findings of the Screening Assessment and the Appropriate Assessment stages, including recommendations for the plan where necessary.

## 1.0 INTRODUCTION

- 1.1 Caerphilly County Borough Council (CCBC) is preparing its Local Development Plan (LDP) that will set out the strategic planning policy for the Borough until 2021. The Deposit LDP includes: a vision and strategic objectives; the development strategy which is based on three broad areas [The Heads of the Valleys Regeneration Area, the Northern Connections Corridor and the Southern Connections Corridor]; countywide policies and area specific policies as relevant to the three identified development areas.
- 1.2 Enfusion was appointed by CCBC to undertake Habitats Regulations Assessment (HRA) of the County Borough's Local Development Plan. This HRA Report addresses the likely significant effect on designated European Sites of implementing the policies and proposals of the Deposit LDP and the findings also relate to and are informed by wider regional work on HRA being undertaken by Enfusion on behalf of the South East Wales Strategic Planning Group (SEWSPG).
- 1.3 Habitats Regulations Assessment is also commonly referred to as Appropriate Assessment (AA) although the requirement for AA is first determined by an initial 'screening' stage undertaken as part of the full HRA. This report addresses both the Screening Phase and the Appropriate Assessment stages of the HRA; it outlines the methods and the key findings emerging from the full assessment process.
- Requirement for Habitats Regulations Assessment**
- 1.5 The European Directive (92/43/EEC) on the Conservation of Natural Habitats and Wild Flora and Fauna (the Habitats Directive) protects habitats and species of European nature conservation importance. The Habitats Directive establishes a network of internationally important sites designated for their ecological status. These are referred to as Natura 2000 (N2K) sites or European Sites, and comprise Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) [which are classified under the Council Directive 79/409/EEC on the conservation of wild birds, the 'Birds Directive'].
- 1.6 Articles 6 (3) and 6 (4) of the Habitats Directive require AA to be undertaken on proposed plans or projects which are not necessary for the management of the site but which are likely to have a significant effect on one or more European sites either individually, or in combination with other plans and projects.<sup>1</sup> In 2007, this requirement was transposed into UK law in Part IVA of the Habitats Regulations (The Conservation (Natural Habitats, & c.)(Amendment) (England and Wales) Regulations 2007). These regulations require the application of HRA to all land use plans. Welsh Assembly Government (WAG) guidance also requires that Ramsar sites (which support internationally important wetland habitats) and are listed under the Convention on Wetlands of International Importance (Ramsar Convention 1971)

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<sup>1</sup> Determining whether an effect is 'significant' is undertaken in relation to the designated interest features and conservation objectives of the Natura 2000 sites. If an impact on any conservation objective is assessed as being adverse then it should be treated as significant. Where information is limited the precautionary principle applies and significant effects should be assumed until evidence exists to the contrary.

are included within HRA/AA, and that candidate SACs and proposed SPAs are treated as ‘designated’ sites in the context of HRA.

1.7 The purpose of HRA/AA is to assess the impacts of a land-use plan, in combination with the effects of other plans and projects, against the conservation objectives of a European Site and to ascertain whether it would adversely affect the integrity<sup>2</sup> of that site. Where significant negative effects are identified, alternative options or mitigation measures should be examined to avoid any potential damaging effects. The scope of the HRA/AA is dependent on the location, size and significance of the proposed plan or project and the sensitivities and nature of the interest features of the European sites under consideration.

1.8 Broader environmental/ habitats issues are that related to but are not directly implicated in HRA requirements, are referred to in the parallel Sustainability Appraisal/ Strategic Environmental Assessment reports produced in tandem with CCBC’s Deposit LDP and accompanying the public consultation.

**Guidance for Habitats Regulations Assessment/Appropriate Assessment**

1.9 Draft guidance for HRA ‘The Assessment of Development Plans in Wales under the Provisions of the Habitats Regulations’, has been produced by David Tyldesley and Associates and WAG, (WAG, October 2006). The final WAG guidance is yet to be published, but is expected to be available in 2008.<sup>3</sup> The draft guidance is provided in the Annex to TAN 5 (Nature Conservation and Planning). A partnership of consultants<sup>4</sup> has also prepared guidance (Appropriate Assessment of Plans, August 2007) to assist planning bodies in complying with the Habitats Directive.

1.10 The methods and approach used for this screening are based on the formal Welsh guidance currently available and emergent practice, which recommends that HRA is approached in three main stages – outlined in **Table 1**. This report outlines the method and findings for stages 1&2 of the HRA process.

<b>Table1 Habitats Regulations Assessment: Key Stages</b>	
<b>Stage 1</b>	
<b>Screening for likely significant effect</b>	<ul style="list-style-type: none"> <li>• Identify international sites in and around the plan/ strategy area in search area/ buffer zone agreed with the Statutory Body the Countryside Council for Wales</li> <li>• Examine conservation objectives of the interest feature(s)(where available)</li> <li>• Review LDP policies and proposals and consider potential effects on European sites (magnitude, duration, location, extent)</li> <li>• Examine other plans and programmes that could contribute to ‘in combination’ effects</li> </ul>

2 Integrity is described as the sites’ coherence, ecological structure and function across the whole area that enables it to sustain the habitat, complex of habitats and/or levels of populations of species for which it was classified, (ODPM, 2005).

3 Informal consultation with WAG has been undertaken to ascertain the nature and extent of any key changes to the Draft guidance in support of this HRA process (April, 2008).

4 Scott Wilson, Levett-Therivel Sustainability Consultants, Treweek Environmental Consultants and Land Use Consultants (August, 2006).

Table1 Habitats Regulations Assessment: Key Stages	
	<ul style="list-style-type: none"> <li>• <i>If no effects likely – report no significant effect (taking advice from CCW as necessary).</i></li> <li>• <i>If effects are judged likely or uncertainty exists – the precautionary principle applies proceed to <b>stage 2</b></i></li> </ul>
<b>Stage 2</b>	
<b>Appropriate Assessment</b>	<ul style="list-style-type: none"> <li>• Complete additional scoping work including the collation of further information on sites as necessary to evaluate impact in light of conservation objectives</li> <li>• Agree scope and method of AA with CCW</li> <li>• Consider how plan ‘in combination’ with other plans and programmes will interact when implemented (the Appropriate Assessment)</li> <li>• Consider how effect on integrity of site could be avoided by changes to plan and the consideration of alternatives</li> <li>• Develop mitigation measures (including timescale and mechanisms)</li> <li>• Report outcomes of AA including mitigation measures, consult with CCW and wider [public] stakeholders as necessary</li> <li>• If plan will not significantly effect European site proceed without further reference to Habitats Regs</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>If effects or uncertainty remain following the consideration of alternatives and development of mitigations proceed to <b>stage 3</b></i></li> </ul>
<b>Stage 3</b>	
<b>Procedures where significant effect on integrity of international site remains</b>	<ul style="list-style-type: none"> <li>• Consider alternative solutions, delete from plan or modify</li> <li>• Consider if priority species/ habitats affected</li> <li>• Identify ‘imperative reasons of overriding public interest’ (IROPI) economic, social, environmental, human health, public safety</li> <li>• Notify Assembly Government                             <ul style="list-style-type: none"> <li>• Develop and secure compensatory measures</li> </ul> </li> </ul>

**Consultation**

1.11 The Habitats Regulations require the plan making/competent authority to consult the appropriate nature conservation statutory body [Countryside Council for Wales (CCW)]. CCW raised the issue of HRA at the Statutory Consultee Involvement consultation on the LDP’s Sustainability Appraisal/ Strategic Environmental Assessment Report in June 2006. A meeting was subsequently held between the Council and CCW, at which this issue was discussed.



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- 1.12 At that time the Council acknowledged that HRA was a statutory requirement and that it should be referenced in the SA/SEA Scoping Report, although guidance on the process and content for HRA had yet to be published by WAG. In addition, the tight deadlines imposed by the Council's LDP Delivery Agreement, and the need to move forward to meet the deadlines for the LDP Pre-Deposit Consultation, meant that the HRA work was unlikely to be concluded in time to be published alongside the SA/SEA. As a result, the Council agreed with CCW that the SA/SEA Scoping Report should contain references to undertaking the HRA (paragraphs 1.1, and 4.21 - 4.22) and that the HRA work be undertaken subsequently and reported alongside the Part 2 detailed SA/SEA of the Deposit LDP."
- 1.13 Consultation for the HRA screening, including advice on which European sites should be considered within the area of search, was undertaken with CCW during May/June 2008. Further consultation advice was received from CCW on the findings of the interim Screening Report and the approach to undertaking the Appropriate Assessment stage of the HRA [June 2008].
- 1.14 The Habitats Regulations leave consultation with other bodies and the public to the discretion of the plan making authority. The draft WAG guidance notes state that it is good practice to make information on HRA available to the public at each formal development plan consultation stage. In addition to the statutory consultation undertaken with CCW this report is being made available for wider public consultation.

#### **Purpose & Structure of Report**

- 1.15 This report documents the process and the findings from stage 1&2 of the HRA for CCBC's Deposit LDP. Following this introductory section the document is organised into a further four sections:
- ◆ **Section 2** – outlines the methods used for the Screening and Appropriate Assessment process and includes reference to the key information sources used.
  - ◆ **Section 3** – provides a summary of the key screening findings.
  - ◆ **Section 4** – details the analysis and findings of the Appropriate Assessment stage, including recommendations for the Plan where required.
  - ◆ **Section 5** – concludes the HRA process and makes recommendations for monitoring the outcomes of the HRA and ensuring that implementation level actions have regard to the HRA findings.

## 2.0 METHOD

### Stage 1: Screening

2.1 In accordance with the official Welsh guidance and current practice, conducting the screening stage of the HRA for CCBC's Deposit LDP employed the method outlined below. This approach combines both a **plan** focus and a **site** focus.

- ◆ The **plan** focus first screens out those elements of the plan unlikely to affect European site integrity and then considers the impacts of the remaining elements on European sites, including the potential for 'in-combination' impacts.
- ◆ The **site** focus considers the environmental conditions of the site and the factors required to maintain site integrity, and looks at the potential impacts the plan may have.

2.2 HRA experience to date has indicated that maintaining a site based approach as core to the HRA/AA method more closely reflects the intent of the Habitats Directive. This means that subsequent avoidance and mitigation measures [developed if/as required during the AA stage 2] seek to focus on the conditions necessary to maintain site integrity (e.g. avoiding specific types of development/ activity at or near sensitive areas). This is considered to be a more robust and defensible approach than adding policy caveats at a strategic level and devolving decisions about impacts on site integrity to lower level planning documents. Although, this approach does recognise that some decisions on avoidance and mitigation can only be made when site level detail becomes available.

2.3 The key tasks employed for the HRA Screening are set out in **Table 2**.

Table 2 HRA Screening Stage 1: Key Tasks	
<b>Task 1</b>  <b>Identification of Natura 2000 sites &amp; characterisation</b>	<ul style="list-style-type: none"> <li>• Identification of European sites both within CCBC's boundaries and in an area of search extending to 15km [as recommended by extant guidance] around the County Borough boundary. This includes considering hydrological connectivities and the catchment of watercourses relating to SACs</li> <li>• Information was obtained for each European site, based on publicly available information and consultation with Countryside Council for Wales where appropriate.<sup>5</sup></li> <li>• This included information relating to the sites' qualifying features; conservation objectives; vulnerabilities/ sensitivities, current conditions, trends &amp; geographical boundaries.</li> </ul>
<b>Task 2</b>  <b>Plan review and</b>	<ul style="list-style-type: none"> <li>• Screening of the Deposit LDP and the identification of likely impacts (including a review of the Deposit LDP aims, objectives, strategic policies, including</li> </ul>

<sup>5</sup> Key Information Sources: Joint Nature Conservation Committee (JNCC) web resource [www.jncc.gov.uk](http://www.jncc.gov.uk) including site details/ character contained on Natura 2000 Standard Data Form. Conservation Objectives, management plan information, Countryside Council for Wales web resource <http://www.ccw.gov.uk/>

<b>Table 2 HRA Screening Stage 1: Key Tasks</b>	
<b>identification of likely impacts</b>	spatial implications where identified to determine likely impacts).
<b>Task 3</b> <b>Consideration of other plans and programmes</b>	<ul style="list-style-type: none"> <li>• Consideration, where appropriate of other plans and programmes that may have in-combination effects with the CCBC's Local Development Plan.</li> </ul>
<b>Task 4</b> <b>Screening Assessment</b>	<ul style="list-style-type: none"> <li>• Pre-screening of European sites outside the County Borough boundaries</li> <li>• Assessment of the potential of identified impacts to affect the designated interest features of European sites</li> <li>• Summary of screening outcomes and recommendations.</li> </ul>

2.4 As part of this screening consideration was given to the related Sustainability Appraisal (SA)/ Strategic Environmental Assessment (SEA) work produced for the LDP and other HRA work [ where available] being undertaken in neighbouring authorities and in the wider South East Wales region. Specific reference was made to:

- ◆ SA/SEA of the Merthyr Tydfil County Borough Council LDP.
- ◆ The Habitats Regulations Assessment Screening Report of the County Council of the City and County of Cardiff Local Development Plan, (September, 2007).
- ◆ Rhondda Cynon Taf Local Development Plan: Appropriate Assessment Screening Report (January, 2007).
- ◆ Torfaen County Borough Council, Local Development Plan 2006-2016, Habitats Regulations Assessment, (January, 2008).
- ◆ Wales Spatial Plan Update Habitats Regulations Assessment and Appropriate Assessment (June 2008) C4S/TRL, WAG.

#### **Task 1: Identification Of European Sites & Characterisation**

2.5 The natural environment of Caerphilly is varied, with a complex array of landscape types and habitats including open moorland, common land, broad leaved and coniferous woodland, semi-improved grassland, agricultural land and industrial landscapes that reflect a mining heritage. Biodiversity and nature conservation interests are recognised by Sites of Special Scientific Interest (SSSI) and Sites Important for Nature Conservation (SINC) designations.

2.6 There is one European site (**Table 3**) within the CCBC boundary. A summary site characterisation is provided below, and detailed information for the site, is provided in **Appendix 1**.

<b>Table 3 European Sites within CCBC Boundary</b>	
<b>Site</b>	<b>Designation</b>
<p><b>Aberbargoed Grasslands</b></p> <ul style="list-style-type: none"> <li>Aberbargoed Grasslands covers an area of 42.5ha and lies on a southwest facing hillside in the Rhymney Valley, 1km east of Bargoed and adjacent to the A4049. A large and relatively isolated population of marsh fritillary butterfly (<i>Euphydryas aurinia</i>) is present on a series of damp pastures and heaths in Gwent, representing the species on the eastern edge of its range in Wales.</li> </ul>	<b>SAC</b>

- 2.7 Plans, programmes and projects can have spatial implications that extend beyond the intended plan boundaries. In particular, it is recognised that distance in itself is not a definitive guide to the likelihood or severity of an impact [inaccessibility/remoteness is typically more relevant] as factors such as the prevailing wind direction, river flow direction, and ground water flow direction will all have a bearing on the relative 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.
- 2.8 Taking into account the potential for transboundary impacts the screening has identified 11 European Sites that lie within a 15km search area around CCBC's administrative boundary. These sites are outlined in **Table 4** below and detailed information for each designated site including its conservation objectives is provided in **Appendix 1**.

<b>Table 4 European Sites within search area buffer zone</b>		
<b>European Sites within a search area of 15km around Caerphilly County Borough Plan Area</b>	<b>Designation/</b>	<b>Distance from CCBC Boundary (approx)</b>
<b>Blaen Cynon</b>	SAC	13.51km
<b>Brecon Beacons</b>	SAC	10.0km
<b>Cardiff Beech Woods</b>	SAC	Adjacent (within 0.5km)
<b>Cwm Cadlan</b>	SAC	11.1km
<b>Cwm Clydach Woodlands</b>	SAC	8.05km
<b>Llangorse Lake</b>	SAC	14.32km
<b>River Usk</b>	SAC	5.35km
<b>Severn Estuary</b>	cSAC	5.71km
<b>Severn Estuary</b>	SPA	5.71km
<b>Severn Estuary</b>	Ramsar	5.71km
<b>Usk Valley Bat Sites</b>	SAC	6.75km

## **Task 2: Plan/Strategy review, policy screening and identification of likely impacts**

### **Caerphilly County Borough Council Deposit LDP: Summary Review<sup>6</sup>**

- 2.9 Caerphilly County Borough is strategically situated in South East Wales between the Welsh Capital City Cardiff in the South, and the City of Newport to the East. Connections through the M4 corridor in the South and the A465 crossing the Heads of the Valleys to the North mean that Caerphilly is well placed to take advantage of the economic development arising from the Capital Network strategy being driven by the Wales Spatial Plan, as well as benefiting from an attractive and accessible rural hinterland.
- 2.10 From what was once a traditional mining and industrial/ manufacturing economic base the employment profile of the County Borough is moving towards finance, public sector, education and health as well as the leisure industry. Upgrades to the infrastructure in the M4 corridor, the potential for improved rail services, and better public transport have improved accessibility, and out commuting for employment & recreational purposes has steadily increased in recent years.
- 2.11 The CCBC Local Development Plan provides the framework for planning the future development of the County Borough replacing the old system of structure and local plans. The delivery agreement was formerly approved by WAG in March 2006 and following consultation on the Preferred Strategy in April 2007 the Local Plan is to be place on Deposit October in 2008.

<sup>6</sup> The Deposit LDP reviewed and subject to HRA Screening and Appropriate Assessment was the version at 16th June 2008. No material changes made to the Plan since this time have affected the findings of the HRA screening or the conclusions of the Appropriate Assessment.

- 2.12 The Deposit LDP is comprised of three parts, the first of which is the Development Strategy which sets the strategic framework and policies necessary to deliver land use planning in the County Borough. The Development Strategy splits the County Borough into three parts; The Heads of the Valleys Regeneration Area, the Northern Connections Corridor and the Southern Connections Corridors. Part two of the Deposit LDP comprises the criteria based policies (Countywide Policies) against which development proposals will be determine and part three contains the allocations where development is expected to be located and where areas of land use protection are to be found (Area Specific Policies).

**CCBC: Local Development Plan Vision Statement**

**“The Development Strategy for the Local Development Plan will capitalise on the strategic location of Caerphilly County Borough at the centre of the Capital Network Region. It will ensure that the needs of all the County Borough's residents and visitors are met and that the regeneration of our towns, villages and employment centres and the surrounding countryside is delivered in a well-balanced and sustainable manner that reflects the specific role and function of individual settlements.”**

- 2.13 The Deposit LDP is underpinned by eight components which set a framework for the approach to - and the nature of - land use development. They are:
1. Target development to reflect the roles and functions of individual settlements
  2. Allow for development opportunities in the Heads of the Valleys Regeneration Area
  3. Promote a balanced approach to managing future growth
  4. Exploit brownfield opportunities where appropriate
  5. Promote resource efficient settlement patterns
  6. Ensure development contributes towards necessary infrastructure improvements
  7. Ensure development provides necessary community facilities
  8. Reduce the impact of development upon the countryside

- 2.14 The plan makes provision for 8,625 new dwellings during the plan period, provisions for employment land, infrastructure improvements as well as allocations for open space and improvement to recreational and wider community facilities.

**Caerphilly Deposit LDP: Screening of Local Development Plan**

- 2.15 The approach to development in CCBC as set out in the Development Strategy, Countywide Policies and Area Specific policies was - for the purposes of the HRA - subject to an initial screening process. The aim of this screening is to identify at a broad level those policies that will not have an effect on European Sites and those that have the potential to have a significant effect at the sites identified at Task 1.

- 2.16 The approach taken builds on and is in accordance with screening approaches used in the UK for Regional and Sub-Regional Strategies.<sup>7</sup> Policies were considered to have ‘no effect’ and were screened out on the basis of the following criteria:
1. The policy itself will not lead to development.
  2. The location of the development is unknown, and will be selected following consideration of options in lower plans.
  3. The policy will have no effect because development is dependent on implementation of lower tier policies.
  4. The policy concentrates development in existing urban areas, steering development away from European sites and sensitive areas.
  5. The policy will steer development away from European sites and associated sensitive areas.
  6. The policy is intended to protect the natural environment, including biodiversity.
  7. The policy is intended to conserve or enhance the natural, built or historic environment, and such enhancements are unlikely to affect a European site.
- 2.17 The full Policy Screening Tables, including the rationale for a policy screening decision based on the above criteria are provided in **Appendix 2**. Of the 119 policies screened, 9 policies were considered to be proposing development that may have significant effects at the European sites identified at Task 1. The 9 policies screened in to the assessment process are outlined in Table 5<sup>8</sup>.

Table 5 HRA Screening Table	
Local Development Plan Deposit Draft Policies Screened in to the assessment process	
<b>Strategy Policies</b>	
<b>SP1</b>	Development Strategy – Development in the Heads of the Valleys Regeneration Area
<b>SP2</b>	Development Strategy – Development in the Northern Connections Corridor
<b>SP4</b>	Settlement Strategy
<b>SP16</b>	Total Housing Requirement
<b>Area Specific Policies: Heads of the Valleys Regeneration Area (HOVRA)</b>	
<b>HG1</b>	Allocated Housing Sites (HG 1.16-1.22)
<b>EM2</b>	Employment Site Protection (EM2.5-2.6)
<b>CF1</b>	Community Facilities (CF1.6-1.8)
<b>TR7</b>	New Roads to Facilitate Development (TR7.1)
<b>TR8</b>	Regeneration Led Highways Improvements (TR8.1)

<sup>7</sup> The Assessment of Regional Spatial Strategies and Sub-regional strategies under the Provisions of the Habitats Regulations: Draft (David Tyldesley Associate, for English Nature, 2006). As applied to the Neath Port Talbot UDP Appropriate Assessment (June 2007).

<sup>8</sup> Figures relate to main policies – does not include sub-policies e.g. detailing individual employment/ housing allocations.

- 2.18 The potential impacts arising as a result of these policies can be broadly be categorised as:
- ◆ **Urbanisation Impacts & Recreational** – resulting from an expanding population within and around Bargoed/Aberbargoed, issues include fly tipping, dog fouling, cat predation, potential vandalism, trampling, introduction of invasive/ non-native species, pollution (water, air, noise, light)
  - ◆ **Land take** – from proximal and adjacent development to European sites, including impacts on surrounding ‘buffer’ habitats/ green space areas not designated for European interest but part of wider habitats connectivity supporting site integrity (important for the designated species at Aberbargoed Grasslands SAC)
  - ◆ **Water Resources and Water Quality** – resulting from increased demand for water consumption and discharge requirements arising from new/ expanded housing and commercial developments and the potential for increased point source pollution, changes to surface water/ run-off which may have implications for water dependant sites
  - ◆ **Atmospheric Pollution** - arising from a growth in traffic and transport and general development (emissions from construction/ building stock) which has the potential to affect sites sensitive to changes in air quality
- 2.19 As part of the HRA requirement it was noted in relation to regulation 85B(1) that the Deposit LDP and its individual components are not directly connected to or necessary to the management of any European Site and therefore the Deposit LDP could not be screened out of HRA on this basis.
- 2.20 The potential for the impacts identified to have a significant effect on the SACs highlighted is summarised in the pre-screening and main screening assessment findings at **Task 4** below.
- Task 3: Consideration of other plans and programmes**
- 2.21 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). Undertaking an assessment of other PPPs for the CCBC Deposit LDP has required a pragmatic approach given the extensive range of PPPs underway in the region. The approach taken was cognisant of the emphasis in the forthcoming WAG guidance, that considering the potential for in-combination effects is core to delivering robust/ precautionary HRA.<sup>9</sup>
- 2.22 When considering other PPPs attention was focused on those aimed at delivering planned spatial growth with the most significant being those that seek to provide, housing, employment and infrastructure. The review considered the most relevant plans including:
- ◆ The Wales Spatial Plan (update, WSPU) 2008
  - ◆ Local Development Plans in South East Wales neighbouring authorities

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<sup>9</sup> The review also draws on work being undertaken on behalf of the South East Wales Strategic Planning Group (SEWSPG) to build a resource kit of information and analysis to support HRA in the region.



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- ◆ Waste Strategies for South East Wales and neighbouring authorities
  - ◆ Regional Transport Plans – where relevant and/or major development schemes
  - ◆ Catchment Abstraction Management Plans – where relevant to the designated sites under consideration
  - ◆ Non-statutory plans that assist in the delivery of the WSPU, e.g. the ‘Turning Heads’, the Heads of the Valleys regeneration strategy.

2.23 The potential effects of these plans are reviewed in detail at **Appendix 3** and the potential for these effects to act ‘in-combination’ with effects identified from CCBC’s Deposit LDP are considered in the screening assessment [**Appendix 4**]. The range of in-combination impacts considered was focused on the key issues outlined below:

- ◆ Pressures on water abstraction and waste water treatment as a result of development and growth around the plan area and potential impacts on **water quality** (particularly in relation to water dependant SACs).
- ◆ Potential for significant increased traffic generation and associated **air pollution issues** as a result of population growth around and between major existing settlements and major road building programmes.
- ◆ Demand for new infrastructure associated with population growth leading to issues of **land take, contamination, increased green house gas emissions** from buildings.
- ◆ Direct and Indirect impacts from new/increased/ displaced **recreational pressures** as a result of new developments particularly around Heads of Valleys regeneration area.
- ◆ Temporal emissions, **disturbance and pollutant impacts** associated with construction/ development operations – particularly in areas experiencing high level of regeneration inputs.

2.24 The screening assessment noted, however, that in relation to the SACs being considered in the pre-screening and main screening exercise (Task 4), it is typically localised impacts (arising from development in close proximity to the SACs) that have been identified as potentially being of most significance. As a result, the future review work to support the ‘in-combination’ element of the AA stage of the HRA will be required to identify and consider more local level plans (and possibly projects) that may influence the nature of the impacts emerging from the Deposit LDP. This may also include positive impacts arising from associated developments.

#### **Task 4: Screening Assessment**

2.25 In line with the screening requirement of the Habitats Regulations, an assessment was undertaken to determine the potential significant effects of the CCBC Deposit LDP on the integrity of the 11 European sites that lie outwith the plan boundaries and the 1 European site (Aberbargoed Grasslands) that lies within CCBC plan boundaries. The screening assessment included a ‘pre-screening’ exercise focused on determining whether the Natura 2000 sites outside the CCBC plan area needed to be the subject of detailed assessment. The pre-screening and the more detailed screening assessment decisions were informed by:

- ◆ The information gathered on the European sites – **Appendix 1**;
- ◆ The review of the Deposit LDP / strategic sites proposals and their likely impacts (**Appendix 2**) ; which included an analysis of the potential environmental impacts generated by the development activities directed by the Deposit LDP and;
- ◆ The review of other relevant plans and programmes – **Appendix 3**
- ◆ WAG 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.

2.25 The pre-screening and main screening findings are summarised in **Section 3**.

**Stage 2: Appropriate Assessment**

2.26 Assessing the impacts of plans, policies and proposals against the Natura 2000 site conservation objectives is required by Regulation 85(B) of the Amended Habitats Regulations 2007. This ‘appropriate assessment’ is the core part of the HRA process and involves the key tasks set out below.

Table 6 HRA Appropriate Assessment Stage - Key Tasks	
HRA Appropriate Assessment Stage 2: Key Tasks	
<b>Task 1</b>  <b>Scoping and Additional Information Gathering</b>	<ul style="list-style-type: none"> <li>• Revisiting screening information to address knowledge/data gaps.</li> <li>• Additional consultation with the Statutory stakeholder CCW to agree method/ approach and EAW as necessary</li> <li>• Development of</li> </ul>
<b>Task 2</b>  <b>AA – Assessing the Impacts</b>	<ul style="list-style-type: none"> <li>• Assessing the impacts identified during the screening process</li> <li>• Considering whether the impacts (including ‘in-combination’) are direct, indirect, cumulative</li> </ul>
<b>Task 3</b>  <b>Considering Mitigation Measures</b>	<ul style="list-style-type: none"> <li>• Remove/ modify potentially damaging elements of plan/ policy framework determined as leading to adverse impacts</li> <li>• Consider range of potential mitigation measures</li> </ul>
<b>Task 4</b>  <b>Concluding the AA – Conclusions and Recommendations</b>	<ul style="list-style-type: none"> <li>• Set out AA conclusions</li> <li>• Record recommendations including mitigation measures as appropriate</li> </ul>

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**Task 1: Scoping and Additional Information Gathering**

- 2.27 To inform the AA of the Aberbargoed Grasslands SAC additional information was gathered. This scoping exercise focused on understanding the conditions at the site, including the environmental conditions that support the integrity of the sites and the vulnerabilities of the designated habitats. Consideration was also given to any additional plans or projects that may be relevant in terms of 'in-combination' impacts. This stage also involved consultation and liaison with the County Ecologist, alongside additional research from JNCC and NE sources and published data sources<sup>10</sup>.
- 2.28 AA requires that assessment is made against site conservation objectives and interest features as outlines at Appendix 1. However, the meeting site conservation objectives is largely determined by site integrity. Integrity describes a set of conditions that maintain ecological structure and function in order that the habitats, or the complex habitats/ species (for which the site is designated) can be sustained. Additional information was, therefore, also sought in order to understand which factors help to support and improve the condition of the site and which factors may detract from the achievement of the conservation objectives.

**Task 2: AA- Assessing the Impacts**

- 2.29 The impact assessment element of the AA took forward the initial work on the assessment of likely significant effects completed at the Screening stage. The assessment focused on whether the key effects arising from the plan identified through screening (urbanisation/ recreation issues, land take [habitat loss/ fragmentation], water resources & water quality, and atmospheric pollution) could, when subject to closer scrutiny, be considered to result in significant effects at the site.
- 2.30 Specifically the assessment followed a number of key stages: reviewing the issues arising from the plan; considering how the site may be affected (including in relation to existing environmental trends); examining whether other plans may have 'in-combination' effects; and recording the key outcomes of the assessment.

**Task 3: Considering Mitigation Measures**

- 2.31 As part of the assessment the AA also considered how best to avoid or mitigate those impacts that may be significant in the short, medium or longer term. This is a key part of the AA process and feeds into the notion of iterative plan making where policies can be reviewed and robust safeguards put in place. The overarching rationale driving AA at a strategic level is that plans and policies are revised to both avoid impacts and afford protection to Natura 2000 sites. This means that the plan-making authority must be confident that the mitigation will work in order to be able to conclude that, when it is taken into account, there will be no adverse effect on the integrity of the European site.
- 2.32 Whilst theoretically sound, the ability of policy makers to mitigate effectively at policy level is complicated by formal planning direction that advises the avoidance of

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<sup>10</sup> Key Information Sources:

Joint Nature Conservation Committee (JNCC) web resource [www.jncc.gov.uk](http://www.jncc.gov.uk) including site details/ character contained on Natura 2000 Standard Data Form.

Conservation Objectives, management plan information, CCW web resource [www.ccw.gov.uk](http://www.ccw.gov.uk)

policies which duplicate extant legislative protection. In practice, plans and policies need to complement statutory safeguards whilst also noting the role of mitigation measures for lower level planning conditions and operational practice.

**Task 4: Concluding the AA – Conclusions and Recommendations**

- 3.25 This task recorded the AA decision in the light of the assessment of impacts and the recommendations for mitigation measures. The assessment and the conclusions are set out in **Section 4** of the report.

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### 3.0 SCREENING FINDINGS

- 3.1 Taking into account the identified sensitivities of the 11 sites outside the plan area, and the likely impacts arising from the Deposit LDP (Task 2), a pre-screening exercise was undertaken to determine which of the sites situated outside the plan boundaries needed to be considered as part of the more detailed screening assessment. The results of this analysis are presented in detail in **Appendix 4**, with the conclusions summarised below.

#### **Pre-Screening Assessment Summary**

- 3.2 The pre-screening assessment concluded that European sites which lie entirely outside the County Borough Area including the adjacent Cardiff Beech Woods, are unlikely to be significantly affected by the proposals outlined in the Deposit LDP. The analysis noted that in the absence of direct effects, in-combination effects with other plans are not likely to be significant at the sites considered in the light of the evidence presented (**Appendix 4**). As a result, the European Sites pre-screened in the search area around CCBC do not need to be considered further in the screening assessment and the more detailed screening assessment should focus on the 1 European Site (Aberbargoed Grasslands SAC).

#### **Screening Assessment Summary**

- 3.3 The detail of the main screening on the remaining SAC is also set out at **Appendix 4** and the result of the assessment is summarised in the paragraphs below and at **Table 5**.
- 3.4 Aberbargoed Grasslands SAC lies to the north east of the settlement of Aberbargoed and to the east of the principal town of Bargoed. The SAC is directly adjacent to planned development for housing, employment facilities, community facilities and proposed (new) road improvements. A series of socio-economic drivers (policy/ strategy) and physical constraints (such as topography) are directing the spatial plans for this area.
- 3.5 The policy screening work (Task 2) highlighted a number of potential impacts arising from the nature and extent of the development proposed near the Aberbargoed Grasslands SAC, which may be significant when considered against the stated conservation objectives for the site. Key issues include: urbanisation & recreational impacts; land take; water resource and water quality; and atmospheric pollution.
- 3.6 The potential for other plans and programmes to generate impacts that could affect the Aberbargoed Grasslands SAC was reviewed (Task 3) and the assessment considered how these impacts may interact with the impact arising from CCBC's Deposit LDP. The most significant potential 'in-combination' impact identified is air pollution arising from the cumulative effects of development (housing, infrastructure, major transport routes) in the region. Significantly, however, the review of plans and the assessment noted that measures to develop sustainable transport solutions and reduce the impacts of road based traffic in the region may provide strong mitigation for some of the impacts identified. Recent rulings on HRA indicate that

mitigation measures can be considered as part of HRA/AA and these issues will be considered further in the next AA phase of the HRA.<sup>11</sup>

<b>Table 7 HRA Screening Table Summary</b>			
<b>European Sites within Caerphilly County Borough Council plan boundaries</b>	<b>Designation</b>	<b>AA required alone?</b> × No ✓ Yes ? Uncertain	<b>AA required in combination?</b> × No ✓ Yes ? Uncertain
Aberbargoed Grasslands	SAC	✓	?

<sup>11</sup> England and Wales High Court (Administrative Court) Decisions. Hart District Council, R (on the application of) v Secretary of State for Communities and Local Government & Ors [2008] EWHC 1204(Admin) (01 May 2008).  
<http://www.bailii.org/ew/cases/EWHC/Admin/2008/1204.html>

## 4.0 APPROPRIATE ASSESSMENT ANALYSIS & FINDINGS

- 4.1 The policy screening work and the review of plans and programmes ‘in-combination’ undertaken at the Screening Stage 1 identified four main areas of impact arising that may have a significant effect on the Aberbargoed Grasslands SAC: habitat loss/ fragmentation; urbanisation/ recreational impacts; water resources & quality; and air pollution. These issues are investigated further below.

### Habitat Loss/ Fragmentation

#### *What are the issues arising from the plan?*

- 4.2 The HRA Screening [Stage 1] noted the potential for a number of the Deposit LDP strategic policies (SP1, SP2, SP4, SP16) and the lower level policies that give spatial definition to the strategic intent (HG1.16-1.22, EM2, CF1, TR7) to have an effect on the Aberbargoed Grasslands SAC. These policies are seeking to deliver new housing, employment land, community facilities and improved road access in the area adjacent to and in the immediate vicinity of the SAC. None of the proposed allocations will result in direct loss of habitat from the existing designation. However, development will occur on neighbouring brownfield and Greenfield sites.

#### *How might the site be affected?*

- 4.3 The SAC is designated for the marsh fritillary butterfly and for its Molina meadows habitats (on which the marsh fritillary is dependant). The stated conservation objectives are to ensure that the features are in favourable conservation status subject to a series of conditions (Appendix 1). A crucial element of maintaining favourable condition for the marsh fritillary is ensuring that there is sufficient habitat both within the designated area and within a suitable range of the largest (metapopulation), approx 1-2 km. Studies have shown that there are pockets of suitable habitat within a 2km radius of the grasslands and that these areas have the potential to act as suitable ‘stepping stones’ in supporting the strongest (core) populations at the grasslands.<sup>12</sup> Maintaining suitable ‘buffer’ habitats for the marsh fritillary is a key part of the conservation objectives’ attempts to reverse the current unfavourable condition status of the Molina meadows and the dependant butterflies. Development that undermines areas identified as containing suitable habitat, therefore, has the potential to adversely affect achievement of the conservation objectives.
- 4.4 A comparison of the areas identified as containing suitable habitat around the SAC<sup>13</sup> with the areas allocated for employment, housing and leisure and transport by the Deposit LDP shows that the areas identified as supporting the designated habitats and species will not be impacted by the proposed development.

#### *What other plans/ projects could lead to in-combination effects?*

- 4.5 None of the plans considered as part of the in-combination assessment (**Appendix 3**) propose development that will lead directly to habitat loss or fragmentation in the immediate vicinity of the SAC, including the functional landscape area. There are also currently no major projects occurring at a local level that will result in significant land take in the area. The Bargoed Bypass is nearing completion and survey work

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<sup>12</sup> Smith RG.- see references.

<sup>13</sup> Ibid.

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did not identify suitable habitat near this road. Any future developments at the adjacent Aberbargoed 'new tip' will need to take the SAC designation and adjacent stepping stone habitat into account.

**Assessment**

- 4.6 The analysis shows that there will be no direct loss of habitat in areas adjacent to the SAC which have been identified as playing a role in maintaining the overall integrity of the site and its designations. There are currently no regional or local level plans or projects that may act in-combination at this site. The AA indicates that there will not be habitat loss or fragmentation arising as a result of the plan leading to significant effects at the Aberbargoed Grasslands SAC.

**Recommendations for avoidance and mitigation**

- 4.7 Whilst the current Deposit LDP proposals will not result in significant effects at this SAC, all future developments should be aware of the findings of the survey of functional landscape for the marsh fritillary butterfly and ensure that suitable habitats (outside the core designated area) are protected and where possible appropriately managed to provide support for the metapopulation.

**Urbanisation/ Recreational Impacts**

**What are the issues arising from the plan?**

- 4.8 Policies for the Heads of the Valleys Regeneration Area (HG1.16-1.22, EM2, CF1, TR7) direct housing, employment and leisure facilities in allocations that lie in the near vicinity of the SAC. The total housing allocation proposed by the Deposit LDP for the area around the SAC is approximately 687 units over the life of the plan with the largest allocations concentrated to the north beyond Aberbargoed 'new tip' at Bedwelty (Bedwelty Road 180 units) and to the east adjacent to the Country Park leisure site (Aberbargoed Plateau 413 units) the Aberbargoed Hospital site and Bedwelty School site have 20 and 74 dwelling allocations respectively. The combined development supports the regeneration aims of the Deposit LDP which includes redevelopment of the adjacent principal town Bargoed (population approx 14,000).
- 4.9 The screening identified a range of issues that may arise from urbanisation and the increased recreational pressures that can result from a growing population. Physical damage can occur through trampling and erosion, from pedestrians, cyclists and the illegal off-road use of motor vehicles. Other damaging activities or 'urban effects' that can be associated with population increases include rubbish tipping, vandalism and arson/ burning and predation by cats.

**How might the site be affected?**

- 4.10 Recent studies of the SAC (Aberbargoed SAC Study, 2003) and the CCW Core Management Plan (March 2008) identify that 'urban effects' in particular illegal off-roading, tipping and arson have, in the past resulted in detrimental impacts on the habitat and dependant species. The current unfavourable condition assessments can in part be attributed to these impacts.



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- 4.11 However, in 2005 CCBC took over management of the site and a site manager is now responsible for implementing management measures (e.g. clearance of scrub and bracken to open up flight paths, the introduction of fencing to prevent unauthorised access to sensitive areas) which has improved the quality of the habitat and has had the additional benefits of substantially reducing incidents of arson, fly tipping and off-roading.
- 4.12 Key to the improvement of the habitat has been the introduction of stock manager implementing a controlled grazing regime with Welsh Black and belted Galloway cattle and a Limousine bull in stock proof areas. The presence of the cattle has also contributed to the reduction in antisocial behaviour (CCW, 2008). In addition to these core management measures, educational projects (including proposals for a classroom facility to the east of the site) are underway with the aim of informing the local community about the value of the site and encouraging responsible use. The current Core Management Plan (CCW, 2008) notes that, whilst the condition of the designated habitats & species is currently unfavourable, the suite of management measures are beginning to reverse the decline in site condition.
- 4.13 The Screening indicated the potential for 'urban effects' as a result of population growth. The evidence on site shows that the management measure introduced following the SAC study in 2003 have been effective in controlling these negative impacts and it is assessed that they will continue to operate effectively. There is no evidence that recreational use of the site by walkers and dog walkers is currently leading to significant effects and that it is likely to in the future. There are several rights of way across the site and 'desire lines' that are regularly used by the local population without detrimental impacts. Whilst some increase in recreational pressure can be expected, the housing allocation to the east benefits from being situated directly adjacent to the County Park and the allocation to the north is also adjacent to greenspace areas that include rights of way that will serve to mitigate potential increases.

***What other plans/ projects could lead to in-combination effects?***

- 4.14 The review of plans and project has not identified any additional proposals beyond those set out in the Deposit LDP that are likely to increase recreational pressures or 'urban effects' at this site. There are a number of leisure and tourism based developments occurring in the wider region, in particular the Valleys Regional Park, which is seeking to encourage walking, cycling, horse riding and mountain biking in the suitable areas for the local population and tourism. There is significant potential for positive impacts in the longer term at the Aberbargoed Grasslands SAC where viable and accessible alternative recreational space is provided.

***Assessment***

- 4.15 The analysis indicates that 'urban effects' have in the recent past been a key issue at this site, however the introduction of management regimes has halted these detrimental impacts and this ongoing work is assessed as sufficient to address the issues at this site in the context of a changing population. Recreational pressures are not considered significant at this site and presence of easily accessible alternative recreational greenspace close to the proposed new housing areas and plans for additional recreational facilities in the region, provides strong mitigation for an increasing population.

***Recommendations for avoidance and mitigation***

- 4.16 The use of recreational space by local populations is typically driven by accessibility and convenience. There is a role for the Deposit LDP to ensure that open and green spaces are integral to all new development, as outlined in the Development Strategy and set out in SP7 Planning Obligations. There is also a role for the site level management measures to ensure that footpaths and walkways are clearly signed/delineated to discourage recreational users from encroaching on sensitive habitat areas. The development of an educational centre and ongoing outreach activities with the local community, also provide strong mitigation.

**Water Resources & Water Quality*****What are the issues arising from the plan?***

- 4.16 The HRA Screening [Stage 1] noted the potential for the lower level policies (HG1.16-1.22, EM2, CF1, TR7) that direct housing and employment development around the Aberbargoed Grasslands SAC to have an effect on water resources and quality in the area. In particular new housing and employment/ industry increases water demands (abstraction for public water supply) and the requirement for waste water treatment.

***How might the site be affected?***

- 4.17 The SAC is situated on the plateau above the river valley and the site is characterised by marshy/ boggy ground with some small ponds. These conditions support the Molina meadows which is a qualifying feature of the site (although not its primary reason for designation). Any changes to the water regime, for example, abstraction from the water bodies and/or boreholes, or modification of the current drainage regime; has the potential to significantly effect this water dependant habitat.
- 4.18 The plan proposals lie within the Rhymney catchment and the EA notes the quality of the river and its tributaries to be 'good'. The large majority of the authorised abstraction from surface waters (51% of licensed abstractions) serves the public water supply. Water requirements within the CB are also supplied by the River Taff, with a small fraction (1%) being sourced from the Llandegfedd Reservoir for which the River Usk is a source. The Environment Agency Wales' abstraction licensing system safeguards the water resource needs of protected areas and priority habitats. An environmental assessment is made of any license application and all existing licenses and new licenses that could impact on a Natura 2000 site are subject to a review against the site's interest features (HRA).
- 4.19 The grasslands lie with Water Resource Management Unit 3 of the Rhymney Catchment Management Strategy (CAMs). There are 36 licenses within the unit comprising ground and surface water abstraction. The EA notes that based on current knowledge these licences do not cause environmental impacts. The unit has an environmental weighting, low flow sensitivity to abstraction score of B (where A is the most ecologically sensitive to abstraction and E the least sensitive). The unit has a resource availability status of 'Water Available' indicating that new development can be adequately accommodated. As noted, the EAW are required

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to take into account the environmental sensitivities of the Grassland before granting new licences.

- 4.20 Consented discharges for this area are treated by Welsh Water and not returned within the catchment, removing the likelihood of negative impacts from waste water discharge.

***What other plans/ projects could lead to in-combination effects?***

- 4.21 The review of plans and programmes did not identify any proposals that may adversely affect the water regime on which the interest features at this site are dependant. The likelihood of impacts arising from smaller/local level activities is low given the management regime at the site and the presence of a Ranger.

***Assessment***

- 4.22 Water resources and pollution issues are regulated by the EAW and subject to strict conditions which include HRA processes where the potential for impacts on the SAC are identified. The EAW has not identified the potential for water shortages or negative impacts on the hydrological regime as a result of new development in this area, which indicates that there is unlikely to be a significant effect on the SAC.

***Recommendations for avoidance and mitigation***

- 4.23 Whilst water availability and treatment capacity has not been identified as a constraint that may affect this site, it is clear that water resources are a key sustainability issue, particularly in the context of population growth and climate change. It is therefore pertinent for the plan to seek to deliver sustainable design in all new development and to supplement the Sustainable Design CW1 with the requirement for the Code for Sustainable Homes where this is more applicable than the BREEAM standard. Sustainable Drainage Systems (SuDs) should also be actively encouraged where appropriate as part of housing, employment and infrastructure developments to ensure that local hydrological regimes are not negatively impacted. The Council may wish to seek water neutral developments, which means combining strong water efficiency measures with measures to reduce water consumption.

**Air Pollution**

***What are the issues arising from the plan?***

- 4.24 The Deposit LDP strategic policies (SP1, SP2, SP4, SP16) and the lower level policies that give spatial definition to the strategic intent (HG1.16-1.22, EM2, CF1, TR7) will result in growth in housing, employment provision and road building which are sources of air pollution. Oxides of Nitrogen (NO<sub>x</sub>) Ammonia (NH<sub>3</sub>), dust and Sulphur Dioxide (SO<sub>2</sub>) and low level ozone (O<sub>3</sub>) are the anthropogenic air pollutants that have the most potential to have adverse effects on ecological resources.
- 4.25 The most relevant pollutants for the level of development being proposed by the plan are NO<sub>x</sub> gases which mainly arise from road and transport sources and public power generation, with industrial combustion and domestic & commercial uses also implicated. The most acute impacts of NO<sub>x</sub> take place close to where they are

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emitted (generally within 200m of the roadside) but also have the potential to contribute to background pollution levels.

***How might the site be affected?***

- 4.26 Characterisation of the SAC (**Appendix 1**) shows that the main vulnerabilities at this site relate to the previous 'urban effects' discussed above and the presence of parasitic wasp that can threaten the butterfly population. The recently implemented grazing regime is also a key element in maintaining the site integrity. The CCW Conservation Management Plan, the Joint Nature Conservation Committee habitat information sheets do not identify atmospheric pollution as an issue at this site.
- 4.27 The eutrophication of sensitive habitats from atmospheric deposition is a recognised impact, however, the Air Pollution Information System (APIS) does not identify nitrogen deposition as exceeding critical loads at this site.<sup>14</sup> There are also currently no air quality management areas (AQMA) in the CCBC area although an AQMA is being declared for Caerphilly in the south of the CB in Sept 2008. However, overall data suggests that the trend for NO<sub>x</sub> gases is improving across the County Borough (UK Air Quality Archive). Importantly this site is also subject to local nutrients (direct fertilisation from grazing) and the grazing itself may counteract the effects of air borne sources of eutrophication (through the removal of vegetation). Given the improvements to the site following the introduction of a managed grazing regime, the evidence indicates that these actions are currently of greater significant to the maintenance of site integrity than the impacts air borne pollutants. Although this situation may change over time and air quality issues should be considered as part of any monitoring regime.

***What other plans/ projects could lead to in-combination effects?***

- 4.28 All the neighbouring LDPs in the Heads of the Valleys area (Merthyr, Torfaen, Rhondda Cynon Taff, Blaenau Gwent) are proposing regeneration and new housing and economic development in line with the Wales Spatial Plan and the Heads of the Valleys strategy 'Turning Heads'. The cumulative effect of this development includes the potential for rising air pollution as a result of increased traffic movements, domestic and commercial uses and the associated power generation needs. The HRA screening reports for the Torfaen and Cardiff LDPs both note the potential for air pollution to act 'in-combination' at the Grasslands. As noted above the pollutants of most concern are nitrogen oxides the impacts of which are most relevant to close to source. Therefore, the contributions of NO<sub>x</sub> beyond the areas where development is located is likely to be negligible and is not assessed as leading to significant cumulative/ in-combination effects at this site. There remains an issue of the contributions of development to wider background/ diffuse pollution levels, which can only be addressed at a region-wide level.
- 4.29 The Bargoed Bypass, which will be open in full during the life of the plan has the potential to increase traffic movements in the area. The road lies in the valley below the SAC, and the Grasslands are at a significant distance (greater than 200m) beyond the roadside where most NO<sub>x</sub> pollution is deposited. This project should not lead to effects 'in-combination' with the proposed new development. The Bedwellty Road scheme has the potential to increase traffic near to the SAC and

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<sup>14</sup> APIS (3 year average 2003-2005) The critical load is based on the dominant soil type in the 1km square in which the European site occurs

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whilst the distance is sufficient to mitigate direct effects, and the road should not result in increased traffic volumes sufficient to generate significant 'in-combination' impacts, this situation should be kept under review as part of the overall monitoring strategy.

**Assessment**

- 4.30 Air pollution, in particular from NO<sub>x</sub> gases, is a key concern where traffic increases are likely in association with housing allocations and the development of commercial and leisure facilities. The evidence indicates that the integrity of the Aberbargoed Grasslands SAC will not be significantly affected by the localised growth proposed. This is largely due to the fact that current environmental trends have not identified air pollution as a concern at the SAC and the grazing management regime is observed (at the time of assessment) to be the critical determinant in maintaining habitat viability [this includes the ability of the grazing regime to counter some of the effects of increased nitrogen deposition]. The plan is therefore unlikely to have a significant effect on the SAC either alone or in-combination with other plans and projects.

**Recommendations for avoidance and mitigation**

- 4.31 Whilst the proposed developments, including the Bedwelty Road (policy TR 7) are in close proximity to the SAC, the Deposit LDP includes strong sustainable transport policies to mitigate the potential for increased traffic (SP6 Place Making, SP7 Planning Obligations) as well as clear commitments to implement WAG aspirations for zero carbon dwellings by 2011 (CW1 Sustainable Design) and the delivery of renewable energy (SP10 Renewable Energy). It is recommended that the CCBC place strong emphasis on the delivery of these core policies in particular in relation to the development proximal to the SAC, to ensure that existing good air quality is maintained and improved. The potential for the road schemes to generate in-combination effects in the future should be subject to monitoring as part of the plan implementation.

**Recommendations for the CCBC Local Development Plan**

- 4.32 The AA process has highlighted a number of recommendations for the plan, that typically involve emphasising or reinforcing stated policy commitments in the context of the local level development in proximity to the Aberbargoed Grasslands SAC. The key recommendations are summarised in **Table 6** below

<b>Table 8HRA Recommendations: Summary</b>	
<b>Impact</b>	<b>Recommendation</b>
<b>Habitat loss/ fragmentation</b>	<ul style="list-style-type: none"> <li>• Protect marsh fritillary functional landscape from development and inappropriate management practices</li> </ul>
<b>Urbanisation/ recreation</b>	<ul style="list-style-type: none"> <li>• Ensure planning obligations deliver green space and recreational facilities</li> <li>• Enforce site level rights of way management and support education resource and community outreach</li> </ul>
<b>Water resources &amp; quality</b>	<ul style="list-style-type: none"> <li>• Require Code for Sustainable Homes where appropriate</li> <li>• Sustainable Drainage Systems actively encouraged where appropriate</li> <li>• Seek 'water neutral' development</li> </ul>
<b>Air pollution</b>	<ul style="list-style-type: none"> <li>• Enforce sustainable building standards and sustainable transport commitments</li> </ul>

## 5.0 CONCLUSIONS, FUTURE WORK

- 5.1 This report outlines the methods used and the findings arising from the Screening and Appropriate Assessment stages of the Habitats Regulations Assessment undertaken for the Caerphilly County Borough Council Local Development Plan Deposit Draft.
- 5.2 The HRA considered 1 European Site within CCBC's plan boundaries and 11 European sites within a 15km search area around the Authority's boundaries. Of the 12 European sites considered in total, the 11 lying outside the plan boundaries were screened out of the detailed assessment based on an analysis of the likely impacts of the plan and the known sensitivities of the sites. This approach is in accordance with advice received from CCW; and this report provides the audit trail for the analysis applied.
- 5.3 The findings of the screening process suggested the potential for significant effects at the one European Site within the plan area boundary; the Aberbargoed Grasslands SAC. These effects are considered to arise both from the plan itself (in relation to specific, identified policies) and possibly as a result of 'in-combination' effects from other plans and programmes being developed and implemented simultaneously in the area.
- 5.4 Based on the information gathered for the screening process and considering the Habitats Regulations requirements for a precautionary approach, further Appropriate Assessment was undertaken for the Aberbargoed Grasslands SAC in relation to identified impact areas.
- 5.5 The Appropriate Assessment concluded that impacts predicted to arise from the implementation of the plan when considered in-combination with the potential impacts from other surrounding plans and projects, would not significantly affect the integrity of the SAC. This assessment was informed by an analysis of key conditions supporting the site's integrity, existing environmental trend data, the assessed impacts of surrounding plans & projects and the effectiveness of the management regime at the site itself. The assessment also took into account the nature and range of policies included in the Deposit LDP that will act to mitigate identified impacts arising from the implementation of development.<sup>15</sup>
- 5.6 The finding of no significant effect for the Aberbargoed Grasslands SAC in relation to CCBC's Deposit LDP does not obviate the need for lower level, project scale/ implementation plans to undertake HRA/AA where it is considered there is potential for significant effect on the SAC. The findings of this HRA/AA, including the site analysis and the assessment of in-combination effects, should support future assessment work.

### Monitoring and Review

- 5.7 Monitoring is a central requirement of the new planning system and monitoring for biodiversity is an integral part of WAG Environment Strategy (2006) and wider UK

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<sup>15</sup> Hart District Council Vs Secretary of State for Communities and Local Government (May 2008); Planning (25th July, 2008) Mitigation Plan Counts on Appropriate Assessment.

biodiversity targets. Natura 2000 sites are, by definition, the key biodiversity resource within the plan area and monitoring should be employed in support to ensure that the core designation is supported. The SA/SEA of the Deposit LDP sets out suggested indicators for biodiversity monitoring and it is appropriate that monitoring for HRA is aligned with the SA/SEA requirement and linked to Annual Monitoring Reports as appropriate. Recommendations for additional HRA indicators are set out below in **Table 7**.

<b>Table 7 Habitats Regulations Assessment: Targets and Indicators</b>		
<b>Objective</b>	<b>Target</b>	<b>Indicator</b>
To enhance the biodiversity of the County Borough	Achieve favourable condition of internationally, nationally and locally important biodiversity sites	Change in area (ha) of habitat that contributes towards international, national and local BAP habitat and species targets

- 5.8 This HRA report is presented alongside the Deposit LDP as part of the evidence base for examination where it serves to provide a record of how the plan is consistent with Welsh Assembly and wider UK government/EU policy on biodiversity protection. The assessment should be revisited in the light of any significant changes to the plan.



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## Appendix 1 Natura 2000 Site Information Proforma

### Special Areas of Conservation

Site Name: Aberbargoed Grasslands Location Grid Ref: ST163992 JNCC Site Code: <a href="#">UK0030071</a> Size: 39.78 Designation: SAC	Habitats Regulations Assessment: Data Proforma
<b>Site Description</b>	<p>Aberbargoed Grasslands covers an area of 42.5ha and lies on a southwest facing hillside in the Rhymney Valley, 1km east of Bargoed and adjacent to the A4049. A large and relatively isolated population of marsh fritillary butterfly (<i>Euphydryas aurinia</i>) is present on a series of damp pastures and heaths in Gwent, representing the species on the eastern edge of its range in Wales.</p> <p>The fields in the south and west of Aberbargoed Grasslands have impeded drainage and contain a mixture of marshy grassland communities. Areas of particular interest are characterised by abundant purple moor grass <i>Molinia caerulea</i> and meadow thistle <i>Cirsium dissectum</i> with devil's bit scabious <i>Succisa pratensis</i> and carnation sedge <i>Carex panicea</i>. Other species such as saw-wort <i>Serratula tinctoria</i> and lousewort <i>Pedicularis sylvatica</i> occur frequently in heavily flushed areas. Associated stands of <i>Molinia caerulea</i> – <i>Potentilla erecta</i> mire contain abundant purple moor grass with tormentil <i>Potentilla erecta</i>, mat grass <i>Nardus stricta</i>, common sedge <i>Carex nigra</i> and spotted orchid <i>Dactylorhiza maculata</i>. Small stands of rush pasture are scattered across the site, with soft rush <i>Juncus effuses</i>, greater bird's foot trefoil <i>Lotus uliginosus</i> and marsh bedstraw <i>Galium palustre</i>.</p>
<b>Qualifying Features</b>	<p>Annex I Habitats qualifying feature:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>)</a></li> </ul> <p>Annex II Species primary reason for selection:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Marsh fritillary butterfly</a> <i>Euphydryas</i> (<i>Eurodryas</i>, <i>Hypodryas</i>) <i>aurinia</i></li> </ul>

Site Name: Aberbargoed Grasslands Location Grid Ref: ST163992 JNCC Site Code: <a href="#">UK0030071</a> Size: 39.78 Designation: SAC	Habitats Regulations Assessment: Data Proforma
<b>Conservation Objectives</b>	<p><b>Conservation Objective for Feature 1:</b>  <b>Marsh fritillary Butterfly <i>Euphydryas (Eurodryas, Hypodryas) aurinia</i></b></p> <p>The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ The site will support a sustainable metapopulation of the marsh fritillary in the Aberbargoed area. This will require at least 50ha of suitable habitat, although not all of this will be within the SAC</li> <li>▪ The population will be viable in the long term, acknowledging the extreme population fluctuations of the species.</li> <li>▪ Habitats on the site will be in optimal condition to support the metapopulation.</li> <li>▪ At least 25ha of the total site area will be marshy grassland suitable for supporting marsh fritillary, with <i>Succisa pratensis</i> present and only a low cover of scrub.</li> <li>▪ At least 6.25ha will be good marsh fritillary breeding habitat, 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.</li> <li>▪ All factors affecting the achievement of the foregoing conditions are under control.</li> </ul> <p><b>Conservation Objective for Feature 2:</b>  <b><i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)</b></p> <p>Vision for feature 2</p> <p>The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ <i>eu-Molinion</i> marshy grassland will occupy at least 70% of the total site area.</li> <li>▪ The remainder of the site will be other semi-natural habitat or areas of permanent pasture.</li> <li>▪ The following plants will be common in the <i>eu-Molinion</i> marshy grassland: purple moor-grass <i>Molinia</i></li> </ul>

Site Name: Aberbargoed Grasslands Location Grid Ref: ST163992 JNCC Site Code: <a href="#">UK0030071</a> Size: 39.78 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p><i>caerulea</i>; meadow thistle <i>Cirsium dissectum</i>; devil's bit scabious <i>Succisa pratensis</i>; carnation sedge <i>Carex panicea</i>; saw wort <i>Serratula tinctoria</i>; and lousewort <i>Pedicularis sylvestris</i>.</p> <ul style="list-style-type: none"> <li>▪ Cross-leaved heath <i>Erica tetralix</i> and common heather <i>Calluna vulgaris</i> will also be common in some areas.</li> <li>▪ Rushes 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 <i>eu-Molinion</i> marshy grassland.</li> <li>▪ Scrub species such as willow <i>Salix</i> and birch <i>Betula</i> will also be largely absent from the <i>eu-Molinion</i> marshy grassland.</li> <li>▪ All factors affecting the achievement of these conditions are under control.</li> </ul> <p>Performance indicators for Feature 1</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Aberbargoed Grasslands Management Plan</a>.</p>
<b>Component SSSIs</b>	<ul style="list-style-type: none"> <li>▪ Aberbargoed Grasslands SSSI</li> </ul> <p>The site has been divided into 2 management units of which unit 1 forms the Aberbargoed Grasslands SAC. A map of the management units can be viewed on the <a href="#">CCW website</a>.</p>
<b>Key Environmental Conditions (factors that maintain site integrity)</b>	<p>The Marsh fritillary butterfly is dependent on the Molinia meadows and wet heath.</p> <ul style="list-style-type: none"> <li>▪ <b>Livestock grazing</b> - The <i>eu-Molinion</i> marshy grassland needs to be maintained through traditional farming practices. Without an appropriate grazing regime, the grassland will continue to become rank and eventually turn to scrub and woodland. Light grazing by cattle and ponies between April and November each year is essential in maintaining the marshy grassland communities.</li> </ul>

Site Name: Aberbargoed Grasslands Location Grid Ref: ST163992 JNCC Site Code: <a href="#">UK0030071</a> Size: 39.78 Designation: SAC	Habitats Regulations Assessment: Data Proforma
<b>SAC Condition Assessment</b>	<p><b>Conservation Status of Feature 1:</b>  <b>Marsh fritillary butterfly <i>Euphydryas (Eurodryas, Hypodryas) aurinia</i></b></p> <p>The Marsh Fritillary feature at Aberbargoed Grasslands SAC is considered to be in <b>unfavourable</b> condition and conservation status (October 2003).</p> <p>Web counts have in recent years been very low, but the species naturally undergoes significant fluctuations in population numbers due to a variety of factors, including cold and wet weather conditions and parasitic attack.</p> <p><b>Conservation Status of Feature 2:</b>  <b>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)</b></p> <p>The SAC report dated October 2003 states that the site is considered to be <b>Unfavourable</b> condition and conservation status. This is because the habitat is not in suitable condition for the marsh fritillary. In areas of the site the vegetation is too tall, is dominated by Molinia and does not have sufficient <i>Succisa</i>. There is only 2.3ha of good condition habitat and 9.7ha of suitable habitat within the site.</p>
<b>Vulnerabilities (includes existing pressures and trends)</b>	<p><b>The marsh fritillary butterfly population is under threat from:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Parasites</b> - Parasitic wasps.</li> </ul> <p><b>The Molinia meadows is under threat from:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Anti-social behaviours</b> - In previous years anti-social behaviour such as off-roading and burning have occurred at Aberbargoed grasslands. This issues need to be addressed to prevent the <i>eu-Molinion</i> habitat from being damaged.</li> </ul>

<b>Site Name: Aberbargoed Grasslands</b> <b>Location Grid Ref: ST163992</b> <b>JNCC Site Code: <a href="#">UK0030071</a></b> <b>Size: 39.78</b> <b>Designation: SAC</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
	<p>CCW states that work has progressed well on the site in the past few years; the site is now stock-proof and a mixture of Welsh Black and Belted Galloways graze the land with a Limousin bull. Scrub clearance and bracken control has begun and flight lines have been cut to improve the connectivity for the butterflies. A programme has been set up to educate the local community to understand why this area is important. A newsletter has been created detailing activities on the grassland and difficulties the site is facing. This and the presence of staff and stock onsite seem to have halted the illegal burning and off-roading.</p>
<b>Landowner/ Management Responsibility</b>	<ul style="list-style-type: none"> <li>▪ Caerphilly County Borough Council.</li> </ul>
<b>HRA/AA Studies undertaken that address this site</b>	<p>HRA Screening of the County Council of the City and County of Cardiff Local Development Plan Preferred Strategy Sept 2007.  <a href="http://www.cardiff.gov.uk/ObjView.asp?Object_ID=9788">www.cardiff.gov.uk/ObjView.asp?Object_ID=9788</a></p> <ul style="list-style-type: none"> <li>▪ The Screening concluded that the only potential significant effects from the Cardiff LDP are likely to occur through atmospheric pollution. A detailed evaluation of air pollution impacts to the Aberbargoed Grasslands SAC will be required before the potential risks to the habitats and species can be properly assessed but according to the Site Issues Briefing for this site, issued by CCW, no potential increases in atmospheric pollution should be tolerated.</li> </ul> <p>HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008.  <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf</a></p> <ul style="list-style-type: none"> <li>▪ The screening identified airborne pollution as the most likely mechanism for the Preferred Strategy to have a negative impact on this site. The provision of 7000 new homes in Torfaen alongside 60 ha of employment land will have the effect of increasing airborne pollution. It has been identified that acid deposition at Aberbargoed Grasslands already exceeds the critical load factor. In relation to Strategic Housing Sites the LDP, South Sebastopol, Cwmbran lies approximately 10- 15km to the East of the SAC but is likely to accommodate approximately 1200 dwellings on a previously greenfield site. Therefore although the effect of the LDP is unlikely to be 'significant' precautionary approach will be adopted and the potential effect of</li> </ul>

<b>Site Name: Aberbargoed Grasslands</b> <b>Location Grid Ref: ST163992</b> <b>JNCC Site Code: <a href="#">UK0030071</a></b> <b>Size: 39.78</b> <b>Designation: SAC</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
	the Torfaen LDP should warrant further consideration in the next stage of the AA process.

<b>Site Name: Blaen Cynon</b> <b>Location Grid Ref: SN946066</b> <b>JNCC Site Code: <a href="#">UK0030092</a></b> <b>Size: 66.83</b> <b>Designation: SAC</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
<b>Site Description</b>	<p>This site lies adjacent to a housing estate, approximately 1 km south of the village of Penderyn, at an altitude of 220-265 m. Blaen Cynon contains an extensive complex of damp pastures and heaths supporting the largest metapopulation of marsh fritillary <i>Euphydryas aurinia</i> on the southern edge of the Brecon Beacons National Park. The marsh fritillary butterfly <i>Euphydryas aurinia</i> is found in a range of habitats in which its larval food plant, devil's-bit scabious <i>Succisa pratensis</i>, occurs. Marsh fritillaries are essentially grassland butterflies in the UK, and although populations may occur occasionally on wet heath, bog margins and woodland clearings, most colonies are found in damp acidic or dry calcareous grasslands. Populations of marsh fritillary vary greatly in size from year to year, and, at least in part, this is related to cycles of attack from parasitic wasps. Adults tend to be sedentary and remain in a series of linked metapopulations, forming numerous temporary sub-populations, which frequently die out and recolonise.</p> <p>Blaen Cynon also supports a range of habitats. Marshy grassland, and flush and spring are of particular importance as they provide habitat for the marsh fritillary. Also present are areas of raised bog, species-rich neutral grassland, acid grassland and semi-natural broadleaved woodland.</p>
<b>Qualifying Features</b>	<p>Annex II Species primary reason for selection:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Marsh fritillary butterfly</a> <i>Euphydryas (Eurodryas, Hypodryas) aurinia</i></li> </ul>

Site Name: Blaen Cynon Location Grid Ref: SN946066 JNCC Site Code: <a href="#">UK0030092</a> Size: 66.83 Designation: SAC	Habitats Regulations Assessment: Data Proforma
<b>Conservation Objectives</b>	<p><b>Conservation Objective for Feature 1:</b>  <b>Marsh fritillary butterfly <i>Euphydryas (Eurodryas, Hypodryas) aurinia</i></b></p> <p>Vision for feature 1          The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ The site will contribute towards supporting a sustainable metapopulation of the marsh fritillary in the Penderyn/Hirwaun area. This will require a minimum of 50ha of suitable habitat, of which at least 10ha must be in good condition, although not all is expected to be found within the SAC. Some will be on nearby land within a radius of about 2km.</li> <li>▪ The population will be viable in the long term, acknowledging the extreme population fluctuations of the species.</li> <li>▪ A minimum of 30% of the total site area will be grassland suitable for supporting marsh fritillary. (As the total area of the SAC is 66.62 ha, 30% represents approximately 20 ha.)</li> <li>▪ At least 40% of the suitable habitat (approximately 8 ha) must be in optimal condition for breeding marsh fritillary.</li> <li>▪ 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</li> <li>▪ 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.</li> </ul> <p>Performance indicators for Feature 1</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Blaen Cynon Management Plan</a>.</p>



Site Name: Blaen Cynon Location Grid Ref: SN946066 JNCC Site Code: <a href="#">UK0030092</a> Size: 66.83 Designation: SAC	Habitats Regulations Assessment: Data Proforma
<b>Component SSSIs</b>	<ul style="list-style-type: none"> <li>■ Cors Bryn-y-Gaer</li> <li>■ Woodland Park and Pontpren</li> </ul> <p>The SAC is composed of 13 management units with Cors Bryn-y-Gaer containing units 1 to 6 and Woodland Park and Pontpren containing units 7 to 13. A map of the management units can be viewed on the <a href="#">CCW website</a>.</p>
<b>Key Environmental Conditions (factors that maintain site integrity)</b>	<ul style="list-style-type: none"> <li>■ <b>Grazing</b> - Without an appropriate grazing regime, the grassland will become rank and eventually turn to scrub and woodland. Conversely, overgrazing, or grazing by inappropriate stock (particularly sheep) will also lead to unwanted changes in species composition, through selective grazing, increased nutrient inputs and poaching. Balancing grazing is the single most important issue in the management of this site.</li> <li>■ <b>Extent and quality of the marshy grassland</b> as habitat for marsh fritillary. Approximately 50ha of habitat is required to maintain the population in the long-term, with at least 10ha in good condition. Not all is expected to be within the SAC. The operational limits reflect the minimum contribution of the Blaen Cynon SAC towards the favourable conservation status of the species in the Hirwaun/Penderyn area.</li> </ul> <p>Operational Limits:</p> <p>20 hectares of Available marshy grassland, including:</p> <p>8 hectares of Good Condition marsh fritillary habitat Within Areas 1, 2, 3 and 4 50% of the vegetation meets the following criteria:</p> <p>Within a 50cm radius:  <i>Molinia</i> is present.          AND          The cover of <i>Succisa</i> is 10% or greater.</p>

Site Name: Blaen Cynon Location Grid Ref: SN946066 JNCC Site Code: <a href="#">UK0030092</a> Size: 66.83 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p>AND The vegetation height is between 10-20cm when measured using a Boorman's disc.</p> <p>AND The cover of <i>Juncus</i> spp. does not exceed 50%.</p> <p>Definition of Good Condition marsh fritillary habitat Grassland, with <i>Molinia</i> abundant where, for at least 80% of sampling points, the vegetation height is within the range of 10 to 20 cm (when measured using a Boorman's disc) and <i>Succisa pratensis</i> is present within a 1 m radius. Scrub (&gt;0.5 metres tall) covers no more than 10% of area</p> <ul style="list-style-type: none"> <li>▪ <b>Maintain population of devil's-bit scabious</b> <i>Succisa pratensis</i> - Marsh Fritillary Butterfly's larval food plant</li> <li>▪ <b>Hydrological Regime</b> - the drainage and hydrological conditions on the site should be maintained to favour the habitats that support the marsh fritillary and their management. Devil's-bit scabious prefers moist soils.</li> <li>▪ <b>Conserve a cluster of sites in close proximity</b> - existing SAC boundary does not take in all areas of suitable habitat in the surrounding area.</li> </ul>
<b>SAC Condition Assessment</b>	<p><b>Conservation Status of Feature 1</b>  <b>Marsh fritillary butterfly</b> <i>Euphydryas (Eurodryas, Hypodryas) aurinia</i></p> <p>Counts of marsh fritillary larval webs have been undertaken regularly since 1999. Numbers of webs have not achieved the levels required by the performance indicators. Monitoring has also concluded that there is insufficient good and available habitat. The assessment for both component SSSIs was that they were in <b>unfavourable</b> condition, and in this case we can give condition information at the unit level.</p> <p>Cors Bryn-y-Gaer SSSI failed due to insufficient good quality marsh fritillary habitat. In addition, counts of marsh fritillary larval webs have not reached the required 200 per hectare of available habitat. Balancing grazing across the site with the right livestock is the key to successful management for this species. It involves using cattle or horses, and avoiding sheep. It also needs the level of grazing right to create the tussocky structure the butterfly requires, whilst avoiding over or under-grazing. Current assessments are:</p>

<p>Site Name: Blaen Cynon Location Grid Ref: SN946066 JNCC Site Code: <a href="#">UK0030092</a> Size: 66.83 Designation: SAC</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>MU1Unfavourable MU2Unfavourable MU3Unfavourable MU4Unfavourable MU5Unfavourable MU6Unfavourable</p> <p>Woodland Park and Pontpren SSSI failed due to insufficient good quality marsh fritillary habitat. In addition, counts of marsh fritillary larval webs have not reached the required 200 per hectare of available habitat. Balancing grazing across the site with the right livestock is the key to successful management for this species. It involves using cattle or horses, and avoiding sheep. It also needs the level of grazing right to create the tussocky structure the butterfly requires, whilst avoiding over or under-grazing. Scrub encroachment is also a factor at this SSSI. Current assessments are:</p> <p>MU1Unfavourable MU2Unfavourable MU3Unfavourable MU4Unfavourable MU5Unfavourable MU6Unfavourable MU7Unfavourable</p>
<p><b>Vulnerabilities (includes existing pressures and trends)</b></p>	<ul style="list-style-type: none"> <li>▪ <b>Scrub encroachment</b> - Scrub encroachment is an issue, particularly on some wet grassland areas. A programme of scrub control is currently (2008) being undertaken, but it is likely that even with the ideal grazing management, a more or less continuous programme of scrub control will be required at this site. It is clear from aerial photographs and from discussions with landowners, that many areas that are currently covered in alder and willow woodland were formerly wet pasture. Therefore a long-term aim would be to investigate returning some of this to wet pasture that would likely increase the availability of marsh fritillary habitat.</li> <li>▪ <b>Grazing</b> - suitable areas of grassland are overgrazed while others are undergrazed;</li> </ul>

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	<ul style="list-style-type: none"> <li>▪ <b>Inappropriate tree planting</b> - Parts of Woodland Park and Pontpren, notably units 3 and 4 have been subject to improvement in preparation for tree planting, including draining, planting with trees and use of fertiliser.</li> <li>▪ <b>Eutrophication</b></li> <li>▪ <b>Reduced air quality</b></li> <li>▪ <b>Parasites</b> - the larvae of marsh fritillaries can be parasitised by species of braconid wasp of the <i>Cotesia</i> genus. The parasites can have good years and infect a large number of larval webs, causing a crash in the subsequent adult population of marsh fritillary. This factor is outside the influence of the site manager; and an operational limit is not required.</li> <li>▪ <b>Weather conditions</b> - Weather conditions have an effect on the breeding success of the marsh fritillary. In particular, poor weather conditions during the adult flight period will reduce opportunities for mating, egg-laying and dispersal from core areas. Weather conditions during early spring influence the rate of larval development of the marsh fritillary and the effects of the parasitic wasp. This site is situated in an area of relatively high rainfall, which will have a large influence on the population dynamics of the marsh fritillary. This factor is outside the influence of the site manager and an operational limit is not required.</li> <li>▪ <b>Management of surrounding habitats</b> - The SAC only includes the core of the marsh fritillary habitat (and hence core of the metapopulation). There are likely to be other small areas of habitat outside the SAC boundary which are used by the butterfly only occasionally, but which likely contribute to the long-term success of the metapopulation. Efforts should be made to encourage better management of these areas of land through schemes such as Tir Gofal or through specific grazing projects.</li> <li>▪ <b>Owner/occupier objectives</b> - the owners/occupiers of the land typically have an interest in securing some financial/agricultural benefit from the land. This return could be optimised by the agricultural improvement of the land, e.g. by installing new drainage, fertiliser application, or re-seeding; however these operations would cause significant long-term damage to the marsh fritillary habitat, namely the marshy grassland. Additionally unimproved marshy grasslands that are waterlogged for much of the year are difficult to manage for many landowners, possibly resulting in a mixture of over- and under- grazing, with a tendency for scrub to spread. Because of the wet nature of some of the ground, some landowners may be reluctant to graze large stock. This factor will be controlled through management agreements and the SSSI legislation. An operational limit is not required.</li> </ul>

<b>Site Name: Blaen Cynon</b> <b>Location Grid Ref: SN946066</b> <b>JNCC Site Code: <a href="#">UK0030092</a></b> <b>Size: 66.83</b> <b>Designation: SAC</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
	<p>There are no known off-site factors, such as pollution, that are affecting the marsh fritillary to any significant extent, although there is still much industry in the locality. The two overwhelming issues of grazing and scrub encroachment would probably obscure any off-site issues. As management of the site improves off-site factors may become more apparent.</p>
<b>Landowner/ Management Responsibility</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>
<b>HRA/AA Studies undertaken that address this site</b>	<p>AA Screening of the Rhondda Cynon Taff County Borough Council's Local Development Plan (2006-2021): Preferred Strategy January 2007 (<a href="http://www.rhondda-cynon-taff.gov.uk/stellent/groups/Public/documents/RelatedDocuments/012830.pdf">http://www.rhondda-cynon-taff.gov.uk/stellent/groups/Public/documents/RelatedDocuments/012830.pdf</a>)</p> <ul style="list-style-type: none"> <li>▪ The residential development proposed to the south and west of Blaen Cynon is identified as a potential source of adverse impacts on the Blaen Cynon SAC. Taken in conjunction with the plan to upgrade the A465 Abergavenny / Hirwaun to a dual carriageway, there is potential for significant adverse effects on this SAC.</li> </ul>

<b>Site Name: Brecon Beacons</b> <b>Location Grid Ref: SO024211</b> <b>JNCC Site Code: <a href="#">UK0030096</a></b> <b>Size: 269.67</b> <b>Designation: SAC</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
<b>Site Description</b>	<p>The Brecon Beacons SAC is located to the south of the town of Brecon and the Old Red Sandstone cliffs and escarpment is typical of the upland scenery within the National Park. The site is comprised of 4 different units contained within Brecon Beacons SSSI. Pen y Fan is the highest peak in south Wales. The site is of particular interest for the arctic-alpine plants and plant communities growing on the sandstone rocks and ledges on its precipitous mostly north and east facing cliffs. The escarpments also support stands of dry heath vegetation.</p>

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	<p>Within the SAC boundary the only significant areas of dry heath are found on the steep slopes of the NNR. The heath is largely dominated by single species stands of heather <i>Calluna vulgaris</i> and bilberry <i>Vaccinium myrtillus</i>, although some stands have crowberry <i>Empetrum nigrum</i>. Heather and bilberry also grow on the cliff ledges and are sometimes joined by cowberry (<i>Vaccinium vitis-idaea</i>). Here, there is some gradation into the other Annex I habitat types for which this SAC is designated. On the lower slopes, where grazing levels are higher, heath species become less dominant and are replaced by acid grassland. Bracken is locally abundant both on the steeper slopes, where it grows where the soil is slightly deeper, and on the lower slopes where it is sometimes mixed with scrub. Trees, including endemic whitebeams (<i>Sorbus</i>), and shrubs are an important element of the crag vegetation.</p>
<b>Qualifying Features</b>	<p>Annex I Habitats primary reason for selection:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Calcareous rocky slopes with chasmophytic vegetation</a></li> <li>▪ <a href="#">Siliceous rocky slopes with chasmophytic vegetation</a></li> </ul> <p>Annex I Habitats qualifying feature:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">European dry heaths</a></li> <li>▪ <a href="#">Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels</a></li> </ul>
<b>Conservation Objectives</b>	<p><b>Conservation Objective for Feature 1:</b>  <b>Calcareous rocky slopes with chasmophytic vegetation</b></p> <p>Vision for Feature 1</p> <ul style="list-style-type: none"> <li>▪ The base-rich sandstone cliffs, including crevices, scree and associated patches of thin soil remains free from disturbance and support typical plants, including mosses and liverworts.</li> <li>▪ A variety of rare and scarce plants thrive in these areas, including purple saxifrage, green spleenwort, Oeder's apple-moss, lesser rough earwort and several rare hawkweeds.</li> <li>▪ Populations of these species are sufficiently large and widespread to be sustained into the future (currently some populations may be critically low).</li> </ul>

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	<ul style="list-style-type: none"> <li>▪ All factors affecting the achievement of the above conditions are under control.</li> </ul> <p>Performance indicators for Feature 1</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Brecon Beacons Management Plan</a>.</p> <p><b>Conservation Objective for Feature 2: Siliceous rocky slopes with chasmophytic vegetation</b></p> <p>Vision for feature 2</p> <ul style="list-style-type: none"> <li>▪ The acidic sandstone rocks, including crevices and scree, remain free from disturbance to and support typical plants, including mosses, ferns and lichens.</li> <li>▪ A variety of rare and scarce plants thrive in these areas, including fir clubmoss, dwarf willow, and greater streak-moss.</li> <li>▪ Populations of these species are sufficiently large and widespread to be sustained into the future.</li> <li>▪ All factors affecting the achievement of the above conditions are under control.</li> </ul> <p>Performance indicators for Feature 2</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Brecon Beacons Management Plan</a>.</p> <p><b>Conservation Objective for Feature 3: European dry heaths</b></p>

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	<p>Vision for Feature 3</p> <ul style="list-style-type: none"> <li>▪ The extent, quality and diversity of heath vegetation are maintained and, where possible, degraded heath is restored to good condition.</li> <li>▪ The main heathland areas within the SAC and SSSI have a varied age structure with a mosaic of young heath, mature heath and degenerate heath.</li> <li>▪ All factors affecting the achievement of these conditions are under control.</li> </ul> <p>Performance indicators for Feature 3</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Brecon Beacons Management Plan</a>.</p> <p><b>Conservation Objective for Feature 4: Hydrophilous tall herb fringe communities of plains and montane to alpine levels</b></p> <p>Vision for feature 4</p> <ul style="list-style-type: none"> <li>▪ The cliff ledges with less acidic soil remain largely free from grazing, such that the typical flowering plants can flourish and flower freely.</li> <li>▪ Several uncommon plants thrive in these areas, including serrated wintergreen and rare hawkweeds.</li> <li>▪ The populations of these plants are sufficiently large and widespread to be sustained into the future.</li> <li>▪ All factors affecting the achievement of the above conditions are under control.</li> </ul> <p>Performance indicators for Feature 4</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Brecon Beacons Management Plan</a>.</p>



Site Name: Brecon Beacons Location Grid Ref: SO024211 JNCC Site Code: <a href="#">UK0030096</a> Size: 269.67 Designation: SAC	Habitats Regulations Assessment: Data Proforma
<b>Component SSSIs</b>	Brecon Beacons SSSI is composed of 10 management units of which numbers 1, 4, 8, and 9 comprise to form the Brecon Beacons SAC. A map of the management units can be viewed on the <a href="#">CCW website</a> .
<b>Key Environmental Conditions (factors that maintain site integrity)</b>	<ul style="list-style-type: none"> <li>▪ <b>Grazing</b> - Some areas under-grazed while others are over-grazed.             <ul style="list-style-type: none"> <li>○ Upper limit: 0.2 livestock units/ha/year (One livestock unit is equivalent to 1 cow or horse. A sheep (with lamb) is equivalent to 0.15 livestock units).</li> <li>○ Lower limit: Sufficient to prevent the development of scrub within heathland/grassland of conservation interest and/ or spread of bracken and ivy.</li> </ul> </li> <li>▪ <b>Air Quality</b> - Ensure that no critical loads for acidic and nitrogen deposition are exceeded.</li> <li>▪ <b>Erosion</b> - No noticeable impacts from human or livestock induced erosion in units 1, (2), 4, (7), 8, 9, (10). Walkers and livestock cause erosion of paths along the cliffs resulting in rock and soil being washed down from eroded areas on the cliffs above.</li> <li>▪ <b>Rock Climbing</b> - No rock climbing in units 1, (2), (3), 4, (7), 8, 9, (10) without agreement. Although most of the rocks at this site are too soft or unstable for climbing, intensive use can dislodge plants and disturb breeding birds. These impacts may be avoided if climbing is subject to specific agreements, which include a code of conduct.</li> </ul>
<b>SAC Condition Assessment</b>	<p><b>Conservation Status of Feature 1:</b> Calcareous rocky slopes with chasmophytic vegetation</p> <p>The conservation status of the feature within the site is <b>Un-favourable</b> (2005).</p> <p>The extent and quality of this type of vegetation was being adversely affected by sheep grazing, this probably applies to units 4, (7), 9, (10) as well. With reduced grazing, or less sheep grazing, this community would be more widespread. There are still some problems with rock and soil being washed down from eroded areas on the cliffs above in units 8 &amp; 9. The feature in Units 1 and (2) is subject to lower grazing levels, particularly by sheep, and there may be less public access to the cliffs here. Therefore, the habitat in these units is likely to be in favourable, maintained condition.</p>

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	<p><b>Conservation Status of Feature 2:</b> Siliceous rocky slopes with chasmophytic vegetation</p> <p>The conservation status of the feature within the site is <b>Un-favourable</b> (2005).</p> <p>The siliceous chasmophytic vegetation appeared to be in reasonable condition but the Environment Agency has reported that critical loads for air pollutants are still being exceeded, which is likely to be having an adverse impact on the vegetation.</p> <p><b>Conservation Status of Feature 3:</b> European dry heaths</p> <p>The conservation status of the feature within the site is <b>Un-favourable</b> (2006).</p> <p>The European dry heath feature is considered to be in un-favourable (no change) condition within the SSSI and SAC as a whole, largely because grazing levels in units 4, 8, 9, are suppressing the development of heath on the slightly deeper acidic soils. Within the NNR (units 1 &amp; 2) stocking rates are lower and the slopes are generally steep, with a bias towards cattle, which ensures grazing levels are low. The condition attributes are satisfied in both units 1 &amp; 2 (November 2006). Within the remainder of the SSSI, feature condition is thought to be favourable, maintained in unit 5 but un-favourable, no-change in units 3, 7, 10 as result of grazing pressure.</p> <p><b>Conservation Status of Feature 4:</b> Hydrophilous tall herb fringe communities of plains and montane to alpine levels</p> <p>The conservation status of the feature within the site is <b>Un-favourable</b> (2005).</p> <p>Although the vegetation appeared to be thriving in areas that are naturally in-accessible to grazing stock, it is likely that the feature would be more widespread in some of the units within commonland (units 4, 7?, 10) if the</p>

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	<p>grazing pressure was reduced. The part of this feature in Unit 1 is subject to lower grazing levels and there is considered to be in a favourable, maintained condition.</p>
<b>Vulnerabilities (includes existing pressures and trends)</b>	<ul style="list-style-type: none"> <li>▪ <b>Air pollution</b> – Acidification of rain and soils, due to atmospheric pollution, and nutrient enrichment (especially increased nitrogen and phosphorus), through a combination of atmospheric pollution, excessive dunging/urination in areas where stock preferentially graze and other inputs from diffuse sources. Mosses, liverworts and lichens are particularly vulnerable to pollution from atmospheric sources. Much of this atmospheric pollution comes from distant, diffuse sources, such as traffic and domestic emissions, but some can be attributed to large point sources, such as major power stations or industrial processes. The Environment Agency has reported that critical loads for air pollutants are still being exceeded, which is likely to be having an adverse impact on the vegetation.</li> <li>▪ <b>Grazing pressure</b> - Many of the interesting plants on the cliffs are intolerant of grazing and are confined to areas less accessible to stock. Reduced grazing levels on the main escarpment would allow these plants to spread out from their craggy refuges. Sheep tend to graze any lime-rich grassland preferentially at certain times of year and can cause localised damage in these areas, but there are some areas they will never be able to access on vertical or unstable slopes. However, some light grazing of slopes may help to prevent encroachment by coarse vegetation, trees and scrub. Those areas currently ungrazed are not likely to be accessible to stock types currently grazing the land, therefore core areas of the feature are currently safe. Potential changes in the type of grazing animals, such as goats, which would be better suited to climbing, will be monitored and appropriate action taken to remove them.</li> <li>▪ <b>Recreational pressure</b> from walkers and rock climbers - This along with livestock can cause erosion of paths along the cliffs resulting in rock and soil being washed down from eroded areas on the cliffs above.</li> </ul>
<b>Landowner/ Management Responsibility</b>	<ul style="list-style-type: none"> <li>▪ Unit 1 - SAC area within the CCW-owned land</li> <li>▪ Unit 4 - SAC area within Great Forest common land (CL50 Brecknock)</li> <li>▪ Unit 8 - SAC area within National Trust common land (Brecon Beacons CL56 Brecknock)</li> <li>▪ Unit 9 - SAC area within Buckland Manor common (CL62 Brecknock)</li> </ul>

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HRA/AA Studies undertaken that address this site	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>

Site Name: Cardiff Beech Woods Location Grid Ref: ST118824 JNCC Site Code: <a href="#">UK0030109</a> Size: 115.62 Designation: SAC	<b>Habitats Regulations Assessment: Data Proforma</b>
<b>Site Description</b>	Cardiff Beech Woods lies to the north east of Cardiff and is intersected by the A4054 and the A470. The site contains one of the largest concentrations of <i>Asperulo-Fagetum</i> beech forests in Wales, and represents the habitat close to the western limit of its past native range in both the UK and Europe. The woods show mosaics and transitions to other types, including more acidic beech woodland and oak <i>Quercus</i> and ash <i>Fraxinus excelsior</i> woodland. Characteristic and notable species in the ground flora include ramsons <i>Allium ursinum</i> , <i>sanicle Sanicula europaea</i> , bird's-nest orchid <i>Neottia nidus-avis</i> and yellow bird's-nest <i>Monotropa hypopitys</i> .
<b>Qualifying Features</b>	Annex I Habitats primary reason for selection: <ul style="list-style-type: none"> <li>▪ <a href="#">Asperulo-Fagetum beech forests</a></li> </ul> Annex I Habitats qualifying feature: <ul style="list-style-type: none"> <li>▪ <a href="#">Tilio-Acerion forests of slopes, screes and ravines</a>* Priority feature</li> </ul>
<b>Conservation Objectives</b>	<b>Conservation Objective for Feature 1: Aperulo-Fagetum beech forest</b>  Vision for feature 1

<p>Site Name: Cardiff Beech Woods                      Location Grid Ref: ST118824                      JNCC Site Code: <a href="#">UK0030109</a>                      Size: 115.62                      Designation: SAC</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ At least 85% of the site will continue to be covered by semi-natural broadleaved woodland.</li> <li>▪ The range of woodland communities within the site will be maintained - including both of the woodland types considered to be of international importance - <i>Asperulo-Fagetum</i> and <i>Tilio Acerion</i>.</li> <li>▪ At least 95% of canopy forming trees will be locally native species such as beech, ash and oak.</li> <li>▪ The tree canopy will not be completely closed; approximately 10% of the canopy will include a dynamic shifting pattern of gaps encouraging natural regeneration of tree species of all ages.</li> <li>▪ Dead wood, standing and fallen, will be maintained where possible to provide habitat for invertebrates, fungi and other woodland species.</li> <li>▪ The ground flora will comprise species typical of lime-rich beech wood, including indicators of ancient woodland, such as wood anemone, ramsons and sanicle.</li> <li>▪ There is little evidence of browsing.</li> <li>▪ Recreational use of the site will continue to be managed so it does not damage the wildlife interest of the site.</li> <li>▪ All factors affecting the achievement of these conditions are under control.</li> </ul> <p>Performance indicators for feature 1</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Cardiff Beech Woods Management Plan</a>.</p> <p><b>Conservation Objective for Feature 2:</b>  <i>Tilio-Acerion</i> forest of slopes, screes and ravines</p> <p>Vision for feature 2</p>

<p>Site Name: Cardiff Beech Woods Location Grid Ref: ST118824 JNCC Site Code: <a href="#">UK0030109</a> Size: 115.62 Designation: SAC</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ At least 85% of the site will continue to be covered by semi-natural broadleaved woodland.</li> <li>▪ The range of woodland communities within the site will be maintained, as for feature 1</li> <li>▪ At least 95% of canopy forming trees will be locally native species (sycamore included).</li> <li>▪ The tree canopy will not be completely closed; approximately 10% of the canopy will include a dynamic shifting pattern of gaps encouraging natural regeneration of tree species of all ages.</li> <li>▪ Dead wood, standing and fallen, will be maintained where possible to provide habitat for invertebrates, fungi and other woodland species.</li> <li>▪ The ground flora will comprise species typical of lime-rich beech wood, including indicators of ancient woodland, such as wood anemone, ramsons and sanicle.</li> <li>▪ There is little evidence of browsing.</li> <li>▪ Recreational use of the site will continue to be managed so it does not damage the wildlife interest of the site.</li> <li>▪ All factors affecting the achievement of these conditions are under control.</li> </ul> <p>Performance indicators for feature 2</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Cardiff Beech Woods Management Plan</a>.</p>
<p><b>Component SSSIs</b></p>	<ul style="list-style-type: none"> <li>▪ Fforestganol, Tongwynlais a Cwm Nofydd (units 1-5)</li> <li>▪ Castell Coch Woodlands and Road Section (units 6-9)</li> <li>▪ Garth Wood (units 10-12)</li> </ul> <p>There are 12 management units of which numbers 1, 2, 3, 4, 8, 9 and 10 comprise to form the Cardiff Beech</p>

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	<p>Woods SAC. A map showing the management units can be viewed on the <a href="#">CCW website</a>.</p>
<b>Key Environmental Conditions (factors that maintain site integrity)</b>	<ul style="list-style-type: none"> <li>▪ <b>Maintain/manage the surrounding woodland</b> - Commercial forestry in the vicinity of Castell Coch may have implications for surface water supply and quality. There are also a number of active and disused limestone quarries in the area. Garth Wood surrounds Taff's Well Quarry but there are other, smaller quarries in and around all component SSSIs. Quarrying can lead to direct loss of the feature together with indirect impacts from issues such as access. There are also a number of impacts arising from restoration at the end of a quarry's working life.</li> <li>▪ <b>Manage public access</b> - Management of the recreational use of the woodlands should focus on maintaining the network of public footpaths and access routes. Regular maintenance of the footpaths and bridleways is essential to stop them spreading onto the adjacent woodland habitat. By restricting recreational use of the woodlands to certain areas and paths, natural woodland processes can be left to occur away from these areas of recreational use and without the need for intervention from a public health and safety perspective.</li> </ul>
<b>SAC Condition Assessment</b>	<p><b>Conservation Status of Feature 1</b> <b>Aperulo-Fagetum beech forest</b></p> <p>The sites were monitored in March 2004 to gather the extent or condition of the habitat. The current feature status for the Asperulo-fagetum beech forest is <b>Unfavourable</b> - Unclassified (March 2004).</p> <p>The justification for the above feature status (March 2004) is as follows:</p> <p>CCW view is that the site is still recovering from undesirable effects of past management. Although most if not all aspects of the component sites are heading in the right direction the status is still short of favourable. Implementation of appropriate management will be addressed but in our view there is no urgent or immediate need for action.</p>

<p>Site Name: Cardiff Beech Woods                      Location Grid Ref: ST118824                      JNCC Site Code: <a href="#">UK0030109</a>                      Size: 115.62                      Designation: SAC</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>The Garth Wood component is thought to be 'unfavourable recovering' although a management plan has not been prepared to date so its status has not been fully assessed. The management is mostly limited intervention and for most of the site there is good age structure and gap regeneration. Natural processes could be enhanced by localised intervention and this will be addressed through management recommendations.</p> <p>Fforestganol a Chwm Nofydd is thought to be 'unfavourable recovering', although a management plan has not been prepared to date so its status has not been fully assessed. Although there are small areas of even age structure there is generally a diverse age structure. This, together with concerns at the percentage of beech at some locations, will be addressed through management recommendations.</p> <p>Castell Coch Woodlands and Road Section is thought to be 'unfavourable recovering'. A full management plan has not been prepared to date so its status has not been fully assessed. There is generally an even age structure with low canopy cover. However, there is evidence of natural woodland processes, with good regeneration within the pattern of gaps. Recovery is expected over time and this could be hastened with increased localised intervention. This, together with concerns over the species composition (particularly ash and sycamore) at some locations will be addressed through management recommendations.</p> <p><b>Conservation Status of Feature 2</b>  <b>Tilio-Acerion forest of slopes, screes and ravines</b></p> <p>The sites were monitored in February 2004 to gather the extent or condition of the habitats and the species. The current feature status for the Tilio-Acerion forest of slopes, screes and ravines is <b>Unfavourable - Recovering</b> (February 2004).</p> <p>The justification for the above feature status (February 2004) is as follows:</p>



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	<p>CCW view is that the site is still recovering from undesirable effects of past management. Although most if not all aspects of the component sites are heading in the right direction the status is still short of favourable. Implementation of appropriate management will be addressed but in our view there is no urgent or immediate need for action.</p> <p>The Garth Wood component is thought to be 'unfavourable recovering' although a management plan has not been prepared to date so its status has not been fully assessed. The management is mostly limited intervention and for most of the site there is good age structure and gap regeneration. Natural processes could be enhanced by localised intervention and this will be addressed through management recommendations.</p> <p>Fforestganol a Chwm Nofydd is thought to be 'unfavourable recovering', although a management plan has not been prepared to date so its status has not been fully assessed. Although there are small areas of even age structure there is generally a diverse age structure. This, together with concerns at the percentage of beech at some locations, will be addressed through management recommendations.</p>
<p><b>Vulnerabilities (includes existing pressures and trends)</b></p>	<ul style="list-style-type: none"> <li>▪ <b>Atmospheric Pollution</b> - its location in industrialised South Wales, together with the presence of nearby quarrying and associated activities, means that there is the potential for localised atmospheric pollution. Quarry dust deposition is an issue that occasionally comes up. CCW state that there is no evidence to date that this has had an adverse impact on the features but this may need to be addressed in more detail in the future.</li> <li>▪ <b>Recreational pressure</b> - All component SSSIs are used to a greater or lesser extent for recreation purposes. Castell Coch Woodlands and Fforestganol a Chwm Nofydd experience the most recreation pressure, and are popular for walking, climbing and mountain biking. The Taff train runs through part of the Castell Coch Woodlands site and the historic building of Castell Coch attracts many visitors, which increases the access pressure on the woodlands. The road section is becoming increasingly popular for climbing, and this is unlikely to be a problem for the geological interest of the site. However, climbing could be potentially damaging to trees at the top of the crag and needs to be kept under review. Management of access is</li> </ul>

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	<p>           nominally through the individual site owners but there are potential conflicts between different users which to date have been addressed through the Local Authority Access Forum. Recreation within the areas supporting this habitat feature is restricted due to the steep and rocky nature of the terrain. Therefore the recreational pressure on areas of Tilio-acerion is less than on areas of Asperulo-fagetum habitat. Nonetheless, given the high recreation pressure experienced by Fforestganol a Chwm Nofydd, which supports areas of Tilio-acerion habitat, aspects of recreational management still apply to this feature.         </p> <ul style="list-style-type: none"> <li> <span style="color: #800000;">■</span> <b>Mineral extraction and related activities</b> - There are a number of active and disused limestone quarries in the area. Garth Wood surrounds Taff's Well Quarry but there are other, smaller quarries in and around all component SSSIs. Quarrying can lead to direct loss of the feature together with indirect impacts from issues such as access. There are also a number of impacts arising from restoration at the end of a quarry's working life.         </li> <li> <span style="color: #800000;">■</span> <b>Development</b> - Its location in the populated South Wales area means that there is considerable development pressure in the vicinity including associated infrastructure on land adjacent to the site. There is the potential for a range of impacts arising from increasing urbanisation.         </li> <li> <span style="color: #800000;">■</span> <b>Commercial Forestry</b> - Commercial forestry in the vicinity of Castell Coch may have implications for surface water supply and quality, and this needs to be kept under review.         </li> <li> <span style="color: #800000;">■</span> <b>Non-native species</b> - The presence of a number of species considered to be non-native e.g. sycamore and Japanese knotweed, is currently under review to determine any detrimental effects on the woodland communities of special interest.         </li> </ul>
<b>Landowner/ Management Responsibility</b>	<p>           The majority of the woodlands are owned, or in the guardianship of government agencies, with most of the remainder of the woodland covered by a Section 106 agreement. Cardiff County Council, Cadw and Forestry Commission carry out woodland management for conservation purposes and occasionally health and safety purposes.         </p>
<b>HRA/AA Studies undertaken that address this site</b>	<p>           AA Screening of the Vale of Glamorgan Local Development Plan Preferred Strategy Dec 07.  <a href="http://www.valeofglamorgan.gov.uk/files/Living/Planning/Policy/LDP/Appropriate_Assessment_Screening_Report.pdf">http://www.valeofglamorgan.gov.uk/files/Living/Planning/Policy/LDP/Appropriate_Assessment_Screening_Report.pdf</a> </p>

<b>Site Name: Cardiff Beech Woods</b> <b>Location Grid Ref: ST118824</b> <b>JNCC Site Code: <a href="#">UK0030109</a></b> <b>Size: 115.62</b> <b>Designation: SAC</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
	<ul style="list-style-type: none"> <li>▪ The screening report concluded that there is unlikely to be any significant impact on the Cardiff Beech Woods SAC.</li> </ul> <p>AA Screening of the Rhondda Cynon Taff County Borough Council's Local Development Plan (2006-2021): Preferred Strategy Jan 2007  <a href="http://www.rhondda-cynon-taff.gov.uk/stellent/groups/Public/documents/RelatedDocuments/012830.pdf">http://www.rhondda-cynon-taff.gov.uk/stellent/groups/Public/documents/RelatedDocuments/012830.pdf</a></p> <ul style="list-style-type: none"> <li>▪ There is potential for significant impact on the Cardiff Beech Woods SAC, primarily in-combination with development proposed in the Cardiff's Development Plan.</li> </ul> <p>HRA Screening of the County Council of the City and County of Cardiff Local Development Plan Preferred Strategy Sept 2007.  <a href="http://www.cardiff.gov.uk/ObjView.asp?Object_ID=9788">www.cardiff.gov.uk/ObjView.asp?Object_ID=9788</a></p> <ul style="list-style-type: none"> <li>▪ Policies to deliver economic growth and the provision for up to 24750 new dwellings in the preferred strategy could lead to an increase in traffic volume and may well result in increased deposition of airborne pollutants at this site. The screening report identified that there is the potential for significant effects on the Cardiff Beech Woods SAC.</li> </ul>
<b>Site Name: Cwm Cadlan</b> <b>Location Grid Ref: SN961098</b> <b>JNCC Site Code: <a href="#">UK0013585</a></b> <b>Size: 83.93</b> <b>Designation: SAC</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
<b>Site Description</b>	Cwm Cadlan is situated approximately 1km north-east of the village of Penderyn and about 4km north of Hirwaun, near Aberdare. The SAC interests are:

Site Name: Cwm Cadlan Location Grid Ref: SN961098 JNCC Site Code: <a href="#">UK0013585</a> Size: 83.93 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p>'Molinia meadows on calcareous, peaty or clayey silt-laden soils (<i>Molinion caeruleae</i>)' - Cwm Cadlan has the largest recorded example of 'Molinia meadows' (or fen-meadow) in Wales. The typical form of purple moor-grass-meadow thistle (<i>Molinia caerulea</i> - <i>Cirsium dissectum</i>) fen-meadow is extensively developed, and there are clearly displayed transitions to a range of associated habitats, including base-rich flush and neutral grassland.</p> <p>'Alkaline Fens' - Cwm Cadlan supports an outstanding suite of flushed short-sedge mire communities on glacial drift overlying Carboniferous limestone within the valley of the Nant Cadlan on the southern fringe of Brecon Beacons National Park. Communities referable to National Vegetation Classification (NVC) type M10 dioecious sedge-common butterwort (<i>Carex dioica</i>-<i>Pinguicula vulgaris</i>) mire occur widely, often in close association with flushed examples of M24 fen-meadow. Characteristic species include common butterwort <i>Pinguicula vulgaris</i>, bog pimpernel <i>Anagallis tenella</i>, marsh arrowgrass <i>Triglochin palustris</i> and the moss <i>Campyllum stellatum</i>. Other sedge-rich swards are also present which display floristic affinities to both M10 and M24; basiphilous elements of this vegetation include tawny sedge <i>Carex hostiana</i>, flea sedge <i>Carex pulicaris</i> and quaking-grass <i>Briza media</i>.</p> <p>Both these habitats are considered to be 'best areas in the United Kingdom'. Part of the site is owned by CCW and was declared NNR in 2006. The site was traditionally managed as pasture and some as hay-meadow but there has long been a liver fluke problem in this area and there have been past attempts to drain many fields within the SAC - there is an extensive network of drainage ditches within the site. Some of these are slowly infilling, but some vegetation is likely to have been permanently modified by these drains.</p>
<b>Qualifying Features</b>	Annex I Habitats primary reason for selection: <ul style="list-style-type: none"> <li>■ <a href="#">Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)</a></li> <li>■ <a href="#">Alkaline fens</a></li> </ul>
<b>Conservation Objectives</b>	<b>Conservation Objective for Features 1 &amp; 3:</b> <b>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) - this also encompasses Feature 3: other non-SAC marshy grassland habitat</b>

Site Name: Cwm Cadlan Location Grid Ref: SN961098 JNCC Site Code: <a href="#">UK0013585</a> Size: 83.93 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p>Vision for feature 1</p> <p>The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ Fen-meadow will occupy at least 26 ha of a total area of marshy grassland habitat which itself will cover at least 42 ha.</li> <li>▪ The remainder of the site will mainly consist of other semi-natural habitat, including alkaline fen.</li> <li>▪ Typical fen-meadow plants will be common.</li> <li>▪ Plants indicating agricultural modification or alteration to hydrology and drying of soils will be absent or present at only low cover.</li> <li>▪ Although rushes are frequent, the more bulky species will not exceed 33% cover.</li> <li>▪ Bare ground will generally not exceed 5% cover and vegetation litter 25%.</li> <li>▪ Dense scrub will be largely absent from the fen-meadow, but it is probably desirable for invertebrates and birds to have a sparse scattering of shrubs or trees.</li> <li>▪ All factors affecting the achievement of these conditions are under control.</li> </ul> <p>The rationale behind the selection and identification of performance indicators for fen-meadow and other marshy grassland and a map showing the main fen-meadow areas is given in Annex 1.</p> <p>Performance indicators for Feature 1 (&amp; 3)</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Cwm Cadlan Management Plan</a>.</p> <p><b>Conservation Objective for Feature 2:</b> <b>Alkaline Fen</b></p>

Site Name: Cwm Cadlan Location Grid Ref: SN961098 JNCC Site Code: <a href="#">UK0013585</a> Size: 83.93 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p>Vision for feature 2</p> <p>The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ Alkaline Fen will occupy about 11 ha or more.</li> <li>▪ The remainder of the site will mainly consist of other semi-natural habitat including fen-meadow.</li> <li>▪ Typical alkaline fen plants will be common.</li> <li>▪ Plants indicating agricultural modification or alteration of hydrology and drying of soils will be absent or present only at low cover.</li> <li>▪ Although rushes are frequent, the more bulky species will not exceed 33% cover.</li> <li>▪ Bare ground will generally not exceed 5% cover and vegetation litter 10 %.</li> <li>▪ Scrub species will be largely absent from the alkaline fen.</li> <li>▪ At selected springheads, water should flow in all but the most severe drought conditions.</li> <li>▪ All factors affecting the achievement of these conditions are under control.</li> </ul> <p>Performance indicators for Feature 2</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Cwm Cadlan Management Plan</a>.</p>
<b>Component SSSIs</b>	<ul style="list-style-type: none"> <li>▪ Cwm Cadlan SSSI is divided into 12 management units, the Cwm Cadlan SAC covers the same area. The management units can be viewed on a map available on the <a href="#">CCW website</a>.</li> </ul>
<b>Key Environmental Conditions (factors that maintain site integrity)</b>	<ul style="list-style-type: none"> <li>▪ <b>Grazing</b> - the marshy grassland has been maintained through traditional farming practices. Without an appropriate grazing regime, the grassland would become rank and eventually turn to scrub and woodland. Light grazing by mainly cattle and ponies between April and November each year is essential in</li> </ul>

<p>Site Name: Cwm Cadlan Location Grid Ref: SN961098 JNCC Site Code: <a href="#">UK0013585</a> Size: 83.93 Designation: SAC</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>maintaining the marshy grassland and fen-meadow communities.</p> <ul style="list-style-type: none"> <li>○ Lower limits: The wetland areas will be subject to light summer grazing by cattle and/or ponies at least 4 in every 5 years. Light summer grazing is defined as - cattle and/or ponies at a rate of 0.4 LSU/ha/year for the period April to October. Heavy grazing is defined as greater than 1 LSU/ha/year (1 LSU is equivalent to a cow/horse, plus calf/foal).</li> <li>○ Upper limits: No significant grazing outside the growing season or heavy grazing at any time during the summer.</li> </ul> <ul style="list-style-type: none"> <li>▪ <b>Scrub control</b> - open wetland areas are prone to invasion by alder and willow scrub. Optimum grazing levels should help control spread of scrub, but occasionally active scrub eradication is necessary. Scrub and woodland is also a natural component of such wetland complexes and enhances the site both biologically and visually, therefore older well-established stands will be retained. Scattered scrub will be tolerated within the following limits: <ul style="list-style-type: none"> <li>○ Lower limits: Scattered scrub present in defined locations.</li> <li>○ Upper limits: No scrub covering area greater than 5m x 5m within stands mapped as marshy grassland.</li> </ul> </li> <li>▪ <b>Hydrological regime</b> - the marshy grassland communities are strongly influenced by the quantity and base status of the groundwater. Reductions in the quality and quantity of the water in the springs and watercourses feeding the site may lead to a loss of marshy grassland or changes in species composition. Conversely, reduced/impeded drainage may lead to ground-water stagnation and a different change in species composition, e.g. increased abundance of rushes. Infilling some of the many ditches at the site is likely to lead to re-wetting of some marshy grassland. <ul style="list-style-type: none"> <li>○ Upper limit: No new drainage ditches to be installed within the open meadow areas of the site.</li> </ul> </li> <li>▪ <b>Air Quality</b> - Atmospheric deposition at this site has the potential to harm the alkaline fen feature. Dust deposition is likely to be high given the close proximity of Penderyn Quarry, and the absence of a published critical load for this pollutant against this habitat should be taken as indicating lack of impact. Atmospheric Nitrogen deposition in this area is estimated at 21.8 kg N/ha/yr which lies above the lower critical load limit for this pollutant (15-35 kg N / ha / yr). It's likely that the critical load for Nitrogen for M10 forms of alkaline</li> </ul>

Site Name: Cwm Cadlan Location Grid Ref: SN961098 JNCC Site Code: <a href="#">UK0013585</a> Size: 83.93 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p>fen is towards the lower end of this range.</p> <ul style="list-style-type: none"> <li>○ Lower limits: None set – very low dust and N deposition regimes may be beneficial.</li> <li>○ Upper limits: Suggest 15 kg N / ha / year for N. None yet defined for dust.</li> </ul>
<b>SAC Condition Assessment</b>	<p><b>Conservation Status of Feature 1</b>  <b>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) - this also encompasses Feature 3: other non-SAC marshy grassland habitat</b></p> <p>The conservation status of these features within the site is considered to be <b>Unfavourable</b> (2007).</p> <p>Assessment carried out in 2004 indicated that the condition of both was: Unfavourable, no change. White clover, at a low cover and frequency, may be a natural component of the sward. In 2004, the cover and frequency of white clover was a little on the high side in some areas, which detracts somewhat from the quality of the stands of fen-meadow. Part of the site, until purchased by CCW, had been quite heavily grazed by sheep - sometimes throughout the year. Current management by CCW (Unit 1) has returned the grazing to a more cattle-based state and other areas are now in favourable management (units 2, 6 &amp; 7) that should ensure that the quality of the more modified swards recover. Unit 4 is only occasionally grazed and this has resulted in some of the vegetation being rather tussocky. Overall the factors affecting the feature appear to be largely under control, apart from continuing uncertainty over the impacts of drainage and quarrying and the need for more a suitable more grazing in some parts of the site.</p> <p><b>Conservation Status of Feature 2</b>  <b>Alkaline Fen</b></p> <p>The conservation status of this feature within the site is considered to be <b>Unfavourable</b> (2007).</p> <p>Assessment carried out in 2004 indicated that feature condition was: Unfavourable, recovering. Some alkaline fen has been modified by past attempts at drainage resulting in a few stands, which are rather dry and somewhat intermediate to fen-meadow. It is also possible that some stands of fen-meadow were derived from</p>



Site Name: Cwm Cadlan Location Grid Ref: SN961098 JNCC Site Code: <a href="#">UK0013585</a> Size: 83.93 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p>alkaline fen. Part of the site, until purchased by CCW, had been quite heavily grazed by sheep - sometimes throughout the year. Current management by CCW (Unit 1) has returned the grazing there to a more cattle-based regime and sympathetic management elsewhere (units 2, 6 &amp; 7) should ensure that the quality stands are maintained. Some areas are slightly under-grazed or partially affected by past tree planting. Removal of some planted trees has been undertaken and the remaining trees should be removed with the next few years (Unit 8). Under-grazing for a year or two is probably not detrimental to the quality of the fen, but is something that needs addressing (Unit 4). Overall, the factors affecting the feature are still not quite under control, although the habitat is recovering, hence the unfavourable status assessment for 2007.</p>
<b>Vulnerabilities (includes existing pressures and trends)</b>	<ul style="list-style-type: none"> <li>▪ <b>Inappropriate grazing regime</b> - without an appropriate grazing regime, the grassland would become rank and eventually turn to scrub and woodland. Any excessive grazing pressure would be expected to increase the frequency and cover of bare ground and agricultural species. Cessation of cattle farming could affect the vegetation, as sheep are more selective grazers.</li> <li>▪ <b>Scrub encroachment</b> - woodland and scrub should not encroach further into the unimproved grassland, in particular the communities of highest conservation value (alkaline fen, fen-meadow and neutral grassland).</li> <li>▪ <b>Changes to hydrological regime</b> - Activities that effect groundwater level and flow, such as mineral extraction. Dewatering of the adjacent quarry has potential to affect the hydrology of the site.</li> <li>▪ <b>Eutrophication</b> - there has been concern about fertilizer run-off from some adjacent improved fields causing localised nutrient enrichment.</li> <li>▪ <b>Atmospheric Pollution*</b> - atmospheric deposition at this site has the potential to harm the alkaline fen feature. Dust deposition is likely to be high given the close proximity of Penderyn Quarry, and the absence of a published critical load for this pollutant against this habitat should be taken as indicating lack of</li> </ul>

\* Air Pollution Information System (APIS). Calcareous grassland. Available from:

[http://www.apis.ac.uk/cgi\\_bin/habitat\\_result.pl?habResult=Calcareous+grassland&choice=allHabs&haborspec=habitat&submit.x=35&submit.y=13](http://www.apis.ac.uk/cgi_bin/habitat_result.pl?habResult=Calcareous+grassland&choice=allHabs&haborspec=habitat&submit.x=35&submit.y=13)

Habitats Regulations Assessment: Data Proforma	
<b>Site Name:</b> Cwm Cadlan <b>Location Grid Ref:</b> SN961098 <b>JNCC Site Code:</b> <a href="#">UK0013585</a> <b>Size:</b> 83.93 <b>Designation:</b> SAC	
	<p>impact. Atmospheric Nitrogen deposition in this area is estimated at 21.8 kg N/ha/yr which lies above the lower critical load limit for this pollutant (15-35 kg N / ha / yr). It's likely that the critical load for Nitrogen for M10 forms of alkaline fen is towards the lower end of this range.</p>
<b>Landowner/ Management Responsibility</b>	<ul style="list-style-type: none"> <li>▪ Unit 1 is owned by CCW.</li> </ul>
<b>HRA/AA Studies undertaken that address this site</b>	<p>AA Screening of the Rhondda Cynon Taff County Borough Council's Local Development Plan (2006-2021): Preferred Strategy January 2007 (<a href="http://www.rhondda-cynon-taff.gov.uk/stellent/groups/Public/documents/RelatedDocuments/012830.pdf">http://www.rhondda-cynon-taff.gov.uk/stellent/groups/Public/documents/RelatedDocuments/012830.pdf</a>)</p> <ul style="list-style-type: none"> <li>▪ Cwm Cadlan lies outside the area covered by the LDP and on this basis, consideration of direct impacts (i.e. habitat loss) arising from any of the proposal would not need to be considered.</li> <li>▪ Given the distance of the site relative to the closest proposed development, the risk from indirect impacts would appear negligible. For example, the cluster of proposed residential development north of Hirwaun would not result in any foreseeable activities of relevance to Cwm Cadlan.</li> </ul>

Habitats Regulations Assessment: Data Proforma	
<b>Site Name:</b> Cym Clydach Woodlands <b>Location Grid Ref:</b> SO207123 <b>JNCC Site Code:</b> <a href="#">UK0030127</a> <b>Size:</b> 28.81 <b>Designation:</b> SAC	
<b>Site Description</b>	<p>The site is situated on the southern side of the River Clydach valley, approximately 2km east, north east of Brynmawr and is in close proximity to the A465 Heads of the Valley Road. The underlying geology varies across the site, consisting of sedimentary rocks that range from Old Red Sandstone through Carboniferous Limestone into shales and sandstones of the Millstone Grit and Coal Measures. Soils mainly consist of typical brown earths and humo-ferric podsols. Altitude ranges from 170m by the River Clydach to 350m in Cwm Llamarch.</p>

Site Name: Cym Clydach Woodlands Location Grid Ref: SO207123 JNCC Site Code: <a href="#">UK0030127</a> Size: 28.81 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p>Cwm Clydach is of special interest for its stands of broadleaved woodland dominated by beech, intergrading with more open habitats, which together support a number of rare and scarce vascular plants including whitebeams <i>Sorbus spp.</i> and soft-leaved sedge <i>Carex montana</i>. There are important woodland and grassland fungi assemblages with rare species such as <i>Squamanita paradoxa</i>.</p>
<b>Qualifying Features</b>	<p>Annex I Habitats primary reason for selection:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Asperulo-Fagetum beech forests</a></li> </ul> <p>Annex I Habitats qualifying feature:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>)</a></li> </ul>
<b>Conservation Objectives</b>	<p><b>Conservation Objective for Feature 1:</b> <i>Asperulo – Fagetum</i> beech forests</p> <p>Vision for feature 1</p> <p>The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ At least 50% of the canopy-forming trees are beech.</li> <li>▪ The canopy cover is at least 80% (excluding areas of crag) and composed of locally native trees.</li> <li>▪ The woodland has trees of all age classes with a scattering of standing and fallen dead wood.</li> <li>▪ Regeneration of trees is sufficient to maintain the woodland cover in the long term.</li> <li>▪ The shrub layer and ground flora can be quite sparse, but where present consist of locally native plants such as yew, hawthorn, wych elm, ash, hazel, field maple and elder, bramble, dog's mercury, enchanter's-nightshade, lords-and-ladies, woodruff, male fern, sanicle, wood melick, ivy, false brome, violets, herb</li> </ul>

<p>Site Name: Cym Clydach Woodlands Location Grid Ref: SO207123 JNCC Site Code: <a href="#">UK0030127</a> Size: 28.81 Designation: SAC</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>robert, wood avens, and tufted hair-grass.</p> <ul style="list-style-type: none"> <li>▪ Scarcer plants, such as soft-leaved sedge and bird’s-nest orchid are locally frequent and, more rarely, yellow bird’s-nest orchid can be found.</li> <li>▪ All factors affecting the achievement of the above conditions are under control.</li> </ul> <p>Performance indicators for Feature 1</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Cym Clydach Management Plan</a>.</p> <p><b>Conservation Objective for Feature 2:</b> <i>Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion</i></p> <p>Vision for feature 2</p> <p>The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <p>At least 75% of the woodland vegetation meets the criteria for intact acid beech wood, where:</p> <ul style="list-style-type: none"> <li>▪ At least 10% of the canopy forming trees are beech.</li> <li>▪ The canopy cover is at least 80% and composed of locally native species.</li> <li>▪ The woodland has trees of all age classes with a scattering of standing and fallen dead wood.</li> <li>▪ Regeneration of trees is sufficient to maintain the woodland cover in the long term.</li> <li>▪ The shrub layer and ground flora can be quite sparse, but where present consist of locally native plants.</li> <li>▪ All factors affecting the achievement of the above conditions are under control.</li> </ul>

Site Name: Cym Clydach Woodlands Location Grid Ref: SO207123 JNCC Site Code: <a href="#">UK0030127</a> Size: 28.81 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p>Performance indicators for Feature 2</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Cym Clydach Management Plan</a>.</p>
<b>Component SSSIs</b>	<ul style="list-style-type: none"> <li>▪ Cym Clydach SSSI is composed of 5 management units of which numbers 1 and 5 comprise to form the Cym Clydach Woodlands SAC. A map of the management units can be viewed on the <a href="#">CCW website</a>.</li> </ul>
<b>Key Environmental Conditions (factors that maintain site integrity)</b>	<ul style="list-style-type: none"> <li>▪ <b>Grazing</b> - Sufficiently low to allow regeneration in the long term.</li> <li>▪ <b>Non-native and invasive species</b> - No increase in the area of woodland floor that is dominated by invasive species.</li> </ul>
<b>SAC Condition Assessment</b>	<p><b>Conservation Status of Feature 1</b> <i>Asperulo – Fagetum</i> beech forests</p> <p>The conservation status of this feature within the site is considered to be <b>Favourable</b> (2006).</p> <p><b>Conservation Status of Feature 2</b> Atlantic <i>acidophilous</i> beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>)</p> <p>The conservation status of this feature within the site is considered to be <b>Favourable</b> (2006).</p>
<b>Vulnerabilities (includes existing pressures and trends)</b>	<ul style="list-style-type: none"> <li>▪ <b>Woodland management</b> - Recent changes in management within the locality, a general reduction of sheep numbers and the construction of cycle route through the site may have the potential to adversely effect the grassland areas and the fungi in particular.</li> </ul>

Site Name: Cym Clydach Woodlands Location Grid Ref: SO207123 JNCC Site Code: <a href="#">UK0030127</a> Size: 28.81 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<ul style="list-style-type: none"> <li>▪ <b>Grazing</b> - Past grazing has influenced the structure of the woodland, such as the dominance of beech in the canopy. It is therefore likely that occasional light grazing would be beneficial for the woodland habitat, although any increase in grazing pressure could prevent all tree and shrub regeneration and suppress the woodland ground flora.</li> <li>▪ <b>Dumping</b> - Due to roads passing through the site, parts are accessible to vehicles and the illegal dumping of domestic and commercial waste and abandoned vehicles can be a problem. It is essential that these barriers be maintained to prevent any future occurrences.</li> <li>▪ <b>Invasive alien plants</b> - Japanese knotweed is a problem in parts of the site, usually having been introduced by illegal dumping of waste material, and this species will be controlled as necessary.</li> </ul> <p>Airborne acid and nutrient deposition are not a significant threat here as most of the woodland soils are well-buffered and nutrient-rich.</p>
<b>Landowner/ Management Responsibility</b>	<ul style="list-style-type: none"> <li>▪ Unit 1 is owned by CCW and comprises the bulk of the SAC beech woodland. Most of the acidophilous beech woodland is found towards the western part of Unit 1.</li> <li>▪ Unit 5 is other land within the SAC not owned by CCW.</li> </ul>
<b>HRA/AA Studies undertaken that address this site</b>	<p>HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008.  <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf</a></p> <ul style="list-style-type: none"> <li>▪ It is considered that the potential impact from development in Torfaen would be negligible. Taking the precautionary approach the HRA Assessment for the LDP has identified the potential for in-combination effects on 4 SAC sites, which includes Cwm Clydach Woodlands SAC.</li> </ul>

<b>Site Name: Llangorse Lake</b> <b>Location Grid Ref: SO131262</b> <b>JNCC Site Code: <a href="#">UK0012985</a></b> <b>Size: 215.64</b> <b>Designation: SAC</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
<b>Site Description</b>	<p>The site is situated towards the head of the Afon Llynfi between the hills of Mynydd Llangorse and Allt yr Esgair. Llangorse Lake is a large shallow lake with a mean depth 2-3 metres lying in a natural depression of the Old Red Sandstone drift formed during the last glacial period. It is the largest natural lowland water in south Wales. It is one of the few natural eutrophic lakes in Britain and is of European importance in this context.</p> <p>The combination of the mineral-rich geology and size and shape of the lake encourages the growth of a wide range of aquatic and marginal plants, including several that are rare in this part of Wales. The site also demonstrates a gradation from open water, with submerged and floating plant beds, through marginal swamp and fen vegetation, marshy grassland to drier unimproved grassland, with patches of willow scrub and wet woodland. The lake also has a diverse plankton community and supports a wide variety of invertebrates, including rare and scarce species.</p>
<b>Qualifying Features</b>	<p>Annex I Habitats primary reason for selection:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Natural eutrophic lakes with Magnopotamion or Hydrochariton-type vegetation</a></li> </ul>
<b>Conservation Objectives</b>	<p><b>Conservation Objective for Feature 1:</b>            Natural Eutrophic Lakes with Magnopotamion or Hydrochariton – type vegetation</p> <p>Vision for feature 1</p> <p>The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ There is no loss of lake area, as defined in 2006 aerial photographs for summer levels.</li> <li>▪ The aquatic plant community is typical of this lake type in terms of composition and structure, including species such as water-starworts, stoneworts, duckweeds, broad-leaved and fine-leaved pondweeds, water lilies, amphibious bistort, water-crowfoots, rigid hornwort, spiked water-milfoil, mare’s-tail and horned pondweed.</li> <li>▪ Plants indicating very high nutrient levels and excessive silt loads are not dominant and invasive non-native</li> </ul>

Site Name: Llangorse Lake Location Grid Ref: SO131262 JNCC Site Code: <a href="#">UK0012985</a> Size: 215.64 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p>water plants do not threaten to out-compete the native flora.</p> <ul style="list-style-type: none"> <li>▪ The nutrient, pH and dissolved oxygen levels are typical for a lake of this type and there is no excessive growth of cyanobacteria or green algae.</li> <li>▪ There is a natural hydrological regime.</li> <li>▪ The natural shoreline is maintained.</li> <li>▪ The natural and characteristic substrate is maintained.</li> <li>▪ The natural sediment load maintained.</li> <li>▪ All factors affecting the achievement of these conditions are under control.</li> </ul> <p>Performance indicators for Feature 1</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Llangorse Lake Management Plan</a>.</p>
<b>Component SSSIs</b>	<p>Llyn Syfaddan (Llangorse Lake) SSSI – is composed of 13 management units, the SAC covers the same area.</p> <p>A map of the site can be viewed on the <a href="#">CCW website</a>.</p>
<b>Key Environmental Conditions (factors that maintain site integrity)</b>	<ul style="list-style-type: none"> <li>▪ <b>Water Quality</b> - there should be no eutrophication:             <ul style="list-style-type: none"> <li>○ Upper limit: Annual mean total phosphorus (TP) of 35 µg/l-1 or less.</li> <li>○ Lower limit: At least 5 mg/l-1 dissolved oxygen (O<sub>2</sub>) throughout the water column.</li> </ul> </li> <li>▪ <b>Hydrology</b> - No new structures that will reduce inflow or deepening or enlargement of outflow points.</li> <li>▪ <b>Sediment loads and lake substrate</b> - No extensive poaching of the lake margins by stock.</li> <li>▪ <b>Recreational Disturbance</b> - No use outside agreed zones and periods of year as described in printed guidance.</li> <li>▪ <b>Development</b> - No new permanent jetties, slipways or hard bank structures.</li> <li>▪ <b>Non-native species (Fish)</b> - Any introduction of species that are not native to Llangorse would be highly undesirable.</li> </ul>



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	<ul style="list-style-type: none"> <li>○ Upper limit: Introduced species should be removed or populations controlled as necessary. This will be guided by regular EA fish sampling.</li> <li>○ Lower limit: Fish are an essential component of the lake ecology. Populations need to be maintained by a sensible fisheries policy/rules and by ensuring other factors such as water quality are under control.</li> <li>▪ <b>Non-native &amp; Invasive Species</b> - Canadian and/or Nuttall's waterweed (<i>Elodea</i> spp.) no more than frequent. AND: No invasive non-native species, such as New Zealand pigmyweed, floating pennywort, curly waterweed, parrot's-feather, water fern, signal crayfish and zebra mussel, are present in the lake.</li> </ul>
<b>SAC Condition Assessment</b>	<p><b>Conservation Status of Feature 1:</b> Natural Eutrophic Lakes with Magnopotamion or Hydrochariton – type vegetation</p> <p>The conservation status of this feature within the site is considered to be <b>Un-favourable</b> (2006).</p> <p>The full restoration of the lake to favourable condition may be difficult to achieve in the short term because of residual nutrients stored within the lake's sediments. However, every effort should be made to restore the structure and functioning of the lake to a favourable, sustainable status, with particular attention being paid to the management of environmental factors which could cause the lake to switch from the plant-dominated to phytoplankton-dominated stable state.</p>
<b>Vulnerabilities (includes existing pressures and trends)</b>	<ul style="list-style-type: none"> <li>▪ <b>Eutrophication</b> - The quality of the water at Llangorse Lake is very important to the maintenance of its very special plants and animals. The lake sits within a small, predominantly lowland catchment and so receives its water from a very limited area. As the small Afon Llynfi is the main outlet for water from the lake, the water flows through the lake very slowly and any pollutants entering the lake will potentially remain there for long periods. Much of the current pollution is in the form of nutrients from the air and the many small watercourses entering the lake. Extra nutrients in a naturally nutrient rich lake dramatically change the types of plants growing in the lake and the number and type of insects that are able to live among the plants. This has a knock-on effect on the fish, birds and mammals of the lake. Since the diversion directly to the Afon Llynfi of water that was causing eutrophication of the lake, the lake has been slowly recovering from a polluted state and it is vital that this recovery continues. The lake is surrounded by land that is</li> </ul>

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	<p>agriculturally productive, with much used as arable or grass ley.</p> <ul style="list-style-type: none"> <li> <p>▪ <b>Sediment run-off</b> - Llangorse Lake sits in a shallow natural basin; the average depth of the lake is only 2-3 metres. The natural processes of erosion from the surrounding hills will naturally reduce the depth of the lake, albeit at a very slow rate, over time, but because of the shallowness of the lake it is exceptionally vulnerable to any extra sediments that may enter the lake from sources other than the natural inputs. It is essential that land in the catchment be carefully managed to avoid sediment run-off, which could cause rapid siltation of the lake. It is therefore important that any land management practices such as ploughing and stock feeding within the SSSI or lake catchment should be compliant with good agricultural practice. Avoiding any exposed soil or mud where it can wash into watercourses entering the lake and keeping a buffer zone of permanent grassland in the lake's flood zone and next to water courses. Any ditches feeding into the lake need to be carefully managed to enable sediments to be trapped rather than enter the lake.</p> </li> <li> <p>▪ <b>Recreation</b> - Llangorse Lake is a very popular location for water-based recreation, attracting fishermen, sailing craft, water-skiers, canoeists/kayakers and outdoor groups. However, there is great potential to disturb habitats and the wildlife that inhabits the lake. The many bird species that feed, nest or rest on and around the lake are particularly vulnerable to disturbance from recreational use of the lake itself and from walkers and dogs. Wash from motorboats can be a problem, as it can erode vegetation and the shoreline and it is essential that the numbers using the lake are limited and exclusion zones observed. Fishing should be managed to ensure that the balance of fish populations is maintained, predatory fish such as pike, are returned to the lake, and that there is no introduction of fish species not native to the lake. It is essential that this land-based recreation should continue to have a low impact on the lake's wildlife and that people continue to behave responsibly, do not disturb the habitats and importantly keep dogs under control to prevent disturbance to nesting birds. Parts of the lake have no public access and it is essential that this should continue, as it is in these quiet areas that birds such as lapwing are able to continue to breed, wildfowl such as coot and wigeon can feed, and mammals such as otters can find quiet areas to rest.</p> </li> <li> <p>▪ <b>Non-native invasive species</b> - Non-native species including Canada geese and Canadian pondweed already exist in and around Llangorse Lake. Although all of the consequences of their presence (especially</p> </li> </ul>

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	<p>the impacts of grazing and enrichment from geese) are not desirable, their impact is not well understood at present and further research is required. Similarly, the presence of introduced fish species such as bream, which through feeding can disturb the lake sediments, raise the amount of available nutrients and cloud the water, which in turn can affect algal and aquatic weed vegetation. There are many non-native species such as New Zealand pigmyweed, zebra mussels and carp that, if introduced, could out-compete native species or in the case of carp cause severe disturbance to lake sediments.</p> <ul style="list-style-type: none"> <li>▪ <b>Management of surrounding habitats</b> - The many other habitats around the lake, such as the fen, woodlands and grassland are very important in their own right and often require management. The grasslands should be managed sympathetically, being either cut for hay in early summer and the aftermath grazed by sheep or cattle or lightly grazed throughout the growing season from spring into the early autumn. However, this would need to be carefully managed, so that the marginal vegetation is not damaged and marginal sediments not disturbed by excessive trampling. Much of the woodland surrounding the fringes of the lake adds greatly to the lake's diversity and provides further sheltering opportunities for its wildlife and requires little management. However, should the wet woodlands continue their expansion into the reed beds, non-chemical measures to control it should be employed to prevent losses of the other important habitats. The winter cutting of some reed beds could also be employed to aid the continuation of this fragile habitat.</li> </ul>
<p><b>Landowner/ Management Responsibility</b></p>	<ul style="list-style-type: none"> <li>▪ Unit 1 is owned or leased by the Brecon Beacons National Park Authority.</li> <li>▪ Unit 9 is the crannog - a man-made island and a Scheduled Ancient Monument (SAM). The island supports a few trees and there is a little marginal aquatic vegetation, but the main interest is archaeological. The boundary of the SAM extends beyond the island to include part of the water body and aquatic vegetation.</li> <li>▪ Unit 11 is common land, which has been developed in connection with recreational use. This is where the main jetties for launching boats are situated. There are also buildings, car parks, tracks and amenity grassland.</li> <li>▪ Unit 13 is the main body of water, which is a common in its own right. The size of the water body fluctuates and the lake is generally more extensive in the wetter winter months. The lake margin as illustrated on the</li> </ul>

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	<p>accompanying map shows the boundary of Unit 13, and represents mean summer level.</p> <ul style="list-style-type: none"> <li>▪ In Units 1-8 &amp; 10-12, which are mainly small fields, the SAC habitat is largely confined to the inundation zones (consisting of marginal fen and related habitats) which are flooded during the winter months and during high rainfall periods in summer months. Most of these units also contain habitats including marshy grassland, neutral grassland and woodland, which are not submerged by winter water levels.</li> </ul>
<b>HRA/AA Studies undertaken that address this site</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>

Site Name: River Usk Location Grid Ref: SO301113 JNCC Site Code: <a href="#">UK0013007</a> Size: 1007.71 Designation: SAC	Habitats Regulations Assessment: Data Proforma
<b>Site Description</b>	<p>The River Usk SAC rises in the Black Mountain range in the west of the Brecon Beacons National Park and flows east and then south, to enter the Severn Estuary at Newport. The overall form of the catchment is long and narrow, with short, generally steep tributaries flowing north from the Black Mountain, Fforest Fawr and Brecon Beacons, and south from Mynydd Epynt and the Black Mountains. The underlying geology consists predominantly of Devonian Old Red Sandstone with a moderate base status, resulting in waters that are generally well buffered against acidity. This geology also produces a generally low to moderate nutrient status, and a moderate base-flow index, intermediate between base-flow dominated rivers and more flashy rivers on less permeable geology. The run-off characteristics and nutrient status are significantly modified by land use in the catchment, which is predominantly pastoral with some woodland and commercial forestry in the headwaters and arable in the lower catchment. The Usk catchment is entirely within Wales.</p> <p>The ecological structure and functions of the site are dependent on hydrological and geomorphological processes (often referred to as hydromorphological processes), as well as the quality of riparian habitats and</p>

Site Name: River Usk Location Grid Ref: SO301113 JNCC Site Code: <a href="#">UK0013007</a> Size: 1007.71 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p>connectivity of habitats. Animals that move around and sometimes leave the site, such as migratory fish and otters, may also be affected by factors operating outside the site.</p> <p>The River Usk is also important for its population of sea lamprey <i>Petromyzon marinus</i>. The site also supports a healthy population of brook lamprey <i>Lampetra planeri</i> and river lamprey <i>Lampetra fluviatilis</i> and is considered to provide exceptionally good quality habitat likely to ensure the continued survival of the species in this part of the UK. The site supports a range of Annex II fish species, which includes twaite shad <i>Alosa fallax</i>, salmon <i>Salmo salar</i> and bullhead <i>Cottus gobio</i>. The River Usk is an important site for otters <i>Lutra lutra</i> in Wales.</p>
<b>Qualifying Features</b>	<p>Annex I Habitats qualifying feature:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation</a></li> </ul> <p>Annex II Species primary reason for selection:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Sea lamprey</a> <i>Petromyzon marinus</i></li> <li>▪ <a href="#">Brook lamprey</a> <i>Lampetra planeri</i></li> <li>▪ <a href="#">River lamprey</a> <i>Lampetra fluviatilis</i></li> <li>▪ <a href="#">Twaite shad</a> <i>Alosa fallax</i></li> <li>▪ <a href="#">Atlantic salmon</a> <i>Salmo salar</i></li> <li>▪ <a href="#">Bullhead</a> <i>Cottus gobio</i></li> <li>▪ <a href="#">Otter</a> <i>Lutra lutra</i></li> </ul> <p>Annex II Species qualifying feature:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Allis shad</a> <i>Alosa alosa</i></li> </ul>
<b>Conservation Objectives</b>	<p>The ecological status of the water course is a major determinant of Favourable Condition Status (FCS) for all features. The required conservation objective for the water course is defined below.</p> <p><b>Conservation Objective for the water course</b></p>

<p>Site Name: River Usk Location Grid Ref: SO301113 JNCC Site Code: <a href="#">UK0013007</a> Size: 1007.71 Designation: SAC</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<ul style="list-style-type: none"> <li>■ The capacity of the habitats in the SAC to support each feature at near-natural population levels, as determined by predominantly unmodified ecological and hydromorphological processes and characteristics, should be maintained as far as possible, or restored where necessary.</li> <li>■ The ecological status of the water environment should be sufficient to maintain a stable or increasing population of each feature. This will include elements of water quantity and quality, physical habitat and community composition and structure. It is anticipated that these limits will concur with the relevant standards used by the Review of Consents process given in Annexes 1-3.</li> <li>■ Flow regime, water quality and physical habitat should be maintained in, or restored as far as possible to, a near-natural state, in order to support the coherence of ecosystem structure and function across the whole area of the SAC.</li> <li>■ All known breeding, spawning and nursery sites of species features should be maintained as suitable habitat as far as possible, except where natural processes cause them to change.</li> <li>■ Flows, water quality, substrate quality and quantity at fish spawning sites and nursery areas will not be depleted by abstraction, discharges, engineering or gravel extraction activities or other impacts to the extent that these sites are damaged or destroyed.</li> <li>■ The river planform and profile should be predominantly unmodified. Physical modifications having an adverse effect on the integrity of the SAC, including, but not limited to, revetments on active alluvial river banks using stone, concrete or waste materials, unsustainable extraction of gravel, addition or release of excessive quantities of fine sediment, will be avoided.</li> <li>■ River habitat SSSI features should be in favourable condition. In the case of the Usk Tributaries SSSI, the SAC habitat is not underpinned by a river habitat SSSI feature. In this case, the target is to maintain the characteristic physical features of the river channel, banks and riparian zone.</li> <li>■ Artificial factors impacting on the capability of each species feature to occupy the full extent of its natural range should be modified where necessary to allow passage, eg. weirs, bridge sills, acoustic barriers.</li> <li>■ Natural factors such as waterfalls, which may limit the natural range of a species feature or dispersal between naturally isolated populations, should not be modified.</li> <li>■ Flows during the normal migration periods of each migratory fish species feature will not be depleted by abstraction to the extent that passage upstream to spawning sites is hindered.</li> </ul>

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	<ul style="list-style-type: none"> <li>▪ Flow objectives for assessment points in the Usk Catchment Abstraction Management Strategy will be agreed between EA and CCW as necessary. It is anticipated that these limits will concur with the standards used by the Review of Consents process given in Annex 1 of this document.</li> <li>▪ Levels of nutrients, in particular phosphate, will be agreed between EA and CCW for each Water Framework Directive water body in the Usk SAC, and measures taken to maintain nutrients below these levels. It is anticipated that these limits will concur with the standards used by the Review of Consents process given in Annex 2 of this document.</li> <li>▪ Levels of water quality parameters that are known to affect the distribution and abundance of SAC features will be agreed between EA and CCW for each Water Framework Directive water body in the Usk SAC, and measures taken to maintain pollution below these levels. It is anticipated that these limits will concur with the standards used by the Review of Consents process given in Annex 3 of this document.</li> <li>▪ Potential sources of pollution not addressed in the Review of Consents, such as contaminated land, will be considered in assessing plans and projects.</li> <li>▪ Levels of suspended solids will be agreed between EA and CCW for each Water Framework Directive water body in the Usk SAC. Measures including, but not limited to, the control of suspended sediment generated by agriculture, forestry and engineering works, will be taken to maintain suspended solids below these levels.</li> </ul> <p><b>Conservation Objective for Features 1-5:</b></p> <ul style="list-style-type: none"> <li>- <b>Sea lamprey</b> <i>Petromyzon marinus</i>;</li> <li>- <b>Brook lamprey</b> <i>Lampetra planeri</i>;</li> <li>- <b>River lamprey</b> <i>Lampetra fluviatilis</i>;</li> <li>- <b>Twaite shad</b> <i>Alosa fallax</i>;</li> <li>- <b>Allis shad</b> <i>Alosa alosa</i>;</li> <li>- <b>Atlantic salmon</b> <i>Salmo salar</i>;</li> <li>- <b>Bullhead</b> <i>Cottus gobio</i>.</li> </ul> <p>Vision for features 1-5</p>

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	<p>The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ The conservation objective for the water course as defined in 4.1 above must be met.</li> <li>▪ The population of the feature in the SAC is stable or increasing over the long term.</li> <li>▪ The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. The natural range is taken to mean those reaches where predominantly suitable habitat for each life stage exists over the long term. Suitable habitat is defined in terms of near-natural hydrological and geomorphological processes and forms eg. suitable flows to allow upstream migration, depth of water and substrate type at spawning sites, and ecosystem structure and functions eg. food supply. Suitable habitat need not be present throughout the SAC but where present must be secured for the foreseeable future. Natural factors such as waterfalls may limit the natural range of individual species. Existing artificial influences on natural range that cause an adverse effect on site integrity, such as physical barriers to migration, will be assessed in view of the following bullet point.</li> <li>▪ 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.</li> </ul> <p>Performance indicators for features 1-5</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">River Usk Management Plan</a>.</p> <p><b>Conservation Objective for Feature 6:</b>  <b>- European otter <i>Lutra lutra</i></b></p> <p>Vision for feature 6          The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p>



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	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ The natural range of otters in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. The natural range is taken to mean those reaches that are potentially suitable to form part of a breeding territory and/or provide routes between breeding territories. The whole area of the Usk SAC is considered to form potentially suitable breeding habitat for otters. The size of breeding territories may vary depending on prey abundance. The population size should not be limited by the availability of suitable undisturbed breeding sites. Where these are insufficient they should be created through habitat enhancement and where necessary the provision of artificial holts. 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.</li> <li>▪ 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.</li> </ul> <p>Performance indicators for feature 6</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">River Usk Management Plan</a>.</p> <p><b>Conservation Objective for Feature 7:</b> - <b>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation</b></p> <p>Vision for feature 7</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans</p>

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	<p>and projects must be based on the entire conservation objective, not just the performance indicators.</p> <ul style="list-style-type: none"> <li>▪ The conservation objectives for the water course as defined above must be met.</li> <li>▪ The natural range of the plant communities represented within this feature should be stable or increasing in the SAC. The natural range is taken to mean those reaches where predominantly suitable habitat exists over the long term. Suitable habitat and associated plant communities may vary from reach to reach. Suitable habitat is defined in terms of near-natural hydrological and geomorphological processes and forms eg. depth and stability of flow, stability of bed substrate, and ecosystem structure and functions eg. nutrient levels, shade. Suitable habitat for the feature need not be present throughout the SAC but where present must be secured for the foreseeable future, except where natural processes cause it to decline in extent.</li> <li>▪ The area covered by the feature within its natural range in the SAC should be stable or increasing.</li> <li>▪ 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.</li> </ul> <p>Performance indicators for feature 7</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">River Usk Management Plan</a>.</p>
<p><b>Component SSSIs</b></p>	<ul style="list-style-type: none"> <li>▪ River Usk (Upper Usk) SSSI</li> <li>▪ River Usk (Lower Usk) SSSI</li> <li>▪ River Usk (Tributaries) SSSI</li> <li>▪ Penllwyn-yr-hendy SSSI</li> <li>▪ Coed Dyrysiog SSSI</li> <li>▪ Coed Nant Menascin SSSI</li> </ul>

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	<ul style="list-style-type: none"> <li>▪ Coed Ynysfaen SSSI</li> </ul> <p>The SAC has been divided into 10 management units:</p> <ul style="list-style-type: none"> <li>▪ Units 1 to 3 - River Usk (Lower Usk) SSSI.</li> <li>▪ Units 4 to 6 - River Usk (Upper Usk) SSSI.</li> <li>▪ Units 7 to 10 - River Usk (Tributaries) SSSI.</li> </ul> <p>A map showing the various management units can be seen within the <a href="#">River Usk Management Plan</a>.</p>
<p><b>Key Environmental Conditions (factors that maintain site integrity)</b></p>	<ul style="list-style-type: none"> <li>▪ <b>Hydrological processes:</b> <ul style="list-style-type: none"> <li>○ <b>River flow</b> (level and variability) and <b>water chemistry</b>, determine a range of habitat factors of critical importance to the SAC features, including current velocity, water depth, wetted area, substrate quality, dissolved oxygen levels and water temperature. Maintenance of both high 'spate' flows and base-flows is essential. Reduction in flows may reduce the ability of the adults of migratory fish to reach spawning sites. Water-crowfoot vegetation thrives in relatively stable, moderate flows and clean water. The flow regime should be characteristic of the river in order to support the functioning of the river ecosystem.</li> </ul> </li> <li>▪ <b>Geomorphological processes</b> - of erosion by water and subsequent deposition of eroded sediments downstream, create the physical structure of the river habitats. Whilst some sections of the river are naturally stable, especially where they flow over bedrock, others undergo constant and at times rapid change through the erosion and deposition of bed and bank sediments as is typical of meandering sections within floodplains (called 'alluvial' rivers). These processes help to sustain the river ecosystem by allowing a continued supply of clean gravels and other important substrates to be transported downstream. In addition, the freshly deposited and eroded surfaces, such as shingle banks and earth cliffs, enable processes of ecological succession to begin again, providing an essential habitat for specialist, early-successional species. Lampreys need clean gravel for spawning, and marginal silt or sand for the burrowing juvenile ammocoetes. Processes at the wider catchment scale generally govern processes of erosion and deposition occurring at the reach scale, although locally, factors such as the effect of grazing levels on riparian vegetation structure may contribute to enhanced erosion rates. In general, management</li> </ul>

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	<p>that interferes with natural geomorphological processes, for example preventing bank erosion through the use of hard revetments or removing large amounts of gravel, are likely to be damaging to the coherence of the ecosystem structure and functions.</p> <ul style="list-style-type: none"> <li> <p>▪ <b>Riparian habitats</b> - including bank sides and habitats on adjacent land, are an integral part of the river ecosystem. Diverse and high quality riparian habitats have a vital role in maintaining the SAC features in a favourable condition. The type and condition of riparian vegetation influences shade and water temperature, nutrient run-off from adjacent land, the availability of woody debris to the channel and inputs of leaf litter and invertebrates to support in-stream consumers. Light, temperature and nutrient levels influence in-stream plant production and habitat suitability for the SAC features. Woody debris is very important as it provides refuge areas from predators, traps sediment to create spawning and juvenile habitat and forms the base of an important aquatic food chain. Otters require sufficient undisturbed riparian habitats as breeding and resting sites. It is important that appropriate amounts of tree cover, in general at least 50% high canopy cover, tall vegetation and other semi-natural habitats are maintained on the riverbanks and in adjacent areas, and that they are properly managed to support the SAC features. This may be achieved, for example, through managing grazing levels, selective coppicing of riparian trees and restoring adjacent wetlands. In the urban sections the focus may be on maintaining the river as a communication corridor but this will still require that sufficient riparian habitat is present and managed to enable the river corridor to function effectively.</p> </li> <li> <p>▪ <b>Habitat connectivity</b> - is an important property of a river ecosystem structure and function. Many of the fish that spawn in the river are migratory, depending on the maintenance of suitable conditions on their migration routes to allow the adults to reach available spawning habitat and juvenile fish to migrate downstream. For resident species, dispersal to new areas, or the prevention of dispersal causing isolated populations to become genetically distinct, may be important factors. Naturally isolated feature populations that are identified as having important genetic distinctiveness should be maintained. Artificial obstructions including weirs and bridge sills can reduce connectivity for some species. In addition, reaches subject to depleted flow levels, pollution, or disturbance due to noise, vibration or light, can all inhibit the movement of sensitive species. The dispersal of semi-terrestrial species such as the otter can be adversely</p> </li> </ul>

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	<p>affected by structures such as bridges under certain flow conditions; therefore, these must be designed to allow safe passage. The continuity of riparian habitats enables a wide range of terrestrial species, for example lesser horseshoe bats, to migrate and disperse through the landscape. Connectivity should be maintained or restored where necessary as a means to ensure access for the features to sufficient habitat within the SAC.</p>
<b>SAC Condition Assessment</b>	<p><b>Conservation status of Feature 1: Sea lamprey <i>Petromyzon marinus</i></b></p> <p>Status: <b>Unfavourable</b>: Unclassified. Sea lamprey monitoring showed that overall catchment mean ammocoete density considerably exceeded the JNCC target threshold and also complied with targets for spawning site and ammocoete distribution. A caveat on the latter is uncertainty over whether the natural range of sea lamprey extends above Brecon weir: this is assumed not to be the case.</p> <p>Factors leading to an unfavourable assessment are the presence of probable partial barriers further downstream (notably Crickhowell Bridge), and flow depletion resulting from abstractions including Brecon canal and Prioress Mill public water supply abstraction. The latter in particular has been shown to have effects both on a seasonal timescale by reducing spate flows during the migration period and on a diurnal timescale by substantially depleting flows during the night time to the extent that sea lamprey nests and nursery areas are likely to be exposed above the water level. The effect of the Brecon canal abstraction has been shown to comprise a substantial depletion of flows, at least locally, during low flow periods with a resulting reduction in river depth downstream of the off-take weir.</p> <p><b>Conservation status of Feature 2: Brook lamprey <i>Lampetra planeri</i> and River lamprey <i>Lampetra fluviatilis</i></b></p> <p>Status: <b>Favourable</b>. Brook/river lamprey monitoring showed that overall catchment mean ammocoete density considerably exceeded the JNCC target threshold and also complied with targets for ammocoete distribution<sup>1</sup>.</p>

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	<p>It has not been possible to distinguish between these two species during monitoring, due to the reliance on juvenile stages (ammocoetes). Anecdotal evidence suggests that both species are likely to be present in many reaches, though brook lamprey are expected to predominate in the headwaters and river lamprey may be the more abundant species in the main channel and the lower reaches of larger tributaries. More information on the relative abundance of these two species in different parts of the Usk SAC is desirable. Records of spawning adult river lamprey would be particularly useful.</p> <p><b>Conservation status of Feature 3: Twaite shad <i>Alosa fallax</i> and Allis shad <i>Alosa alosa</i></b></p> <p>Status: <b>Unfavourable:</b> Unclassified. Monitoring of these species in the Usk relies on two methods, Kick sampling for eggs provides qualitative information on spawning distribution, Netting for juveniles in the lower river and tidal reaches during late summer/autumn when juveniles drift downstream towards the estuary.</p> <p>These methods do not distinguish between the two species. Allis shad is thought to be rare, with no recent records in the Usk, while twaite shad is relatively common. Kick sampling for eggs is only able to give a broad scale indication of presence or absence at sampled locations. Netting for juveniles gives a quantitative estimate of abundance, though may be subject to a high degree of uncertainty due to sampling error. This uncertainty is likely to be compounded by variation between years in the size of the adult run, spawning success and resulting numbers of juveniles. Poor adult runs are likely to result from unsuitable flows during the March to June migration period, in particular prolonged low flows, while poor survival of eggs and juveniles is related to spate flows in the mid to late summer which can flush them into the estuary prematurely.</p> <p>CSM guidance states that adult run size should comply with an agreed target for each river, with no drop in the annual run greater than would be expected from variations in natural mortality alone. This attribute is not currently assessed in the Usk due to the absence of a fish counter.</p> <p>The current unfavourable status results from a precautionary assessment of feature distribution and abundance, and from the presence of adverse factors, in particular flow depletion and physical barriers to</p>

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	<p>migration.</p> <p><b>Conservation status of Feature 4: Atlantic salmon <i>Salmo salar</i></b></p> <p>Status: <b>Unfavourable:</b> Unclassified. Monitoring of Atlantic salmon in the Usk relies on two methods,</p> <ol style="list-style-type: none"> <li>1. Estimation of adult run size from angling catch returns,</li> <li>2. Electro-fishing for juveniles in nursery areas.</li> </ol> <p>The estimate of adult numbers is converted into an estimate of numbers of eggs deposited which is compared against an Egg Deposition Target (EDT), calculated by considering the area of suitable spawning habitat within the catchment. The equivalent adult run to achieve the EDT is described in terms of a Conservation Limit, which must be exceeded 4 years in 5 for the Management Target to be considered attained. Electro-fishing for juveniles is either quantitative or semi-quantitative, and estimated juvenile densities are classified in one of six categories A to F. The monitoring guidance produced by the LIFE in UK Rivers project recommends that ideally juvenile densities should be compared to predicted densities for the sample reach using the HABSCORE model<sup>6</sup>. These targets are calculated and monitored by the Environment Agency as part of the Salmon Action Plan for the Usk.</p> <p>The current unfavourable status results from a precautionary assessment of feature distribution and abundance, in particular the results of juvenile surveys, and from the presence of adverse factors, in particular flow depletion and localised water quality failures.</p> <p><b>Conservation status of Feature 5: Bullhead <i>Cottus gobio</i></b></p> <p>Status: <b>Unfavourable:</b> Unclassified. The current unfavourable status results from the presence of adverse factors, in particular flow depletion and localised water quality failures. Records obtained from juvenile salmon monitoring show that bullhead are widespread in the main river and tributaries. There is a need for quantitative information on bullhead abundance, which will be addressed by targeted monitoring in 2007.</p>

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	<p><b>Conservation status of Feature 6: European otter <i>Lutra lutra</i></b></p> <p>Status: <b>Favourable</b>. The conservation status of otters in the Usk SAC is determined by monitoring their distribution, breeding success, and the condition of potential breeding and feeding habitat outlined in the Performance Indicators. Their current condition can be considered favourable, but with scope for further improvement, if habitat and other natural factors can be maintained and enhanced.</p> <p><b>Conservation status of Feature 7: Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation</b></p> <p>Status: <b>Unfavourable</b>: Unclassified. This feature is not identified as one of the primary reasons for designation of the River Usk SAC; its distribution being apparently limited by the availability of suitable hydromorphological conditions. Important stands have been identified in the lower reaches of the main river below Abergavenny down to the tidal limit, and in the upper reaches of a headwater stream, the Afon Senni. These reaches may represent a sub-type of the feature where large submerged and floating leaved flowering plants, in particular <i>Ranunculus</i>, are dominant. Habitat suitability studies<sup>4</sup> suggest that the natural range of the feature may be more widespread within the SAC. More widespread sub-types may consist of communities dominated by aquatic bryophytes. Where necessary, examples of these sub-types may be identified as priorities for management, for example through the management of riparian vegetation to preserve shade and humidity. Further understanding of the distribution and status of this feature and its natural range within the River Usk SAC is required.</p> <p>The present unfavourable status of the feature results from the over-abundance of invasive non-native species of bankside plant communities, which are included within the feature definition. These are predominantly giant hogweed and Himalayan balsam in the lower reaches of the main river.</p>
<p><b>Vulnerabilities (includes existing pressures and trends)</b></p>	<ul style="list-style-type: none"> <li>▪ <b>Abstraction levels</b> - Entrainment in water abstractions directly impacts on population dynamics through reduced recruitment and survival rates. The impact of flow depletion resulting from a small number of major abstractions was highlighted in the Review of Consents process.</li> </ul>



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	<ul style="list-style-type: none"> <li> <p>▪ <b>Eutrophication</b> - factors that are important to the favourable conservation status of this feature include flow, substrate quality and water quality, which in turn influence species composition and abundance. These factors often interact, producing unfavourable conditions by promoting the growth of a range of algae and other species indicative of eutrophication. Under conditions of prolonged low flows and high nutrient status, epiphytic algae may suppress the growth of aquatic flowering plants.</p> </li> <li> <p>▪ <b>Diffuse Pollution</b> - The Atlantic salmon is the focus for much of the management activity carried out on the Usk. The relatively demanding water quality and spawning substrate quality requirements of this feature mean that reduction in diffuse pollution and siltation impacts is a high priority. In the Usk catchment, the most significant sources of diffuse pollution and siltation are from agriculture, including fertiliser run-off, livestock manure, silage effluent and soil erosion from ploughed land. The most intensively used areas such as heavily trampled gateways and tracks can be especially significant sources of polluting run-off. Farm operations should avoid ploughing land which is vulnerable to soil erosion or leaving such areas without crop cover during the winter. Contamination by synthetic pyrethroid sheep dips, which are extremely toxic to aquatic invertebrates, has a devastating impact on crayfish populations and can deprive fish populations of food over large stretches of river. These impacts can arise if recently dipped sheep are allowed access to a stream or hard standing area, which drains into a watercourse. Pollution from organophosphate sheep dips and silage effluent can be very damaging locally. Pollution from slurry and other agricultural and industrial chemicals, including fuels, can kill all forms of aquatic life. All sheep dips and silage, fuel and chemical storage areas should be sited away from watercourses or bunded to contain leakage. Recently dipped sheep should be kept off stream banks. Discharges from sewage treatment works, urban drainage, engineering works such as road improvement schemes, contaminated land, and other domestic and industrial sources can also be significant causes of pollution, and must be managed appropriately. Pollution of rivers with toxic chemicals, such as PCBs, was one of the major factors identified in the widespread decline of otters during the last century.</p> </li> <li> <p>▪ <b>Barriers to migration</b> - There are few barriers to migration for the anadromous species and where barriers exist, investigation is proposed to analyse for potential impacts and remedy them through multi-species fish</p> </li> </ul>

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	<p>passes. Crickhowell Bridge is considered to be the most significant barrier to fish migration in the Usk. Management to reduce or remove the effect of this barrier is a high priority for the River Usk SAC. Artificial physical barriers are probably the single most important factor in the decline of shad in Europe. Impassable obstacles between suitable spawning areas and the sea can eliminate breeding populations of shad. Both species (but particularly allis shad) can make migrations of hundreds of kilometres from the estuary to spawning grounds in the absence of artificial barriers. Existing fish passes designed for salmon are often not effective for shad.</p> <ul style="list-style-type: none"> <li> <p>▪ <b>Development pressure</b> - in the lower catchment can cause temporary physical, acoustic, chemical and sediment barrier effects that need to be addressed in the assessment of specific plans and projects. Noise/vibration e.g. due to impact piling, drilling, salmon fish counters present within or in close proximity to the river can create a barrier to shad migration. Land on both sides of the river in Newport is potentially highly contaminated. Contamination of the river can arise when this is disturbed e.g. as a result of development. Contamination can also arise from pollution events (which could be shipping or industry related). Barriers resulting from vibration, chemicals, low dissolved oxygen and artificially high sediment levels must be prevented at key times (generally March to June).</p> </li> <li> <p>▪ <b>Invasive non-native plants</b> - are a detrimental impact on the water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation. Giant hogweed, Himalayan balsam and Japanese knotweed should be actively managed to control their spread and hopefully reduce their extent in the SAC.</p> </li> <li> <p>▪ <b>Artificially enhanced densities of other fish</b> - may introduce unacceptable competition or predation pressure and the aim should be to minimise these risks in considering any proposals for stocking.</p> </li> <li> <p>▪ <b>External factors</b> - operating outside the SAC, may also be influential, particularly for the migratory fish and otters. For example, salmon may be affected by barriers to migration in the Severn Estuary, inshore fishing and environmental conditions prevailing in their north Atlantic feeding grounds. Otters may be affected by developments that affect resting and breeding sites outside the SAC boundary.</p> </li> </ul>

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Site Name: River Usk Location Grid Ref: SO301113 JNCC Site Code: <a href="#">UK0013007</a> Size: 1007.71 Designation: SAC	
Landowner/ Management Responsibility	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>
HRA/AA Studies undertaken that address this site	<p>HRA Screening of the County Council of the City and County of Cardiff Local Development Plan Preferred Strategy Sept 2007.  <a href="http://www.cardiff.gov.uk/ObjView.asp?Object_ID=9788">www.cardiff.gov.uk/ObjView.asp?Object_ID=9788</a></p> <ul style="list-style-type: none"> <li>▪ The Screening states that the most likely mechanism for the Preferred Strategy to have a significant effect on this site is through airborne pollution.</li> </ul> <p>HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008.  <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf</a></p> <ul style="list-style-type: none"> <li>▪ The Screening concludes that there is potential for significant effects on this site through discharge of sewerage, increased surface run-off and an increase in airborne pollutants.</li> </ul>

Habitats Regulations Assessment: Data Proforma	
Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: <a href="#">UK0014784</a> Size: 1686.4 Designation: SAC	
Site Description	<p>The site encompasses a series of lesser horseshoe bat roosts, upland habitats, woodlands and cave systems located around the valley of the River Usk near to Abergavenny.</p> <p>Mynydd Llangatwg is an area of open moorland and bog, with an impressive limestone escarpment along the northeastern edge, and is one of the largest exposures of upland limestone crag in south Wales. The Craig y Cilau National Nature Reserve (NNR) covers a large proportion of this escarpment area, including most of the</p>

<b>Site Name: Usk Bat Sites</b> <b>Location Grid Ref: SO190145</b> <b>JNCC Site Code: <a href="#">UK0014784</a></b> <b>Size: 1686.4</b> <b>Designation: SAC</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
	<p>unquarried scarp, with areas of limestone grassland, scree and quarry spoil, woodland and scrub. A small raised bog (Waun Ddu) bordered by two small streams has developed below the escarpment. An extensive system of caves lies beneath Mynydd Llangatwg and the plateau is peppered with sinkholes.</p> <p>The main reason for the presence of the NNR is to help control and manage access to the cave system to protect the bat roosts and the underground geology and also the surface habitats, which support an outstanding assemblage of plants. Species include large and small-leaved lime, several species of whitebeam (including least whitebeam (<i>Sorbus minima</i>) which is unique to this area of Brecknock), limestone fern, endemic hawkweeds and alpine enchanter's-nightshade.</p> <p>The chasmophytic vegetation encompasses the various crevices, nooks and crannies on the cliffs, boulders and partially vegetated unstable slopes of the limestone escarpment. It supports a typical range of ferns, bryophytes and calcareous lichens; these include ferns such as maidenhair spleenwort, mosses like <i>Tortella tortuosa</i>, and liverworts like <i>Scapania aspera</i>. This site is known to support a number of notable lichen species and provides some of the best examples in the area of calcicolous lichen communities, which include the jelly lichen <i>Collema cristatum</i> and examples of lichen communities like the <i>Leproplacetum chrysodetae</i> and <i>Aspicillion calcarea</i>.</p> <p>Patches of Tileo-Acerion forest are also scattered along the length of the cliffs on Mynydd Llangatwg and intermixed with beechwood in the Clydach gorge. These areas also support a number of rare whitebeams (<i>Sorbus</i> spp.).</p>
<b>Qualifying Features</b>	<p>Annex I Habitats qualifying feature:</p> <ul style="list-style-type: none"> <li>■ <a href="#">European dry heaths</a></li> <li>■ <a href="#">Degraded raised bogs still capable of natural regeneration</a></li> <li>■ <a href="#">Blanket bogs</a>* Priority feature</li> <li>■ <a href="#">Calcareous rocky slopes with chasmophytic vegetation</a></li> <li>■ <a href="#">Caves not open to the public</a></li> <li>■ <a href="#">Tilio-Acerion forests of slopes, screes and ravines</a>* Priority feature</li> </ul>

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: <a href="#">UK0014784</a> Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	Annex II Species primary reason for selection: <ul style="list-style-type: none"> <li>▪ <a href="#">Lesser horseshoe bat</a> <i>Rhinolophus hipposideros</i></li> </ul>
<b>Conservation Objectives</b>	<p><b>Conservation Objective for Feature 1: Lesser Horseshoe Bat <i>Rhinolophus hipposideros</i></b></p> <p>Vision for Feature 1 The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ The site will support a sustainable population of lesser horseshoe bats in the River Usk area.</li> <li>▪ The population will viable in the long term, acknowledging the population fluctuations of the species.</li> <li>▪ Buildings, structures and habitats on the site will be in optimal condition to support the populations.</li> <li>▪ Sufficient foraging habitat is available, in which factors such as disturbance, interruption to flight lines, and mortality from predation or vehicle collision, changes in habitat management that would reduce the available food source are not at levels which could cause any decline in population size or range</li> <li>▪ Management of the surrounding habitats is of the appropriate type and sufficiently secure to ensure there is likely to be no reduction in population size or range, nor any decline in the extent or quality of breeding, foraging or hibernating habitat.</li> <li>▪ There will be no loss or decline in quality of linear features (such as hedgerows and tree lines) which the bats use as flight lines - there will be no loss of foraging habitat use by the bats or decline in its quality, such as due to over-intensive woodland management</li> <li>▪ All factors affecting the achievement of the above conditions are under control.</li> </ul> <p>Performance indicators for Feature 1</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The</p>

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	<p>performance indicators can be found within the <a href="#">Usk Bat Sites Management Plan</a>.</p> <p><b>Conservation Objective for Feature 2: Blanket bog</b></p> <p>Vision for Feature 2</p> <ul style="list-style-type: none"> <li>▪ The extent, quality and species richness of the blanket bog vegetation is maintained and, where possible, degraded bog is restored to good condition so that this habitat occupies its full potential range within the site.</li> <li>▪ The bog vegetation is largely a mixture of dwarf shrubs, hare’s-tail cottongrass and mosses, including bog-mosses.</li> <li>▪ Extensive areas of purple moor-grass or hare’s-tail cottongrass show signs of recovery towards a more mixed dwarf shrub sward.</li> <li>▪ The natural hydrological regime is maintained and there is continued peat formation and thus carbon storage.</li> <li>▪ Areas of bare peat are not extensive and most areas show signs of recovery.</li> <li>▪ Peat profiles containing important pollen records are maintained.</li> <li>▪ All factors affecting the achievement of the above conditions are under control.</li> </ul> <p>Performance indicators for Feature 2</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Usk Bat Sites Management Plan</a>.</p> <p><b>Conservation Objective for Feature 3: Tilio-Acerion forests of slopes, screes and ravines</b></p> <p>Vision for Feature 3</p>

<p>Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: <a href="#">UK0014784</a> Size: 1686.4 Designation: SAC</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>The vision for this feature is for it to be in favourable conservation status within the site, as a functioning and regenerating ash woodland, where all of the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>▪ There are extensive patches of semi-natural woodland on the cliffs of the Llangatwg escarpment and hillsides in the Clydach gorge.</li> <li>▪ The woodland canopy is dominated by locally native species, including lime ash <i>Fraxinus excelsior</i>, <i>Tilia</i> spp., pedunculate oak <i>Quercus robur</i>, hazel <i>Corylus avellana</i>, birch <i>Betula</i> spp., whitebeams <i>Sorbus</i> spp. and, in the Clydach gorge, beech <i>Fagus sylvatica</i>. Rare whitebeams are a significant component of the canopy.</li> <li>▪ Saplings of locally native species dominate the tree regeneration and there is evidence of sufficient regeneration to maintain the canopy in the long term.</li> <li>▪ There is an accumulation of standing and fallen deadwood as the woodland develops.</li> <li>▪ The woodland ground flora is composed of a range of typical native plants including enchanters-nightshade <i>Circaea lutetiana</i>, dog’s-mercury <i>Mercurialis perennis</i>, wood-sorrel <i>Oxalis acetosella</i>, hart’s-tongue <i>Phyllitis scolopendrium</i> and wood sage <i>Teucrium scorodonia</i>.</li> <li>▪ The populations of rare whitebeams are stable or increasing.</li> <li>▪ Young sycamore <i>Acer pseudoplatanus</i> trees are rare, as are beech <i>Fagus sylvatica</i> in areas away from the Clydach gorge.</li> <li>▪ Plants indicating disturbance and nutrient enrichment, such as nettles, cleavers and weeds, are not dominant in the ground flora of the woodland.</li> <li>▪ All factors affecting the achievement of the above conditions are under control.</li> </ul> <p>Performance indicators for Feature 3</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Usk Bat Sites Management Plan</a>.</p> <p><b>Conservation Objective for Feature 4:</b></p>

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: <a href="#">UK0014784</a> Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p><b>Calcareous rocky slopes with chasmophytic vegetation</b></p> <p>Vision for Feature 4</p> <ul style="list-style-type: none"> <li>▪ Sufficient vegetation within crevices remains free from disturbance to support typical plants, including mosses, ferns and rare hawkweeds (<i>Hieracium</i> spp.) and allow them to sustain their populations into the future.</li> <li>▪ Areas accessible to grazing animals should free from being smothered by ivy or heavily shaded by trees.</li> <li>▪ All factors affecting the achievement of the above conditions are under control.</li> </ul> <p>Performance indicators for Feature 4</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Usk Bat Sites Management Plan</a>.</p> <p><b>Conservation Objective for Feature 5: Caves not open to the public</b></p> <p>Vision for Feature 5</p> <ul style="list-style-type: none"> <li>▪ The cave system provides a winter hibernation site for large numbers of lesser horseshoe bats and other bat species, including Brandt's, whiskered, Daubenton's, Natterer's, brown long-eared and, occasionally, greater horseshoe bats.</li> <li>▪ Numbers of roosting bats are stable or increasing in the system as a whole.</li> <li>▪ All factors affecting the achievement of the above conditions are under control.</li> </ul> <p>Also see the vision for lesser horseshoe bats.</p> <p>As outlined in the JNCC description of this feature, the cavernicolous fauna is considered to be impoverished throughout the UK and this feature is not a primary reason for selection of any SAC in the UK</p>



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	<p><a href="http://www.jncc.gov.uk">www.jncc.gov.uk</a>).</p> <p>There is however significant bat interest associated with many of the caves within this SAC, particularly Lesser Horseshoe Bat. Great Horseshoe Bat has also been recorded in very small numbers. Several other bat species are recorded, particularly from the genus Myotis, but their habit of hibernating deep within crevices in the caves (rather than hanging freely from the cave roof, like horseshoe species) makes them extremely difficult to record.</p> <p>Performance indicators for Feature 5</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Usk Bat Sites Management Plan</a>.</p> <p><b>Conservation Objective for Feature 6: Degraded raised bogs still capable of natural regeneration</b></p> <p>Vision for Feature 6</p> <ul style="list-style-type: none"> <li>▪ The extent, quality and diversity of raised bog vegetation is maintained and, where possible, restored to good condition, with active moss and peat growth across the raised bog surface.</li> <li>▪ The vegetation consists of a mixture of dwarf shrubs, hare’s-tail cottongrass, deergrass and bog mosses, grading at the edges into acid and alkaline flushes influenced by acidic water draining from the bog and springs rising in the limestone catchment.</li> <li>▪ All factors affecting the achievement of the above conditions are under control.</li> </ul> <p>Performance indicators for Feature 6</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The</p>

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	<p>performance indicators can be found within the <a href="#">Usk Bat Sites Management Plan</a>.</p> <p><b>Conservation Objective for Feature 7: European dry heaths</b></p> <p>Vision for Feature 7</p> <ul style="list-style-type: none"> <li>▪ The extent, quality and diversity of heath vegetation within the constituent sites is maintained and, where possible, degraded heath is restored to good condition.</li> <li>▪ The main heathland areas have a varied age structure with a mosaic of young heath, mature heath and degenerate heath.</li> <li>▪ All factors affecting the achievement of these conditions are under control.</li> </ul> <p>Performance indicators for Feature 7</p> <p>The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators. The performance indicators can be found within the <a href="#">Usk Bat Sites Management Plan</a>.</p>
<b>Component SSSIs</b>	<ul style="list-style-type: none"> <li>▪ Mynydd Llangatwg/ Mynydd Llangattock SSSI (units 1 to 15)</li> <li>▪ Siambre Ddu SSSI (unit 19)</li> <li>▪ Buckland Coach House &amp; Ice House SSSI (unit 20)</li> <li>▪ Foxwood SSSI (unit 21)</li> </ul> <p>The site has been divided into 21 management units of which units 1 to 15, 19, 20 and 21 comprise to form the Usk Bat Sites SAC. A map of the management units can be viewed on the <a href="#">CCW website</a>.</p>
<b>Key Environmental Conditions (factors that maintain site integrity)</b>	<p><b>Key environmental conditions for the Lesser Horseshoe Bat:</b></p> <p><b>Buckland House Maternity Roost</b></p>

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	<ul style="list-style-type: none"> <li>▪ Site security - Access to the site should be secured against unauthorized access ensuring doors, gates and security fences are in sound condition.</li> <li>▪ External condition of building - Fabric of building sufficient to maintain roost conditions internally with:             <ul style="list-style-type: none"> <li>○ Weatherproof roof. The roof covering materials (slates, tiles etc.) in weatherproof condition with no significant gaps, slippage or damage.</li> <li>○ No holes large enough to allow soaking of roof timbers, excessive heat loss or high light levels in the roost area</li> <li>○ Walls sound, rainwater goods in adequate condition.</li> <li>○ The building is structurally stable. No significant deterioration in overall condition of the building.</li> </ul> </li> <li>▪ Roost entrance -buildings and underground sites:             <ul style="list-style-type: none"> <li>○ Unobstructed roost entrance large enough for bats to fly through unimpeded. Normal minima: 300 x 200 mm.</li> <li>○ No artificial lights shining on access or associated flight paths.</li> </ul> </li> <li>▪ External Disturbance - Disturbance levels acceptable to bats with:             <ul style="list-style-type: none"> <li>○ No increase since previous visit.</li> <li>○ Human access to roost controlled and limited.</li> </ul> </li> <li>▪ Internal condition of building/ underground site in roost area:             <ul style="list-style-type: none"> <li>○ A vital element of the bats' behaviour involves extensive flight within a roost prior to emergence, which occurs shortly after dusk. Therefore the bats require fairly large open areas within the coach house roof and first floor voids to fly before they emerge. It is important that these areas are unobstructed and that the flying space (volume) is not significantly reduced. Areas used for pre-emergence flight should not be used for storage.</li> <li>○ Low light levels with no through draught.</li> <li>○ No toxic substances present, which would adversely affect the health of the bats (e.g. chemical timber treatment within inappropriate substances).</li> </ul> </li> <li>▪ Temperature of roost area:             <ul style="list-style-type: none"> <li>○ Range of temperatures available to bats with mean temperature in July greater than 20°C</li> </ul> </li> <li>▪ Internal disturbance:             <ul style="list-style-type: none"> <li>○ Human access to roost area controlled and limited.</li> </ul> </li> </ul>

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	<ul style="list-style-type: none"> <li>○ Disturbance is kept to a minimum.</li> </ul> <p><b>Hibernation Sites</b></p> <ul style="list-style-type: none"> <li>■ Site entrance:           <ul style="list-style-type: none"> <li>○ Existing entrances should be unobstructed.</li> <li>○ No human-influenced new entrances causing a change to ventilation.</li> <li>○ No change in size sufficient to affect airflow and internal temperature.</li> </ul> </li> <li>■ External conditions of site:           <ul style="list-style-type: none"> <li>○ Vegetation present close to entrance(s) but not obstructing it (them).</li> <li>○ No artificial lights shining on entrance(s).</li> </ul> </li> <li>■ Internal conditions:           <ul style="list-style-type: none"> <li>○ The temperature should remain constantly cool (8-12°C) and dark, once beyond the entrance zone.</li> <li>○ No significant man-induced changes to ventilation or temperature regime.</li> <li>○ No toxic substances present (dumping of oil or other substances).</li> </ul> </li> <li>■ Internal disturbance:           <ul style="list-style-type: none"> <li>○ Human access to roost area controlled and limited (at Agen Allwedd the number of visitors is already controlled). Lesser horseshoe bats are very sensitive to disturbance and even the presence of a single person in close proximity can cause problems. Cavers and geologists should avoid areas where bats are likely to be disturbed during the winter months. Where there is a risk of disturbance by unauthorised persons, grilling the cave entrances should be considered. Any structures placed at cave entrances to prevent unauthorized access should not hinder the passage of bats.</li> <li>○ Disturbance is kept to a minimum.</li> </ul> </li> </ul> <p><b>Foraging areas and links to roosts</b></p> <ul style="list-style-type: none"> <li>■ Habitat Quality:           <ul style="list-style-type: none"> <li>○ There should be no nett loss of suitable woodland, scrub and hedgerows within the SAC or adjoining areas used by the bats. Lesser horseshoe bats feed on flies (mainly midges), small moths, caddis flies, lacewings, beetles, small wasps and spiders. Suitable foraging habitat includes open broadleaved woodland, scrub, parkland, scrubby wetland and permanent pasture. Lesser horseshoe bats do not</li> </ul> </li> </ul>

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	<p>normally fly across open land and when foraging, remain close to wooded canopy. The insects they eat, though, may be derived from other unimproved insect rich habitat nearby. Management of foraging habitat should aim to maximise the amount of insect food as well as provide sufficient canopy cover to maximise opportunities for the bats to find their prey.</p> <ul style="list-style-type: none"> <li>▪ Connectivity: <ul style="list-style-type: none"> <li>○ Connectivity of woodland, hedgerows, linear habitat and field boundary features should be maintained as lesser horseshoe bats tend to feed in wooded areas and use linear features to navigate their way between roosts and foraging habitat. Some management of woodlands and hedgerows and trees will be necessary to preserve these features in the landscape but such work should be carried out in a sensitive manner, particularly within the SAC itself, so as not to disrupt habitat continuity.</li> </ul> </li> </ul> <p>Disturbance - Lesser horseshoe bats are very sensitive to disturbance and even the presence of a single person in close proximity can cause problems. Light and noise pollution Habitat fragmentation</p> <p><b>Key Environmental Conditions for the Blanket Bog:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Drainage</b> - No new drainage ditches should be dug, and wherever possible old drainage ditches should be allowed to infill naturally. <ul style="list-style-type: none"> <li>○ There should be no evidence of new drains or major clearance of old drains or deepening of bog outlet streams.</li> </ul> </li> <li>▪ <b>Burning</b> - blanket bog should not normally be burnt, as burning is likely to damage important plant and animal species, especially bog mosses and invertebrates, and encourage the growth of rank species, like hare's-tail cottongrass; it can also result in erosion of the peat which can then cause water quality problems in cave system and adjacent reservoirs. Past unplanned or uncontrolled burning is likely to be at least partly responsible for the scarcity of bog-mosses in some areas. <ul style="list-style-type: none"> <li>○ No evidence of significant burning (patches larger than 1ha) in any areas of blanket bog.</li> </ul> </li> <li>▪ <b>Peat Erosion</b> - There is a natural cycle of peat erosion and deposition but the balance can be upset by burning, heavy grazing, pollution and vehicle damage. <ul style="list-style-type: none"> <li>○ The total extent of active erosion over a 5-year period should not exceed the total extent of areas</li> </ul> </li> </ul>

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	<p>showing signs of peat accumulation and re-vegetation.</p> <ul style="list-style-type: none"> <li>▪ <b>Air quality</b> - No exceedence of critical loads for:           <ul style="list-style-type: none"> <li>○ Sulphur dioxide – 20µg/m<sup>3</sup></li> <li>○ Nitrous Oxides – 30µg/m<sup>3</sup></li> <li>○ Ozone – 3000 ppb</li> <li>○ ammonia – 1µg/m<sup>3</sup></li> <li>○ N – 5-10 kg/ha/yr</li> <li>○ acid – 0.35keq/ha/yr</li> </ul> </li> </ul> <p>Monitoring stations located at grid location: 319097.79 214637.88</p> <p><b>Key Environmental Conditions for the Tilio-Acerion forests of slopes, screes and ravines:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Grazing</b> - The greatest influence on the woodland, and its continued regeneration, is grazing. The present structure and species composition of the northern escarpment woodland, excluding the cliff ledges, is a result of natural regeneration. The cliff ledges are inaccessible to stock, have developed naturally and are not actively managed. In units 1 &amp; 2, the woodland has developed on common land and parts are subject to high grazing levels by sheep. The woodland in units 5, 12 &amp; 13 is now largely un-grazed and the ground flora is noticeably more luxuriant in these areas.           <ul style="list-style-type: none"> <li>○ Grazing levels should be sufficient to allow regeneration in the long term.</li> <li>○ On the common (units 1 &amp; 2), maintain grazing at or below the current (2007) levels.</li> <li>○ Un-grazed areas (unit 5, 12, 13) should remain un-grazed.</li> </ul> </li> <li>▪ <b>Woodland Management</b> - Natural ecological processes should be allowed to operate as far as possible. In many areas, these are gradually creating greater structural diversity. Most of the woodland on the site is not actively managed as the woodland occupies cliffs and steeply sloping ground, such that active woodland management is not a practical or desirable option           <ul style="list-style-type: none"> <li>○ There should be no evidence of tree felling or coppicing within the past five years. (Tree surgery for safety reasons excluded).</li> <li>○ Dead wood should ideally be left where it falls and standing dead trees should be allowed to fall</li> </ul> </li> </ul>

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	<p>naturally. Movement and cutting/tidying of dead wood should be avoided and/or limited, unless essential for public safety.</p> <ul style="list-style-type: none"> <li>▪ <b>Non-native species</b> - Beech is at the edge of its range in this part of Wales. In units 5, 12 and 13 the beech wood appears to be natural, but the spread of beech over much of Units 1 &amp; 2 may not be desirable, as it would replace the ash woodland. Limits should be met in 70% of the woodland.             <ul style="list-style-type: none"> <li>○ 5% cover of non-native trees in the canopy.</li> <li>○ No cotoneaster (or other invasive non-native shrubs) in the understorey or shrub layer.</li> </ul> </li> </ul> <p><b>Key Environmental Conditions for the Calcareous rocky slopes with chasmophytic vegetation:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Grazing</b> - Low grazing levels on the more accessible rocky areas in units 1 &amp; 2 in are important in controlling the growth of ground-smothering species such as ivy, which have the potential to smother boulders and cliff faces that are important for their lower plant communities. Tree growth at the base of the cliffs may shade out important calcareous chasmophytic habitat, so should be controlled within limits outside the areas of agreed woodland. Surveillance of grazing levels and type should be maintained so that changes that may influence the features on the site are identified and recorded.             <ul style="list-style-type: none"> <li>○ Sufficient grazing to prevent the development of scrub or spread of ivy and tall vegetation in units 1 &amp; 2.</li> </ul> </li> <li>▪ <b>Rock Climbing</b> - Intensive rock climbing can dislodge plants and disturb breeding birds. These impacts may be avoided if climbing is subject to specific agreements, which include a code of conduct. No rock climbing in the key areas of units 1 &amp; 2 without agreement.</li> <li>▪ <b>Quarrying</b> - any quarrying in the key areas of units 1 &amp; 2 would lead to habitat loss.</li> </ul> <p><b>Key Environmental Conditions for the Degraded raised bogs still capable of natural regeneration:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Drainage</b> - See blanket bog above.</li> <li>▪ <b>Grazing</b> - A way of reducing the grazing to acceptable levels must be found. A period without grazing will promote recovery, although some light grazing, ideally by cattle or ponies, will be required in the longer term to prevent the development of scrub or the dominating growth of dwarf shrubs or purple moor-grass.             <ul style="list-style-type: none"> <li>○ Upper limits: Overall grazing pressure of 0.05 livestock units/ha/year on the bog area.</li> </ul> </li> </ul>

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	<p>AND:</p> <ul style="list-style-type: none"> <li>○ Minimal winter grazing.</li> </ul> <p>AND:</p> <ul style="list-style-type: none"> <li>○ No stock feeding</li> <li>○ Lower limit: Sufficient to prevent the establishment of trees and shrubs in the long term</li> </ul> <ul style="list-style-type: none"> <li>▪ <b>Burning</b> - will damage the feature and could encourage dominance by purple-moor grass if grazing is significantly reduced and result in a decline in the cover of bog mosses. At present there is generally insufficient vegetation to be burnt here.</li> <li>▪ <b>Air quality</b> - See blanket bog above.</li> </ul> <p><b>Key Environmental Conditions for the European dry heaths:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Burning</b> - can be a useful management tool on the heathlands, provided that it forms part of an appropriate and controlled cycle of management. It is important to ensure that such management does not encourage the spread of bracken.           <ul style="list-style-type: none"> <li>○ In areas subject to any burning plan, only a maximum of up to 15% of the total heathland area should be burnt in any one year.</li> </ul> </li> <li>▪ <b>Erosion/Bare Ground</b> - Is generally caused by uncontrolled fires (see above) or heavy trampling.           <ul style="list-style-type: none"> <li>○ Upper Limit - 10% bare ground</li> </ul> </li> <li>▪ <b>Air Quality</b> - Increased cover of grasses and de-generate heather may be symptomatic of air pollution, as there is evidence that pollution makes heather plants more susceptible to damage by frost and heather beetles. The Environment Agency has set critical levels for these pollutants in relation to various types of vegetation. No critical loads are exceeded:           <ul style="list-style-type: none"> <li>○ Sulphur dioxide - 20µg/m<sup>3</sup></li> <li>○ Nitrous Oxides - 30µg/m<sup>3</sup></li> <li>○ Ozone - 3000 ppb</li> <li>○ Ammonia - 1µg/m<sup>3</sup></li> <li>○ N - 10-20 kg/ha/yr</li> <li>○ Acid - 0.35keq/ha/yr</li> </ul> </li> </ul>



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	Monitoring station located at grid location: 319097.79 214637.88
<b>SAC Condition Assessment</b>	<p><b>Conservation Status of Feature 1:</b>  <b>Lesser horseshoe bat <i>Rhinolophus hipposideros</i></b></p> <p>The conservation status of this feature within the site is considered to be <b>Favourable</b> (2006).</p> <p>Based on annual counts made at all locations between 2000 and 2006, the lesser horseshoe bat feature is considered to be in favourable condition.</p> <p><b>Conservation Status of Feature 2:</b>  <b>Blanket bog</b></p> <p>The conservation status of this feature within the site is considered to be <b>Unfavourable</b> (2006).</p> <p>Assessment carried out in April 2002 indicated that feature condition was: Unfavourable, no change. In many areas there was little or no bog mosses and the cover of dwarf shrubs exceeded the upper limits defined. In other areas the vegetation was dominated by hare's-tail cottongrass and the cover of bog mosses was limited.</p> <p>Past grazing, burning and drainage activity means that some stands of blanket bog have been damaged by deep drainage. There is also concern that the vegetation is being damaged by atmospheric pollution, due to exceedence of many of the critical loads identified for this feature.</p> <p><b>Conservation Status of Feature 3:</b>  <b>Tilio-Acerion forests of slopes, screes and ravines</b></p> <p>The conservation status of this feature within the site is considered to be <b>Favourable</b> (2006).</p>

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	<p>Assessment carried out in August 2004 indicated that feature condition was: Favourable, maintained. All the factors affecting the features appear to be under control.</p> <p><b>Conservation Status of Feature 4: Calcareous rocky slopes with chasmophytic vegetation</b></p> <p>The conservation status of this feature within the site is considered to be <b>Favourable</b> (2006).</p> <p>Assessment carried out in August 2004 indicated that feature condition was: Favourable, maintained. All the factors affecting the features appear to be under control.</p> <p><b>Conservation Status of Feature 5: Caves not open to the public</b></p> <p>The conservation status of this feature within the site is considered to be <b>Favourable</b> (2006).</p> <p>Based on records of made at all locations between 2000 and 2006, the feature condition is considered to be: Favourable, maintained. All the factors affecting the features appear to be under control.</p> <p><b>Conservation Status of Feature 6: Degraded raised bogs still capable of natural regeneration</b></p> <p>The conservation status of this feature within the site is considered to be <b>Unfavourable</b> (2006).</p> <p>Assessment carried out in July 2002 indicated that feature condition was: Unfavourable, declining. The feature is currently (2007) too heavily grazed because the most of it is common land and because it is on the sheltered side of the hill, is subject to high levels of grazing, particularly by sheep. There is also concern that the vegetation is being damaged by atmospheric pollution, due to exceedence of many of the critical loads</p>

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	<p>identified for this feature.</p> <p><b>Conservation Status of Feature 7: European dry heaths</b></p> <p>The conservation status of this feature within the site is considered to be <b>Unfavourable</b> (2006).</p> <p>Assessment carried out in April 2002 indicated that feature condition was: Unfavourable, no change. Past grazing and burning activity means that some stands of dry heath have insufficient cover of dwarf shrubs. There is also concern that the vegetation is being damaged by atmospheric pollution, due to exceedence of many of the critical loads identified for this feature.</p>
<b>Vulnerabilities (includes existing pressures and trends)</b>	<p><b>Lesser Horseshoe bat:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Deterioration of buildings used to roost</b> - Alterations/neglect to the structure of the buildings could result in the site becoming unsuitable as a nursery roost by causing changes to the internal conditions of the roost.</li> <li>▪ <b>Disturbance</b> - It is important that access to the cave systems and roosts is managed to protect the bats. Lesser horseshoe bats are very sensitive to disturbance, such as light and noise pollution and even the presence of a single person in close proximity can cause problems. Where there is a risk of disturbance by unauthorised persons, grilling the cave entrances should be considered. Any structures placed at cave entrances to prevent unauthorised access should not hinder the passage of bats.</li> <li>▪ <b>Temperature change</b> - Underground hibernation roosts should be dark, cool and humid with stable temperature (8 -120C) beyond the entrance zone. However, the boulder roof of the Foxwood cave is gappy and internal temperatures are dependant on external temperatures, unlike the situation in many true caves. The consequence is that declining winter ambient temperature leads to a decline in roost temperature and in the colder winter months roost temperature falls below the required temperature range, triggering departures of bats to other unknown roosts.</li> <li>▪ <b>Habitat fragmentation</b> - Development allocations pressures and transport development could lead to the loss or decline in quality of linear features (such as hedgerows and tree lines) which the bats use as flight</li> </ul>

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	<p>lines. Connectivity of woodland, hedgerows, linear habitat and field boundary features are important as lesser horseshoe bats tend to feed in wooded areas and use linear features to navigate their way between roosts and foraging habitat.</p> <p><b>Blanket bog:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Air pollution</b> - High levels of air pollution are believed to be damaging and there may be combined effects. Increased cover of hare's-tail cottongrass and flat-topped bog-moss may be symptoms, as could increased levels of peat erosion. Blanket bogs are at risk from*:             <ul style="list-style-type: none"> <li>○ Acidification;</li> <li>○ Photochemical oxidants;</li> <li>○ Direct toxicity; and</li> <li>○ Eutrophication.</li> </ul> </li> <li>▪ <b>Hydrological change</b> - the blanket bog has been subject to hydrological change as a result of past ditch construction to supply water to reservoirs.</li> <li>▪ <b>Recreational activities</b> - Unauthorised vehicle use is a threat to the moorland areas. Bog vegetation is easily damaged and may take a long time to recover. Ground nesting birds may be disturbed during the breeding season. Although the common land within the site is subject to a right of public access on foot, such use does not appear to be so intensive as to cause habitat damage or significant disturbance to birdlife.</li> <li>▪ <b>Development</b> - The ground along the existing pipeline routes, which cross the Llangatwg hill, has been disturbed during the engineering phase. Some habitats naturally recover better than others, whilst some will require specific management to restore it to its natural state. Generally, further pipeline construction or other engineering works affecting sensitive habitats within the site should be avoided. Any future engineering or pipeline works would need to show that the SAC features would not be adversely affected and if any licence was approved then there would be a requirement to restore the vegetation to its original</li> </ul>

\* Pollution Information System (APIS). Raised bog and blanket bog. Available from:

[http://www.apis.ac.uk/cgi\\_bin/habitat\\_result.pl?habResult=Raised+bog+and+blanket+bog&choice=allHabs&haborspec=habitat&submit.x=27&submit.y=9](http://www.apis.ac.uk/cgi_bin/habitat_result.pl?habResult=Raised+bog+and+blanket+bog&choice=allHabs&haborspec=habitat&submit.x=27&submit.y=9)

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: <a href="#">UK0014784</a> Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p>character and quality.</p> <p><b>Tilio-Acerion forests of slopes, screes and ravines:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Grazing</b> - In the cliff and woodland areas any more than light grazing may prevent tree regeneration and damage the populations of rare and scarce plants that may be accessible to grazing stock.</li> <li>▪ <b>Non-native species</b> - The ash woodland in units 1 &amp; 2 is vulnerable to the introduction of beech.</li> </ul> <p><b>Calcareous rocky slopes with chasmophytic vegetation:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Invasive plants</b> - Introduced and invasive species such as cotoneaster can smother large areas of grassland and cliff habitats, displacing native species and would need to be controlled. Cotoneaster has spread on the south side of Mynydd Llangatwg above the Clydach gorge and some control is desirable to stop it spreading into feature habitats.</li> <li>▪ <b>Recreational activities</b> - Rare plants, and plants in general, on the cliffs and ledges, may be dislodged by climbers and some breeding birds are particularly sensitive to disturbance during the nesting season. Rock climbing at this site should be restricted to suitable areas and be subject to a suitable code of conduct in order to minimise such damage and disturbance.</li> </ul> <p><b>Degraded raised bogs still capable of natural regeneration:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Air Pollution</b> - See blanket bog above.</li> <li>▪ <b>Hydrological Change</b> - No new drainage ditches should be dug within the bog and outlet and inflow channels must not be deepened or altered in any way.</li> <li>▪ <b>Grazing</b> - This area of bog has been damaged by heavy grazing in the past and current (2008) grazing levels are still too high to enable the re-generation of the bog habitats. Most of the bog is on commonland and therefore it is difficult to control grazing without agreement and fencing. Supplementary stock feeding can lead to damage of the sward and cause poaching and gradual nutrient enrichment. Feeding should not occur on this habitat.</li> </ul>

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: <a href="#">UK0014784</a> Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	<p><b>European dry heaths:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Grazing</b> - levels are believed to be lower than they have been historically but they may still be too high in some parts of the common to enable the heathland to regenerate. It may not be possible to address this problem in unit 1 because the adjoining limestone grassland and rocky habitats require a relatively high stocking rate to maintain their interest. Supplementary stock feeding can lead to localised damage of the sward and cause poaching and gradual nutrient enrichment. Feeding should be confined to acceptable areas off the common, such as agriculturally improved land.</li> <li>▪ <b>Bracken and scrub encroachment</b> - Scrub invasion in the open moorland areas can be controlled by the correct combination of grazing and burning. Bracken however can be more problematical. Grazing may not prevent bracken invasion particularly if sheep rather than heavier animals are the main stock-type and burning can encourage the spread of bracken. Bracken control will be considered if there is significant spread within the drier heathy areas.</li> <li>▪ <b>Burning in combination with intense grazing</b> - can result in the loss of those heathland shrub species that give this habitat its characteristic appearance, and which are so important to the value of these moorland habitats.</li> <li>▪ <b>Dumping</b> - The plateau areas at Mynydd Llangatwg are easily accessible from nearby population centres, so the illegal dumping of domestic and commercial waste and abandoned vehicles is a problem.</li> <li>▪ <b>Development</b> - See blanket bog above.</li> </ul>
<b>Landowner/ Management Responsibility</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>
<b>HRA/AA Studies undertaken that address this site</b>	<p>HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008.  <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf</a></p> <ul style="list-style-type: none"> <li>▪ The Screening concludes that whilst the LDP will not have a direct impact on this SAC in terms of land take, there is the potential however for development of residential and employment uses to increase airborne pollution in Torfaen which could have an impact on this SAC. The Strategic Ecological Corridor of the Afon</li> </ul>

<p>Site Name: Usk Bat Sites                  Location Grid Ref: SO190145                  JNCC Site Code: <a href="#">UK0014784</a>                  Size: 1686.4                  Designation: SAC</p>	<p style="text-align: center;"><b>Habitats Regulations Assessment: Data Proforma</b></p>
	<p>Llywd is present in Torfaen, which is an important river riparian habitat. This corridor could potentially be used by lesser horseshoe bats although details of the foraging areas from the Usk Valley sites are not known.</p>

## Candidate Special Areas of Conservation

Site Name: Severn Estuary Location Grid Ref: ST321748 JNCC Site Code: <a href="#">UK0013030</a> Size: 73715.4 Designation: cSAC	Habitats Regulations Assessment: Data Proforma
<b>Site Description</b>	<p>The Severn Estuary is the largest coastal plain estuary in the UK with extensive mudflats and sandflats, rocky shore platforms, shingle and islands. Saltmarsh fringes the coast, backed by grazing marsh with freshwater and occasional brackish ditches. The estuary's classic funnel shape, unique in the UK, is a factor causing the Severn to have the second highest tidal range in the world (after the Bay of Fundy in Canada) at more than 12 meters. This tidal regime results in plant and animal communities typical of the extreme physical conditions of strong flows, mobile sediments, changing salinity, high turbidity and heavy scouring. The resultant low diversity invertebrate communities, that frequently include populations of ragworms, lugworms and other invertebrates in high densities, form an important food source for passage and wintering birds. The site is important in the spring and autumn migration periods for waders moving along the west coast of Europe, as well as in winter for large numbers of waterbirds including swans, geese, ducks and waders. These bird populations are regarded as internationally important.</p> <p>Glassworts and annual sea-blite colonise the open mud, with beds of all three species of eelgrass <i>Zostera</i> occurring on more sheltered mud and sandbanks. Large expanses of common cord-grass also occur on the outer marshes. Heavily grazed saltmarsh fringes the estuary with a range of saltmarsh types present. The middle marsh sward is dominated by common saltmarsh-grass with typical associated species. In the upper marsh, red fescue and saltmarsh rush become more prominent.</p> <p>Areas of saltmarsh fringe the estuary, mostly grazed with a range of vegetation communities. There are gradual and stepped transitions between bare mudflat to upper marsh and grassland. Main vegetation types are: upper saltmarsh with <i>Festuca rubra</i> and <i>Juncus gerardii</i>; middle marsh dominated by <i>Puccinellia maritima</i> with <i>Glaux maritima</i> and <i>Triglochin maritima</i>; dense monocultures of <i>Spartina anglica</i> at the edge of the mudflats-brackish pools and depressions with <i>Phragmites australis</i> and <i>Bolboschoenus maritimus</i>.</p>
<b>Qualifying Features</b>	Annex I Habitats primary reason for selection: <ul style="list-style-type: none"> <li>■ <a href="#">Estuaries</a></li> </ul>



Site Name: Severn Estuary Location Grid Ref: ST321748 JNCC Site Code: <a href="#">UK0013030</a> Size: 73715.4 Designation: cSAC	Habitats Regulations Assessment: Data Proforma
	<ul style="list-style-type: none"> <li>▪ <a href="#">Mudflats and sandflats not covered by seawater at low tide</a></li> <li>▪ <a href="#">Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)</a></li> </ul> <p>Annex I Habitats qualifying feature:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Sandbanks which are slightly covered by sea water all the time</a></li> <li>▪ <a href="#">Reefs</a></li> </ul> <p>Annex II Species primary reason for selection:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Sea lamprey</a> <i>Petromyzon marinus</i></li> <li>▪ <a href="#">River lamprey</a> <i>Lampetra fluviatilis</i></li> <li>▪ <a href="#">Twaite shad</a> <i>Alosa fallax</i></li> </ul>
<b>Conservation Objectives</b>	<ul style="list-style-type: none"> <li>▪ No conservation objectives currently available for this site.</li> </ul>
<b>Component SSSIs</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>
<b>Key Environmental Conditions (factors that maintain site integrity)</b>	<ul style="list-style-type: none"> <li>▪ <b>Hydrodynamic and sedimentary regime</b> - The conservation of the site features is dependent on the tidal regime. The tidal range in the Severn Estuary is the second-highest in the world and the scouring of the seabed and strong tidal streams result in natural erosion of the habitats and the presence of high sediment loads.</li> <li>▪ <b>Maintain suitable distance between the site and development</b> - to allow for managed retreat of intertidal habitats and avoid coastal squeeze.</li> <li>▪ <b>Manage public access and activities.</b></li> </ul>
<b>SAC Condition Assessment</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>
<b>Vulnerabilities (includes existing pressures and trends)</b>	<ul style="list-style-type: none"> <li>▪ <b>Physical loss of supporting habitats through removal</b> - The physical loss of areas of intertidal habitats may be caused directly through change of land use or indirectly as a consequence of changes to sedimentation processes (e.g. coastal defences) as well as via the effects of smothering by artificial structures (e.g. jetties) or the disposal of spoils. The intertidal mudflats and sandflats and the saltmarsh are highly sensitive to removal by land reclamation and barrage construction. Information provided by NE and CCW states that large areas of the European marine site are not currently under threat, however when combined with a</li> </ul>

Site Name: Severn Estuary Location Grid Ref: ST321748 JNCC Site Code: <a href="#">UK0013030</a> Size: 73715.4 Designation: cSAC	Habitats Regulations Assessment: Data Proforma
	<p>high level of sensitivity this leads to a moderate vulnerability.</p> <ul style="list-style-type: none"> <li>▪ <b>Contamination by synthetic and/or non-synthetic toxic compounds</b> - At the moment there is no evidence to show that this is the case on the Severn Estuary, but the estuary is vulnerable to oil spills and there is a continuous discharge of toxins into the estuary, some of which bind to the sediments. NE and CCW identify this is an area which requires further assessment. The intertidal mudflats and sandflats and the saltmarsh are currently highly vulnerable to the introduction of synthetic and non-synthetic compounds.</li> <li>▪ <b>Damage by abrasion or selective extraction</b> - Saltmarsh may be physically damaged from overgrazing or eroded when boats are moored on it and when paths are worn through it to reach moored boats on foot or via vehicles. Currently all supporting habitats are considered to be moderately vulnerable to abrasion. Intertidal habitats are highly sensitive to damage by direct and indirect effects of aggregate dredging. The intertidal mudflats and sandflats and the shingle and rocky shore are therefore considered by NE and CCW to be highly vulnerable to selective extraction.</li> <li>▪ <b>Changes in nutrient and/or organic loading</b> - Changes in organic or nutrient loading can change the species composition of the plants on the saltmarsh and thus the structure of the sward. Increases in nutrients can also cause excessive algal growth on the mudflats, denying the birds access to their invertebrate prey and changing the invertebrate species composition in the sediment. Though the water quality has been improved in recent years there are still local areas of concern and any increase in nutrient loading should be avoided. At present the intertidal mudflats and sandflats are moderately vulnerable to this category of operation.</li> <li>▪ <b>Inappropriate grazing</b> - Much of the saltmarsh is managed by grazing and changes in management can alter the availability of prey and suitability of roosting sites. The saltmarsh is currently highly vulnerable to the selective extraction of species.</li> </ul>
<b>Landowner/ Management Responsibility</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>
<b>HRA/AA Studies undertaken that address this site</b>	<p>HRA Screening of the County Council of the City and County of Cardiff Local Development Plan Preferred Strategy Sept 2007.  <a href="http://www.cardiff.gov.uk/ObjView.asp?Object_ID=9788">www.cardiff.gov.uk/ObjView.asp?Object_ID=9788</a></p> <ul style="list-style-type: none"> <li>▪ The Screening states that the significance of the potential impacts of the Eastern Bay Link (Pg. 50,</li> </ul>

<b>Site Name: Severn Estuary</b> <b>Location Grid Ref: ST321748</b> <b>JNCC Site Code: <a href="#">UK0013030</a></b> <b>Size: 73715.4</b> <b>Designation: cSAC</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
	<p>Paragraph 6.23) in the <a href="#">Preferred Strategy</a> (either alone or in-combination with other plans and projects) will be considered when a more detailed scheme is available. An appropriate assessment may be required for the scheme.</p> <p>HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008.  <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf</a></p> <ul style="list-style-type: none"> <li>▪ It is likely that an increase of 7000 dwellings in Torfaen and associated development will in some way impact upon the site. It is likely however that the potential impact will be as a result of in-combination effects with other implemented plans and programmes in close proximity to the Severn Estuary.</li> </ul> <p>AA Screening of the Vale of Glamorgan Local Development Plan Preferred Strategy Dec 07.  <a href="http://www.valeofglamorgan.gov.uk/files/Living/Planning/Policy/LDP/Appropriate_Assessment_Screening_Report.pdf">http://www.valeofglamorgan.gov.uk/files/Living/Planning/Policy/LDP/Appropriate_Assessment_Screening_Report.pdf</a></p> <ul style="list-style-type: none"> <li>▪ Given the extent of the Severn Estuary and the diverse range of activities and operations that could result in adverse impact to the European Site, it is considered inevitable that the Draft Preferred Strategy will in some way, impact upon the designated site. While much of the development arising from the draft preferred strategy is likely to be located well away from the Severn Estuary, the south-eastern zone has been identified as a growth area and abuts the boundary of the designated site. Therefore, it is recommended that a more detailed assessment of the LDP be undertaken following consultation on the Draft Preferred Strategy to ascertain and mitigate against any likely significant effects to the SPA, cSAC, RAMSAR.</li> </ul>

## Special Protection Areas

Site Name: Severn Estuary Location (Lat & Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK9015022</a> Size: 24662.98 Designation: SPA	Habitats Regulations Assessment: Data Proforma
<b>Site Description</b>	<p>The Severn Estuary is the largest coastal plain estuary in the UK with extensive mudflats and sandflats, rocky shore platforms, shingle and islands. Saltmarsh fringes the coast, backed by grazing marsh with freshwater and occasional brackish ditches. The estuary's classic funnel shape, unique in the UK, is a factor causing the Severn to have the second highest tidal range in the world (after the Bay of Fundy in Canada) at more than 12 meters. This tidal regime results in plant and animal communities typical of the extreme physical conditions of strong flows, mobile sediments, changing salinity, high turbidity and heavy scouring. The resultant low diversity invertebrate communities, that frequently include populations of ragworms, lugworms and other invertebrates in high densities, form an important food source for passage and wintering birds. The site is important in the spring and autumn migration periods for waders moving along the west coast of Europe, as well as in winter for large numbers of waterbirds including swans, geese, ducks and waders. These bird populations are regarded as internationally important.</p> <p>Glassworts and annual sea-blite colonise the open mud, with beds of all three species of eelgrass <i>Zostera</i> occurring on more sheltered mud and sandbanks. Large expanses of common cord-grass also occur on the outer marshes. Heavily grazed saltmarsh fringes the estuary with a range of saltmarsh types present. The middle marsh sward is dominated by common saltmarsh-grass with typical associated species. In the upper marsh, red fescue and saltmarsh rush become more prominent.</p> <p>Areas of saltmarsh fringe the estuary, mostly grazed with a range of vegetation communities. There are gradual and stepped transitions between bare mudflat to upper marsh and grassland. Main vegetation types are: upper saltmarsh with <i>Festuca rubra</i> and <i>Juncus gerardii</i>; middle marsh dominated by <i>Puccinellia maritima</i> with <i>Glaux maritima</i> and <i>Triglochin maritima</i>; dense monocultures of <i>Spartina anglica</i> at the edge of the mudflats-brackish pools and depressions with <i>Phragmites australis</i> and <i>Bolboschoenus maritimus</i>.</p>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK9015022</a> Size: 24662.98 Designation: SPA</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
<p>Qualifying Features</p>	<p>Article 4.1 Qualification</p> <p>Over winter the area regularly supports:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Bewick's Swan</a> <i>Cygnus columbianus bewickii</i> 3.9% of the GB population</li> </ul> <p>Article 4.2 Qualification</p> <p>Over winter the area regularly supports:</p> <ul style="list-style-type: none"> <li>▪ <a href="#">Gadwall</a> <i>Anas strepera</i> 0.9% of the population</li> <li>▪ <a href="#">White-fronted Goose</a> <i>Anser albifrons albifrons</i> 0.4% of the population</li> <li>▪ <a href="#">Dunlin</a> <i>Calidris alpina alpina</i> 3.3% of the population</li> <li>▪ <a href="#">Shelduck</a> <i>Tadorna tadorna</i> 1.1% of the population</li> <li>▪ <a href="#">Redshank</a> <i>Tringa totanus</i> 1.3% of the population</li> </ul> <p>Article 4.2 Qualification: Internationally Important Assemblage of Birds</p> <p>Over winter the area regularly supports:</p> <ul style="list-style-type: none"> <li>▪ 84317 waterfowl</li> </ul>
<p>Conservation Objectives</p>	<p><b>Interest feature 1: Internationally important population of regularly occurring Annex 1 species: Bewick's swan</b></p> <p>The conservation objective is to maintain the Bewick's swan population and its supporting habitats in <b>favourable condition</b>, as defined below.</p> <p>The interest feature Bewick's swan will be considered to be in favourable condition when, subject to natural processes, each of the following conditions are met:</p>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK9015022</a> Size: 24662.98 Designation: SPA</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>i.the 5 year peak mean population size for the Bewick’s swan population is no less than 289 individuals (ie the 5 year peak mean between 1988/9 - 1992/3); ii.the extent of saltmarsh at the Dumbles is maintained; iii.the extent of intertidal mudflats and sandflats at Frampton Sands, Waveridge Sands and the Noose is maintained; iv.the extent of vegetation with an effective field size of &gt;6 ha and with unrestricted bird sightlines &gt; 500m at feeding, roosting and refuge sites are maintained; v.greater than 25% cover of suitable soft leaved herbs and grasses in winter season throughout the transitional saltmarsh at the Dumbles is maintained; vi.aggregations of Bewick’s swan at feeding, roosting and refuge sites are not subject to significant disturbance.</p> <p><b>Interest feature 2: Internationally important population of regularly occurring migratory species: wintering dunlin</b></p> <p>The conservation objective is to maintain the dunlin population and its supporting habitats in <b>favourable condition</b>, as defined below.</p> <p>The interest feature dunlin will be considered to be in favourable condition when, subject to natural processes, each of the following conditions are met:</p> <p>i.the 5 year peak mean population size for the wintering dunlin population is no less than 41,683 individuals (ie the 5 year peak mean between 1988/9 - 1992/3); ii.the extent of saltmarsh is maintained; iii.the extent of intertidal mudflats and sandflats is maintained; iv.the extent of shingle and rocky shore is maintained; v.the extent of vegetation with a sward height of &lt;10cm is maintained throughout the saltmarsh;</p>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK9015022</a> Size: 24662.98 Designation: SPA</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>vi.the distribution and abundance of suitable invertebrates in intertidal mudflats and sandflats is maintained; vii.the distribution and abundance of suitable invertebrates in shingle and rocky shore is maintained; viii.the extent of strandlines is maintained; ix.unrestricted bird sightlines of &gt;200m at feeding and roosting sites are maintained; x.aggregations of dunlin at feeding or roosting sites are not subject to significant disturbance.</p> <p><b>Interest feature 3: Internationally important population of regularly occurring migratory species: wintering European white-fronted goose</b></p> <p>The conservation objective is to maintain the European white-fronted goose population and its supporting habitats in <b>favourable condition</b>, as defined below.</p> <p>The interest feature European white-fronted goose will be considered to be in favourable condition when, subject to natural processes (Box 1), each of the following conditions are met:</p> <ul style="list-style-type: none"> <li>i.the 5 year peak mean population size for the wintering European white fronted goose population is no less than 3,002 individuals (ie the 5 year peak mean between 1988/9-ii.1992/3);</li> <li>iii.the extent of saltmarsh at the Dumbles is maintained;</li> <li>iv.the extent of intertidal mudflats and sandflats at Frampton Sands, Waveridge Sands and the Noose is maintained;</li> <li>v.greater than 25% cover of suitable soft-leaved herbs and grasses is maintained during the winter on saltmarsh areas;</li> <li>vi.unrestricted bird sightlines of &gt;200m at feeding and roosting sites are maintained;</li> <li>vii.aggregations of European white-fronted goose at feeding or roosting sites are not subject to significant disturbance.</li> </ul>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK9015022</a> Size: 24662.98 Designation: SPA</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p><b>Interest feature 4: Internationally important population of regularly occurring migratory species: wintering redshank</b></p> <p>The conservation objective is to maintain the redshank population and its supporting habitats in <b>favourable condition</b>, as defined below.</p> <p>The interest feature redshank will be considered to be in favourable condition when, subject to natural processes, each of the following conditions are met:</p> <ul style="list-style-type: none"> <li>i.the 5 year peak mean population size for the wintering redshank population is no less than 2,013 individuals (ie the 5 year peak mean between 1988/9 - 1992/3);</li> <li>ii.the extent of saltmarsh is maintained;</li> <li>iii.the extent of intertidal mudflats and sandflats is maintained;</li> <li>iv.the extent of shingle and rocky shore is maintained;</li> <li>v.the extent of vegetation with a sward height of &lt;10cm throughout the saltmarsh is maintained;</li> <li>vi.the distribution and abundance of suitable invertebrates in intertidal mudflats and sandflats is maintained;</li> <li>vii.the distribution and abundance of suitable invertebrates in shingle and rocky shore is maintained;</li> <li>viii.strandlines are not subject to significant disturbance;</li> <li>ix.unrestricted bird sightlines of &gt;200m at feeding and roosting sites are maintained;</li> <li>x.aggregations of redshank at feeding or roosting sites are not subject to significant disturbance.</li> </ul> <p><b>Interest feature 5: Internationally important population of regularly occurring migratory species: wintering shelduck</b></p> <p>The conservation objective is to maintain the shelduck population and its supporting habitats in <b>favourable condition</b>, as defined below.</p>



<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK9015022</a> Size: 24662.98 Designation: SPA</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>The interest feature shelduck will be considered to be in favourable condition when, subject to natural processes, each of the following conditions are met:</p> <ul style="list-style-type: none"> <li>i.the 5 year peak mean population size for the wintering shelduck population is no less than 2,892 individuals (ie the 5 year peak mean between 1988/9 - 1992/3);</li> <li>ii.the extent of saltmarsh is maintained;</li> <li>iii.the extent of intertidal mudflats and sandflats is maintained;</li> <li>iv.the extent of shingle and rocky shore is maintained;</li> <li>v.the distribution and abundance of suitable invertebrates in intertidal mudflats and sandflats is maintained;</li> <li>vi.unrestricted bird sightlines of &gt;200m at feeding and roosting sites are maintained; aggregations of shelduck at feeding or roosting sites are not subject to significant disturbance.</li> </ul> <p><b>Interest feature 6: Internationally important assemblage of waterfowl</b></p> <p>The conservation objective is to maintain the waterfowl assemblage and its supporting habitats in <b>favourable condition</b>, as defined below.</p> <p>The interest feature waterfowl assemblage will be considered to be in favourable condition when, subject to natural processes (Box1), each of the following conditions are met:</p> <ul style="list-style-type: none"> <li>i.the 5 year peak mean population size for the waterfowl assemblage is no less than 68,026 individuals (ie the 5 year peak mean between 1988/9 - 1992/3);</li> <li>ii.the extent of saltmarsh is maintained;</li> <li>iii.the extent of intertidal mudflats and sandflats is maintained;</li> <li>iv.the extent of shingle and rocky shore is maintained;</li> <li>v.extent of vegetation of &lt;10cm throughout the saltmarsh is maintained;</li> <li>vi.the distribution and abundance of suitable invertebrates in intertidal mudflats and sandflats is maintained;</li> </ul>

<b>Site Name: Severn Estuary</b> <b>Location (Lat &amp; Long):</b> 51 13 29 N 03 02 57 W <b>JNCC Site Code: <a href="#">UK9015022</a></b> <b>Size: 24662.98</b> <b>Designation: SPA</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
	vii.the distribution and abundance of suitable invertebrates in shingle and rocky shore is maintained; viii.greater than 25% cover of suitable soft leaved herbs and grasses during the winter on saltmarsh areas is maintained; ix.strandlines are not subject to significant disturbance; x.unrestricted bird sightlines of >500m at feeding and roosting sites are maintained; xi.waterfowl aggregations at feeding or roosting sites are not subject to significant disturbance.
<b>Component SSSIs</b>	<ul style="list-style-type: none"> <li>▪ Severn Estuary SSSI</li> <li>▪ Flat Holm SSSI</li> <li>▪ Bridgwater Bay SSSI</li> <li>▪ Penarth Coast SSSI</li> <li>▪ Steep Holm SSSI</li> <li>▪ Sully Island SSSI</li> <li>▪ Upper Severn Estuary SSSI</li> </ul> <p>Maps of the site can be viewed on the <a href="#">CCW website</a>.</p>
<b>Key Environmental Conditions (factors that maintain site integrity)</b>	<b>Key supporting habitats for the Annex I species:</b> <ul style="list-style-type: none"> <li>▪ <b>Intertidal mudflats and sandflats:</b> <ul style="list-style-type: none"> <li>○ Habitat extent - The focal area for the Bewick's swans is the upper Severn Estuary in the vicinity of the New Grounds, Slimbridge area. The mudflats and sandflats exposed as the tide falls where the estuary widens in the upper reaches of the site at Waveridge Sands, Frampton Sands and The Noose are used as safe refuge areas when the birds are disturbed.</li> <li>○ Unimpeded sightlines at feeding and roosting sites - Bewick's swan require unrestricted views &gt;500m to allow early detection of predators when feeding and roosting.</li> </ul> </li> <li>▪ <b>Saltmarsh communities:</b></li> </ul>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK9015022</a> Size: 24662.98 Designation: SPA</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<ul style="list-style-type: none"> <li>○ Habitat extent - The birds feed on the saltmarsh and the transition from saltmarsh to coastal grazing marsh in front of the sea defences in the upper estuary at The Dumbles, where areas of the high marsh are mainly affected only by brackish water during tidal inundation.</li> <li>○ Vegetation characteristics - Bewick's swan graze on a range of 'soft' meadow grasses such as <i>Agrostis stolonifera</i> and <i>Alopecurus geniculatus</i> found in wet meadows which are outwith the European marine site boundary.</li> <li>○ Unimpeded sightlines at feeding and roosting sites - Bewick's swan require unrestricted views &gt;500m to allow early detection of predators when feeding and roosting.</li> </ul> <p><b>Key supporting habitats for populations of regularly occurring migratory species and assemblage of waterfowl:</b></p> <ul style="list-style-type: none"> <li>■ <b>Intertidal mudflats and sandflats:</b> <ul style="list-style-type: none"> <li>○ Habitat extent - Intertidal mudflats and sandflats and their communities are important habitats as they provide both roosting and feeding areas. The European white-fronted geese roost at night on estuarine sandbanks and usually fly less than 10km to the daytime feeding grounds. Therefore conservation of traditional roosting sites is necessary to enable the population to exploit potential feeding habitats.</li> <li>○ Food availability - Most of the waders and waterfowl within the assemblage including the internationally important regularly occurring migratory birds feed on invertebrates within and on the sediments.</li> <li>○ Unimpeded sightlines at feeding and roosting sites - Waterfowl require unrestricted views &gt;500m to allow early detection of predators when feeding and roosting.</li> </ul> </li> <li>■ <b>Saltmarsh:</b> <ul style="list-style-type: none"> <li>○ Habitat extent - Saltmarsh and their communities are important habitats as they provide both roosting and feeding areas. Upper and lower saltmarsh provide important feeding and roosting areas for the internationally important migratory birds throughout the estuary.</li> <li>○ Food availability - The saltmarshes provide a rich feeding habitat for redshank and shelduck, which feed on invertebrate species in the sediments, such as the mudsnail <i>Hydrobia</i>. The European white-fronted geese graze on a range of saltmarsh grasses and herbs such as common saltmarsh grass <i>Puccinellia</i></li> </ul> </li> </ul>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK9015022</a> Size: 24662.98 Designation: SPA</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>maritime and sea barley <i>Hordeum marinum</i>. The birds feed on the saltmarsh and the transition to coastal grazing marsh in front of the sea defences in the upper estuary and particularly at the The Dumbles.</p> <ul style="list-style-type: none"> <li>○ Vegetation characteristics - Vegetation of &lt;10 cm is required throughout areas used by roosting waders. This is managed by grazing.</li> <li>○ Unimpeded sightlines at feeding and roosting sites - Waterfowl require unrestricted views &gt;500m to allow early detection of predators when feeding and roosting. The saltmarshes also have an important function providing a safe haven from the tides that flood the mudflats twice a day. The low-growing dense vegetation provides a suitable roosting habitat for redshank and dunlin, which prefer to roost on areas of short vegetation ensuring good visibility.</li> </ul> <ul style="list-style-type: none"> <li>▪ <b>Shingle and rocky shore:</b> <ul style="list-style-type: none"> <li>○ Habitat extent - the shingle and rocks in the estuary provide feeding areas for dunlin and redshank and some limited foraging at high tide. It also provides important roost sites at high tide particularly for the dunlin and redshank. Many of the rocks are off shore and are therefore generally free from human disturbance. These include Guscar Rocks in the upper reaches, Blackstone Rocks at Clevedon and Stert Island in Bridgwater Bay.</li> <li>○ Food availability - see above.</li> <li>○ Unimpeded sightlines at feeding and roosting sites - Waterfowl require unrestricted views &gt;500m to allow early detection of predators when feeding and roosting.</li> </ul> </li> <li>▪ <b>Wet coastal grazing marsh, improved grassland and open standing waters</b> - these supporting habitats lie outside the European marine site boundary but within the SPA. They provide key areas for feeding and roosting for all the migratory species particularly at high tide.</li> </ul> <p><b>Key environmental conditions for the supporting habitats:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Hydrodynamic and sedimentary regime</b> - the tidal range in the Severn Estuary is the second-highest in the world and the scouring of the seabed and strong tidal streams result in natural erosion of the habitats and the presence of high sediment loads.</li> </ul>

Habitats Regulations Assessment: Data Proforma													
<b>Site Name:</b> Severn Estuary <b>Location (Lat &amp; Long):</b> 51 13 29 N 03 02 57 W <b>JNCC Site Code:</b> <a href="#">UK9015022</a> <b>Size:</b> 24662.98 <b>Designation:</b> SPA													
	<ul style="list-style-type: none"> <li>▪ <b>Maintain suitable distance between the site and development</b> - to allow for managed retreat of intertidal habitats and avoid coastal squeeze.</li> </ul> <p><b>Other key conditions:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Manage/restrict public access</b> - at certain times of the year. Significant disturbance attributable to human activities can result in reduced food intake and/or increased energy expenditure.</li> <li>▪ <b>Maintain levels of prey.</b></li> </ul> <p>Maps showing supporting habitats of the Severn Estuary SPA can be found on the <a href="#">CCW Website</a>.</p>												
<b>SAC Condition Assessment</b>	<p>Severn Estuary SSSI condition summary<sup>16</sup> (compiled 09 April 2008).</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 16.6%;">% Area meeting PSA* target</th> <th style="width: 16.6%;">% Area favourable</th> <th style="width: 16.6%;">% Area unfavourable recovering</th> <th style="width: 16.6%;">% Area unfavourable no change</th> <th style="width: 16.6%;">% Area unfavourable declining</th> <th style="width: 16.6%;">% Area destroyed / part destroyed</th> </tr> </thead> <tbody> <tr> <td>95.71%</td> <td>95.71%</td> <td>0.00%</td> <td>2.44%</td> <td>1.85%</td> <td>0.00%</td> </tr> </tbody> </table> <p>*PSA target - The Government's Public Service Agreement (PSA) target to have 95% of the SSSI area in favourable or recovering condition by 2010.</p>	% Area meeting PSA* target	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed / part destroyed	95.71%	95.71%	0.00%	2.44%	1.85%	0.00%
% Area meeting PSA* target	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed / part destroyed								
95.71%	95.71%	0.00%	2.44%	1.85%	0.00%								
<b>Vulnerabilities (includes existing pressures and trends)</b>	<p><b>Internationally important populations of regularly occurring Annex 1 species:</b></p>												

<sup>16</sup> Natural England SSSI condition summary. Available [online]: <http://www.english-nature.org.uk/special/ssi/reportAction.cfm?report=sdr18&category=S&reference=1002284>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK9015022</a> Size: 24662.98 Designation: SPA</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<ul style="list-style-type: none"> <li>▪ <b>Physical loss of supporting habitats through removal</b> - The physical loss of areas of intertidal habitats may be caused directly through change of land use or indirectly as a consequence of changes to sedimentation processes (e.g. coastal defences) as well as via the effects of smothering by artificial structures (e.g. jetties) or the disposal of spoils. Activities or developments resulting in physical loss of the intertidal supporting habitats are likely to reduce the availability of feeding and roosting habitat and thus be detrimental to the favourable condition of the SPA interest features including the Annex 1 species, Bewick's swan. The intertidal mudflats and sandflats and the saltmarsh are highly sensitive to removal by land reclamation and barrage construction. Information provided by NE and CCW states that large areas of the European marine site are not currently under threat, however when combined with a high level of sensitivity this leads to a moderate vulnerability.</li> <li>▪ <b>Noise or visual disturbance</b> - Overwintering birds are disturbed by sudden movements and sudden noises. This can displace the birds from their feeding grounds. Disturbance can prevent the birds from feeding and in response they either a) decrease their energy intake at their present (disturbed) feeding site through displacement activity, or b) move to an alternative less favoured feeding site. Such a response affects energy budgets and thus survival. There is intermittent disturbance from both the landward and seaward side of the site. Bewick's swans are mainly affected by disturbance from the landward side and any increase in disturbance should be avoided. At present NE and CCW assess that the Annex 1 species are moderately vulnerable to noise and visual disturbance on the intertidal mudflats and sandflats and highly vulnerable to this category of operation on the saltmarsh.</li> <li>▪ <b>Contamination by synthetic and/or non-synthetic toxic compounds</b> - Waterfowl are subject to the accumulation of toxins through the food chain or through direct contact with toxic substances when roosting or feeding. Their ability to feed can also be affected by the abundance or change in palatability of their prey caused by toxic contamination. At the moment there is no evidence to show that this is the case, but the estuary is vulnerable to oil spills and there is a continuous discharge of toxins into the estuary, some of which bind to the sediments. NE and CCW identify this is an area which requires further assessment. They also identify Bewick's swans as currently moderately vulnerable to toxic contamination.</li> </ul>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK9015022</a> Size: 24662.98 Designation: SPA</p>	<p style="text-align: center;"><b>Habitats Regulations Assessment: Data Proforma</b></p>
	<p><b>Internationally important waterfowl assemblage including populations of regularly occurring migratory species:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Physical loss through removal</b> - The physical loss of areas of intertidal habitats may be caused directly through change of land use or indirectly as a consequence of changes to sedimentation processes (e.g. coastal defences) as well as via the effects of smothering by artificial structures (e.g. jetties) or the disposal of spoils. Eelgrass beds are being affected by siltation due to changes in sediment movement after construction of the Second Severn Crossing which has resulted in smothering. Activities or developments resulting in physical loss of the intertidal supporting habitats are likely to reduce the availability of food and roosting habitat and thus be detrimental to the favourable condition of the SPA interest features including all the migratory species and waterfowl assemblage. All three supporting habitats are highly sensitive to removal by land reclamation and barrage construction. Information provided by NE and CCW states that large areas of the European marine site are not currently under threat, however when combined with a high level of sensitivity this leads to a moderate vulnerability.</li> <li>▪ <b>Damage by abrasion or selective extraction</b> - Saltmarsh may be physically damaged from overgrazing or eroded when boats are moored on it and when paths are worn through it to reach moored boats on foot or via vehicles. Currently all supporting habitats are considered to be moderately vulnerable to abrasion. Intertidal habitats are highly sensitive to damage by direct and indirect effects of aggregate dredging. The intertidal mudflats and sandflats and the shingle and rocky shore are therefore considered by NE and CCW to be highly vulnerable to selective extraction.</li> <li>▪ <b>Noise or visual disturbance</b> - Overwintering birds are disturbed by sudden movements and sudden noises. This can have the effect of displacing the birds from their feeding grounds. Disturbance can prevent the birds from feeding and in response they either a) decrease their energy intake at their present (disturbed) feeding site through displacement activity, or b) move to an alternative less favoured feeding site. Such a response affects energy budgets and thus survival. There is intermittent disturbance to the internationally important migratory species and the waterfowl assemblage from both the landward and seaward side of the site which has increased in recent years, due to the estuary becoming more populated and the</li> </ul>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK9015022</a> Size: 24662.98 Designation: SPA</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>development of all weather recreational pursuits. All supporting habitats are currently highly vulnerable to noise and visual disturbance.</p> <ul style="list-style-type: none"> <li>▪ <b>Contamination by synthetic and/or non-synthetic toxic compounds</b> - Waterfowl are subject to the accumulation of toxins through the food chain or through direct contact with toxic substances when roosting or feeding. Their ability to feed can also be affected by the abundance or change in palatability of their prey caused by toxic contamination. At the moment there is no evidence to show that this is the case on the Severn Estuary, but the estuary is vulnerable to oil spills and there is a continuous discharge of toxins into the estuary, some of which bind to the sediments. NE and CCW identify this is an area which requires further assessment. The intertidal mudflats and sandflats and the saltmarsh are currently highly vulnerable to the introduction of synthetic and non-synthetic compounds.</li> <li>▪ <b>Changes in nutrient and/or organic loading</b> - Changes in organic or nutrient loading can change the species composition of the plants on the saltmarsh and thus the structure of the sward. Increases in nutrients can also cause excessive algal growth on the mudflats, denying the birds access to their invertebrate prey and changing the invertebrate species composition in the sediment. Though the water quality has been improved in recent years there are still local areas of concern and any increase in nutrient loading should be avoided. At present the intertidal mudflats and sandflats are moderately vulnerable to this category of operation.</li> <li>▪ <b>Biological disturbance through the selective extraction of species</b> - Wildfowling is carried out all around the estuary. NE and CCW have not established that it has a detrimental effect on the overall bird populations but state that wildfowling needs to be exercised in a managed and sustainable manner preferably by a British Association of Shooting and Conservation (BASC) affiliated association, applying the BASC wildfowling code of conduct. Bait digging is also carried out around the estuary. If too large an area is regularly dug over, it can change the availability of prey in the sediment as the area needs a period of recovery and recolonisation. The removal of strandline vegetation by beach cleaning removes an important habitat for invertebrates, as well as many of the invertebrates themselves, reducing the quantity and variety of prey available to the birds. Much of the saltmarsh is managed by grazing and changes in management can alter the availability of prey and suitability of roosting sites. The saltmarsh is currently</li> </ul>



<b>Site Name: Severn Estuary</b> <b>Location (Lat &amp; Long):</b> 51 13 29 N 03 02 57 W <b>JNCC Site Code: <a href="#">UK9015022</a></b> <b>Size: 24662.98</b> <b>Designation: SPA</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
	<p>highly vulnerable to the selective extraction of species.</p>
<b>Landowner/ Management Responsibility</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>
<b>HRA/AA Studies undertaken that address this site</b>	<p>HRA Screening of the County Council of the City and County of Cardiff Local Development Plan Preferred Strategy Sept 2007.  <a href="http://www.cardiff.gov.uk/ObjView.asp?Object_ID=9788">www.cardiff.gov.uk/ObjView.asp?Object_ID=9788</a></p> <ul style="list-style-type: none"> <li>▪ The Screening states that the significance of the potential impacts of the indicative route in the Preferred Strategy (either alone or in-combination with other plans and projects) will be considered when a more detailed scheme is available. An appropriate assessment may be required for the scheme.</li> </ul> <p>HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008.  <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf</a></p> <ul style="list-style-type: none"> <li>▪ It is likely that an increase of 7000 dwellings in Torfaen and associated development will in some way impact upon the site. It is likely however that the potential impact will be as a result of in-combination effects with other implemented plans and programmes in close proximity to the Severn Estuary.</li> </ul> <p>AA Screening of the Vale of Glamorgan Local Development Plan Preferred Strategy Dec 07.  <a href="http://www.valeofglamorgan.gov.uk/files/Living/Planning/Policy/LDP/Appropriate_Assessment_Screening_Report.pdf">http://www.valeofglamorgan.gov.uk/files/Living/Planning/Policy/LDP/Appropriate_Assessment_Screening_Report.pdf</a></p> <ul style="list-style-type: none"> <li>▪ Given the extent of the Severn Estuary and the diverse range of activities and operations that could result in adverse impact to the European Site, it is considered inevitable that the Draft Preferred Strategy will in some way, impact upon the designated site. While much of the development arising from the draft preferred strategy is likely to be located well away from the Severn Estuary, the south-eastern zone has been identified as a growth area and abuts the boundary of the designated site. Therefore, it is recommended that a more detailed assessment of the LDP be undertaken following consultation on the Draft Preferred</li> </ul>

<p>Site Name: Severn Estuary                  Location (Lat &amp; Long):                  51 13 29 N                  03 02 57 W                  JNCC Site Code: <a href="#">UK9015022</a>                  Size: 24662.98                  Designation: SPA</p>	<p style="text-align: center;"><b>Habitats Regulations Assessment: Data Proforma</b></p>
	<p>Strategy to ascertain and mitigate against any likely significant effects to the SPA, cSAC, RAMSAR.</p>

## Ramsar Sites

Site Name: Severn Estuary Location (Lat & Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK11081</a> Size: 24662.98 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
<b>Site Description</b>	<p>The Severn Estuary is the largest coastal plain estuary in the UK with extensive mudflats and sandflats, rocky shore platforms, shingle and islands. Saltmarsh fringes the coast, backed by grazing marsh with freshwater and occasional brackish ditches. The estuary's classic funnel shape, unique in the UK, is a factor causing the Severn to have the second highest tidal range in the world (after the Bay of Fundy in Canada) at more than 12 meters. This tidal regime results in plant and animal communities typical of the extreme physical conditions of strong flows, mobile sediments, changing salinity, high turbidity and heavy scouring. The resultant low diversity invertebrate communities, that frequently include populations of ragworms, lugworms and other invertebrates in high densities, form an important food source for passage and wintering birds. The site is important in the spring and autumn migration periods for waders moving along the west coast of Europe, as well as in winter for large numbers of waterbirds including swans, geese, ducks and waders. These bird populations are regarded as internationally important.</p> <p>Glassworts and annual sea-blite colonise the open mud, with beds of all three species of eelgrass <i>Zostera</i> occurring on more sheltered mud and sandbanks. Large expanses of common cord-grass also occur on the outer marshes. Heavily grazed saltmarsh fringes the estuary with a range of saltmarsh types present. The middle marsh sward is dominated by common saltmarsh-grass with typical associated species. In the upper marsh, red fescue and saltmarsh rush become more prominent.</p> <p>Areas of saltmarsh fringe the estuary, mostly grazed with a range of vegetation communities. There are gradual and stepped transitions between bare mudflat to upper marsh and grassland. Main vegetation types are: upper saltmarsh with <i>Festuca rubra</i> and <i>Juncus gerardii</i>; middle marsh dominated by <i>Puccinellia maritima</i> with <i>Glaux maritima</i> and <i>Triglochin maritima</i>; dense monocultures of <i>Spartina anglica</i> at the edge of the mudflats-brackish pools and depressions with <i>Phragmites australis</i> and <i>Bolboschoenus maritimus</i>.</p>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK11081</a> Size: 24662.98 Designation: Ramsar</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
<p>Qualifying Features</p>	<p>Ramsar criterion 1</p> <ul style="list-style-type: none"> <li>▪ Immense tidal range (second-largest in world) creating diversity of physical environment and biological communities.</li> </ul> <p>Ramsar criterion 3</p> <ul style="list-style-type: none"> <li>▪ Due to unusual estuarine communities, reduced diversity and high productivity.</li> </ul> <p>Ramsar criterion 4</p> <ul style="list-style-type: none"> <li>▪ This site is important for the run of migratory fish between sea and river via estuary. Species include Salmon <i>Salmo salar</i>, sea trout <i>S. trutta</i>, sea lamprey <i>Petromyzon marinus</i>, river lamprey <i>Lampetra fluviatilis</i>, allis shad <i>Alosa alosa</i>, twaite shad <i>A. fallax</i>, and eel <i>Anguilla anguilla</i>. It is also of particular importance for migratory birds during spring and autumn.</li> </ul> <p>Ramsar criterion 5</p> <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> <li>▪ 70919 waterfowl</li> </ul> <p>Ramsar criterion 6</p> <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> <li>▪ Bewick's swan</li> <li>▪ Greater white-fronted goose</li> <li>▪ Common shelduck</li> <li>▪ Gadwall</li> <li>▪ Dunlin</li> <li>▪ Common redshank</li> </ul> <p>Ramsar criterion 8</p>

<b>Site Name: Severn Estuary</b> <b>Location (Lat &amp; Long):</b> 51 13 29 N 03 02 57 W <b>JNCC Site Code: <a href="#">UK11081</a></b> <b>Size: 24662.98</b> <b>Designation: Ramsar</b>	<b>Habitats Regulations Assessment: Data Proforma</b>
	<ul style="list-style-type: none"> <li>▪ The fish of the whole estuarine and river system is one of the most diverse in Britain, with over 110 species recorded. Salmon <i>Salmo salar</i>, sea trout <i>S. trutta</i>, sea lamprey <i>Petromyzon marinus</i>, river lamprey <i>Lampetra fluviatilis</i>, allis shad <i>Alosa alosa</i>, twaite shad <i>A. fallax</i>, and eel <i>Anguilla Anguilla</i> use the Severn Estuary as a key migration route to their spawning grounds in the many tributaries that flow into the estuary. The site is important as a feeding and nursery ground for many fish species particularly allis shad <i>Alosa alosa</i> and twaite shad <i>A. fallax</i> which feed on mysid shrimps in the salt wedge.</li> </ul>
<b>Conservation Objectives</b>	<ul style="list-style-type: none"> <li>▪ No conservation objectives currently available for this site.</li> </ul>
<b>Component SSSIs</b>	<ul style="list-style-type: none"> <li>▪ Sully Island SSSI</li> <li>▪ Steep Holm SSSI</li> <li>▪ Bridgwater Bay SSSI</li> <li>▪ Flat Holm SSSI</li> <li>▪ Severn Estuary SSSI</li> <li>▪ Severn Estuary SSSI</li> <li>▪ Flat Holm SSSI</li> <li>▪ Upper Severn Estuary SSSI</li> <li>▪ Bridgwater Bay SSSI</li> <li>▪ Penarth Coast SSSI</li> <li>▪ Steep Holm SSSI</li> <li>▪ Sully Island SSSI</li> <li>▪ Upper Severn Estuary SSSI</li> </ul>
<b>Key Environmental Conditions (factors that maintain site integrity)</b>	<b>Key supporting habitats for the Bewick's swan:</b> <ul style="list-style-type: none"> <li>▪ <b>Intertidal mudflats and sandflats:</b> <ul style="list-style-type: none"> <li>○ Habitat extent - The focal area for the Bewick's swans is the upper Severn Estuary in the vicinity of the</li> </ul> </li> </ul>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK11081</a> Size: 24662.98 Designation: Ramsar</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<p>New Grounds, Slimbridge area. The mudflats and sandflats exposed as the tide falls where the estuary widens in the upper reaches of the site at Waveridge Sands, Frampton Sands and The Moose are used as safe refuge areas when the birds are disturbed.</p> <ul style="list-style-type: none"> <li>○ Unimpeded sightlines at feeding and roosting sites - Bewick's swan require unrestricted views &gt;500m to allow early detection of predators when feeding and roosting.</li> </ul> <p>■ <b>Saltmarsh communities:</b></p> <ul style="list-style-type: none"> <li>○ Habitat extent - The birds feed on the saltmarsh and the transition from saltmarsh to coastal grazing marsh in front of the sea defences in the upper estuary at The Dumbles, where areas of the high marsh are mainly affected only by brackish water during tidal inundation.</li> <li>○ Vegetation characteristics - Bewick's swan graze on a range of 'soft' meadow grasses such as <i>Agrostis stolonifera</i> and <i>Alopecurus geniculatus</i> found in wet meadows which are outwith the European marine site boundary.</li> <li>○ Unimpeded sightlines at feeding and roosting sites - Bewick's swan require unrestricted views &gt;500m to allow early detection of predators when feeding and roosting.</li> </ul> <p><b>Key supporting habitats for populations of regularly occurring migratory species and assemblage of waterfowl</b></p> <p>■ <b>Intertidal mudflats and sandflats:</b></p> <ul style="list-style-type: none"> <li>○ Habitat extent - Intertidal mudflats and sandflats and their communities are important habitats as they provide both roosting and feeding areas. The European white-fronted geese roost at night on estuarine sandbanks and usually fly less than 10km to the daytime feeding grounds. Therefore conservation of traditional roosting sites is necessary to enable the population to exploit potential feeding habitats.</li> <li>○ Food availability - Most of the waders and waterfowl within the assemblage including the internationally important regularly occurring migratory birds feed on invertebrates within and on the sediments.</li> <li>○ Unimpeded sightlines at feeding and roosting sites - Waterfowl require unrestricted views &gt;500m to allow early detection of predators when feeding and roosting.</li> </ul> <p>■ <b>Saltmarsh:</b></p>

<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK11081</a> Size: 24662.98 Designation: Ramsar</p>	<p>Habitats Regulations Assessment: Data Proforma</p>
	<ul style="list-style-type: none"> <li>○ Habitat extent - Saltmarsh and their communities are important habitats as they provide both roosting and feeding areas. Upper and lower saltmarsh provide important feeding and roosting areas for the internationally important migratory birds throughout the estuary.</li> <li>○ Food availability - The saltmarshes provide a rich feeding habitat for redshank and shelduck, which feed on invertebrate species in the sediments, such as the mudsnail <i>Hydrobia</i>. The European white-fronted geese graze on a range of saltmarsh grasses and herbs such as common saltmarsh grass <i>Puccinellia maritime</i> and sea barley <i>Hordeum marinum</i>. The birds feed on the saltmarsh and the transition to coastal grazing marsh in front of the sea defences in the upper estuary and particularly at the The Dumbles.</li> <li>○ Vegetation characteristics - Vegetation of &lt;10 cm is required throughout areas used by roosting waders. This is managed by grazing.</li> <li>○ Unimpeded sightlines at feeding and roosting sites - Waterfowl require unrestricted views &gt;500m to allow early detection of predators when feeding and roosting. The saltmarshes also have an important function providing a safe haven from the tides that flood the mudflats twice a day. The low-growing dense vegetation provides a suitable roosting habitat for redshank and dunlin, which prefer to roost on areas of short vegetation ensuring good visibility.</li> <li>■ <b>Shingle and rocky shore:</b> <ul style="list-style-type: none"> <li>○ Habitat extent - the shingle and rocks in the estuary provide feeding areas for dunlin and redshank and some limited foraging at high tide. It also provides important roost sites at high tide particularly for the dunlin and redshank. Many of the rocks are off shore and are therefore generally free from human disturbance. These include Guscar Rocks in the upper reaches, Blackstone Rocks at Clevedon and Stert Island in Bridgwater Bay.</li> <li>○ Food availability - see above.</li> <li>○ Unimpeded sightlines at feeding and roosting sites - Waterfowl require unrestricted views &gt;500m to allow early detection of predators when feeding and roosting.</li> </ul> </li> <li>■ <b>Wet coastal grazing marsh, improved grassland and open standing waters</b> - these supporting habitats lie outside the European marine site boundary but within the SPA. They provide key areas for feeding and roosting for all the migratory species particularly at high tide.</li> </ul>

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	<p><b>Key environmental conditions for the supporting habitats:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Hydrodynamic and sedimentary regime</b> - the tidal range in the Severn Estuary is the second-highest in the world and the scouring of the seabed and strong tidal streams result in natural erosion of the habitats and the presence of high sediment loads.</li> <li>▪ <b>Maintain suitable distance between the site and development</b> - to allow for managed retreat of intertidal habitats and avoid coastal squeeze.</li> </ul> <p><b>Other key conditions:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Manage/restrict public access</b> - at certain times of the year. Significant disturbance attributable to human activities can result in reduced food intake and/or increased energy expenditure.</li> <li>▪ <b>Maintain levels of prey.</b></li> </ul>
<b>SAC Condition Assessment</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>
<b>Vulnerabilities (includes existing pressures and trends)</b>	<ul style="list-style-type: none"> <li>▪ <b>Physical loss of supporting habitats through removal</b> - The physical loss of areas of intertidal habitats may be caused directly through change of land use or indirectly as a consequence of changes to sedimentation processes (e.g. coastal defences) as well as via the effects of smothering by artificial structures (e.g. jetties) or the disposal of spoils. Activities or developments resulting in physical loss of the intertidal supporting habitats are likely to reduce the availability of feeding and roosting habitats. The intertidal mudflats and sandflats and the saltmarsh are highly sensitive to removal by land reclamation and barrage construction. Information provided by NE and CCW states that large areas of the European marine site are not currently under threat, however when combined with a high level of sensitivity this leads to a moderate vulnerability.</li> <li>▪ <b>Noise or visual disturbance</b> - Overwintering birds are disturbed by sudden movements and sudden noises. This can displace the birds from their feeding grounds. Disturbance can prevent the birds from feeding and</li> </ul>



Habitats Regulations Assessment: Data Proforma	
<p>Site Name: Severn Estuary Location (Lat &amp; Long): 51 13 29 N 03 02 57 W JNCC Site Code: <a href="#">UK11081</a> Size: 24662.98 Designation: Ramsar</p>	
	<p>in response they either a) decrease their energy intake at their present (disturbed) feeding site through displacement activity, or b) move to an alternative less favoured feeding site. Such a response affects energy budgets and thus survival. There is intermittent disturbance to the internationally important migratory species and the waterfowl assemblage from both the landward and seaward side of the site which has increased in recent years, due to the estuary becoming more populated and the development of all weather recreational pursuits. Bewick's swans are mainly affected by disturbance from the landward side and any increase in disturbance should be avoided. All supporting habitats are currently highly vulnerable to noise and visual disturbance.</p> <ul style="list-style-type: none"> <li>▪ <b>Contamination by synthetic and/or non-synthetic toxic compounds</b> - Waterfowl are subject to the accumulation of toxins through the food chain or through direct contact with toxic substances when roosting or feeding. Their ability to feed can also be affected by the abundance or change in palatability of their prey caused by toxic contamination. At the moment there is no evidence to show that this is the case, but the estuary is vulnerable to oil spills and there is a continuous discharge of toxins into the estuary, some of which bind to the sediments. NE and CCW identify this is an area which requires further assessment. The intertidal mudflats and sandflats and the saltmarsh are currently highly vulnerable to the introduction of synthetic and non-synthetic compounds.</li> <li>▪ <b>Damage by abrasion or selective extraction</b> - Saltmarsh may be physically damaged from overgrazing or eroded when boats are moored on it and when paths are worn through it to reach moored boats on foot or via vehicles. Currently all supporting habitats are considered to be moderately vulnerable to abrasion. Intertidal habitats are highly sensitive to damage by direct and indirect effects of aggregate dredging. The intertidal mudflats and sandflats and the shingle and rocky shore are therefore considered by NE and CCW to be highly vulnerable to selective extraction.</li> <li>▪ <b>Changes in nutrient and/or organic loading</b> - Changes in organic or nutrient loading can change the species composition of the plants on the saltmarsh and thus the structure of the sward. Increases in nutrients can also cause excessive algal growth on the mudflats, denying the birds access to their invertebrate prey and changing the invertebrate species composition in the sediment. Though the water quality has been improved in recent years there are still local areas of concern and any increase in nutrient loading should</li> </ul>

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	<p>be avoided. At present the intertidal mudflats and sandflats are moderately vulnerable to this category of operation.</p> <ul style="list-style-type: none"> <li> <b>Biological disturbance through the selective extraction of species</b> - Wildfowling is carried out all around the estuary. NE and CCW have not established that it has a detrimental effect on the overall bird populations but state that wildfowling needs to be exercised in a managed and sustainable manner preferably by a British Association of Shooting and Conservation (BASC) affiliated association, applying the BASC wildfowling code of conduct. Bait digging is also carried out around the estuary. If too large an area is regularly dug over, it can change the availability of prey in the sediment as the area needs a period of recovery and recolonisation. The removal of strandline vegetation by beach cleaning removes an important habitat for invertebrates, as well as many of the invertebrates themselves, reducing the quantity and variety of prey available to the birds. Much of the saltmarsh is managed by grazing and changes in management can alter the availability of prey and suitability of roosting sites. The saltmarsh is currently highly vulnerable to the selective extraction of species.         </li> </ul>
<b>Landowner/ Management Responsibility</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>HRA/AA Studies undertaken that address this site</b>	<p>HRA Screening of the County Council of the City and County of Cardiff Local Development Plan Preferred Strategy Sept 2007.  <a href="http://www.cardiff.gov.uk/ObjView.asp?Object_ID=9788">www.cardiff.gov.uk/ObjView.asp?Object_ID=9788</a></p> <ul style="list-style-type: none"> <li>The Screening states that the significance of the potential impacts of the indicative route in the Preferred Strategy (either alone or in-combination with other plans and projects) will be considered when a more detailed scheme is available. An appropriate assessment may be required for the scheme.</li> </ul> <p>HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008.  <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf</a></p> <ul style="list-style-type: none"> <li>It is likely that an increase of 7000 dwellings in Torfaen and associated development will in some way</li> </ul>

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	<p>impact upon the site. It is likely however that the potential impact will be as a result of in-combination effects with other implemented plans and programmes in close proximity to the Severn Estuary.</p> <p>AA Screening of the Vale of Glamorgan Local Development Plan Preferred Strategy Dec 07. <a href="http://www.valeofglamorgan.gov.uk/files/Living/Planning/Policy/LDP/Appropriate_Assessment_Screening_Report.pdf">http://www.valeofglamorgan.gov.uk/files/Living/Planning/Policy/LDP/Appropriate_Assessment_Screening_Report.pdf</a></p> <ul style="list-style-type: none"> <li>Given the extent of the Severn Estuary and the diverse range of activities and operations that could result in adverse impact to the European Site, it is considered inevitable that the Draft Preferred Strategy will in some way, impact upon the designated site. While much of the development arising from the draft preferred strategy is likely to be located well away from the Severn Estuary, the south-eastern zone has been identified as a growth area and abuts the boundary of the designated site. Therefore, it is recommended that a more detailed assessment of the LDP be undertaken following consultation on the Draft Preferred Strategy to ascertain and mitigate against any likely significant effects to the SPA, cSAC, RAMSAR.</li> </ul>

**Appendix 2 Screening of Policies Caerphilly Deposit Local Development Plan**

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<b>Strategy Policies</b>		
<p><b>Local Development Plan Vision Statement</b></p> <p>The Development Strategy for the Local Development Plan will capitalise on the strategic location of Caerphilly County Borough at the centre of the Capital Network Region. It will ensure that the needs of all the County Borough's residents and visitors are met and that the regeneration of our towns, villages and employment centres and the surrounding countryside is delivered in a well-balanced and sustainable manner that reflects the specific role and function of individual settlements.</p>	<p><i>Sets overarching/ Strategic Framework for development – issues addressed as part of Core policies screening assessment below.</i></p>	
<p><b>Key Objectives for the Caerphilly County Borough Local Development Plan</b></p> <p><b>Objectives for Health Social Care and Well Being</b></p> <ul style="list-style-type: none"> <li>▪ Accommodate sustainable levels of population growth.</li> <li>▪ Ensure that the county borough is well served by accessible public open space and accessible natural green space.</li> </ul> <p><b>Objectives for The Living Environment</b></p> <ul style="list-style-type: none"> <li>▪ Ensure the effective and efficient use of natural and built resources while preventing the unnecessary sterilisation of finite resources through inappropriate development.</li> <li>▪ Ensure that the environmental impact of all new development is minimised in order to ensure air quality improves.</li> <li>▪ Improve energy, waste and water efficiency while promoting environmentally acceptable</li> </ul>		

<p><b>Policy References Deposit Local Development Plan</b></p>	<p><b>Potential effects (Criteria 1-7) Rationale/ Comments</b></p>	<p><b>Likely Significant Effect (LSE)</b> No - x Yes - ✓</p>
<p>renewable energy to maintain a cleaner environment and help reduce our impact on climate change.</p> <ul style="list-style-type: none"> <li>▪ Encourage waste management based on a hierarchy of re-use, recovery (including material recycling, energy recovery and composting) and safe disposal.</li> <li>▪ Encourage the re-use and / or reclamation of appropriate brown-field and contaminated land and prevent the incidence of further contamination and dereliction.</li> <li>▪ Concentrate new development in appropriate locations along existing and proposed infrastructure networks that are accessible to pedestrians, cyclists and to public transport in order to sustain and complement the role and function of individual settlements.</li> <li>▪ Ensure an adequate and appropriate range of housing sites are available across the county borough in the most suitable locations to meet the housing requirements of all sections of the population.</li> <li>▪ Ensure that all new development is well designed and has regard for its surroundings in order to reduce the opportunity for crime to occur.</li> <li>▪ Identify, protect and, where appropriate enhance, valuable landscapes and landscape features and protect them from unacceptable development.</li> <li>▪ Identify, protect and enhance sites of nature conservation and earth science interest and ensure the biodiversity of the county borough is enhanced.</li> <li>▪ Create appropriate new landscape and ecological features and habitats as an integral part of new development wherever appropriate.</li> <li>▪ Manage, protect and enhance the quality and quantity of the water environment and reduce water consumption.</li> <li>▪ Reduce the impact of flooding by ensuring that highly vulnerable development is directed away from areas of risk wherever possible.</li> <li>▪ Reduce congestion by minimising the need to travel, promoting more sustainable modes of transport and making the most efficient of existing transport infrastructure.</li> </ul> <p><b>Objectives for Regeneration</b></p>		

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<ul style="list-style-type: none"> <li>▪ Capitalise on Caerphilly’s strategic position further developing its role as a commercial and employment centre in the Heart of the Valleys City Region with strong links to the heads of the valleys area and as the smart alternative for locating development to Cardiff and Newport.</li> <li>▪ Provide and protect a diverse portfolio of employment land for a variety of employment uses, focusing in particular on higher value employment opportunities and sites to meet local need.</li> <li>▪ Encourage the development of high quality, all season tourist attractions and tourist accommodation which complements the natural and built environment of the County Borough.</li> <li>▪ Maximise the efficient use of the existing infrastructure and encourage the necessary improvements to the network to sustain necessary levels of development at appropriate locations across the County Borough.</li> </ul> <p><b>Objectives for Education for Life</b></p> <ul style="list-style-type: none"> <li>▪ Protect and provide a wide range of community facilities which are appropriately located and easily accessible, and which meet the needs of all sections of the population.</li> <li>▪ Maintain the vitality, viability and character of the County Borough’s town and village centres and re-establish them as a focus for economic activity and community pride.</li> <li>▪ Maintain, enhance and develop a hierarchy of town and village centres which are easily accessible, and which meet the needs of all sections of the population.</li> <li>▪ Protect and enhance the overall quality of the historic natural and built environment of the County Borough.</li> </ul>		
<b>CORE STRATEGY PREFERRED POLICIES</b>		
<b>Development Strategy – Development in the Heads of the Valleys Regeneration Area</b> SP1	Uncertain Effect.  This policy supports	✓

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<p>Proposals in the Heads Of The Valleys Regeneration Area will help promote the north of the County Borough as a tourist, employment and residential area at the heart of the valleys city region. The area will provide appropriate forms of growth to address existing problems of deprivation and to sustain and develop communities in a manner that is consistent with the underlying principles of sustainable development.</p>	<p>regeneration based around tourism, employment and housing in the North of the County Borough – guided by sustainable development principles.</p> <p>The Heads of the Valleys area includes the County Borough’s one SAC (Aberbargoed Grasslands) and potential impacts arising from developments in the area include: urbanisation and its associated effects (e.g. fly tipping, dog fouling, cat predation), recreational impacts, atmospheric pollution, water abstraction, pollution and noise</p>	

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
	pollution as an indirect effect.	
<p><b>Development Strategy – Development in the Northern Connections Corridor SP2</b></p> <p>Development proposals in the Northern Connections Corridor will promote sustainable development that:</p> <p>A Focuses significant development on both brownfield &amp; Greenfield sites that have regard for the social &amp; economic functions of the area</p> <p>B Reduces the need to travel</p> <p>C Makes the most efficient use of the existing infrastructure;</p> <p>D Protects the natural heritage from inappropriate forms of development.</p> <p>E That capitalises on the economic opportunities offered by Oakdale/Penyfan Plateau</p>	<p>Uncertain effect.</p> <p>Development at Greenfield sites has the potential to result in indirect effects at European sites where connectivity between habitats and related greenspace supports the overall integrity of the site. This is most relevant where the greenspace/ Greenfield sites are in close proximity to the designated habitats. The protection afforded to natural heritage through this policy provides a mitigation measure.</p>	<p>✓</p>
<p><b>Development Strategy – Development in the Southern Connections Corridor SP3</b></p>	<p>‘No effect’ policy: 4/5.</p>	<p>x</p>



Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<p>Development proposals in the Southern Connections Corridor will promote sustainable development that:</p> <ul style="list-style-type: none"> <li>A Uses previously developed land within settlement limits</li> <li>B Reduces the need to travel</li> <li>C Makes the most efficient use of the existing infrastructure</li> <li>D Has regard to the social and economic function of the area; and</li> <li>E Protects the natural heritage from inappropriate forms of development</li> </ul>	<p>Focus of development on brownfield/ previously developed sites, steers development away from sensitive areas – explicit protection for natural heritage.</p>	
<p><b>Settlement Strategy SP4</b></p> <p>The Council will support existing settlements, which will be enhanced based on their role and function in the settlement strategy:</p> <p><b>Principal Towns:</b></p> <ul style="list-style-type: none"> <li>• Bargoed (HOV)</li> <li>• Blackwood (NCC)</li> <li>• Ystrad Mynach (NCC)</li> <li>• Caerphilly (SCC)</li> <li>• Risca - Pontymister (SCC)</li> </ul> <p><b>Key Settlements:</b></p> <ul style="list-style-type: none"> <li>• Rhymney (HOV)</li> <li>• Nelson (NCC)</li> <li>• Newbridge (NCC)</li> <li>• Bedwas (SCC)</li> </ul>	<p>Uncertain impacts.</p> <p>Effects will be dependant on the implementation of lower level policies. The potential for impacts are most likely where settlements are proximal to SAC sites (Bargoed – Aberbargoed Grasslands SAC; Caerphilly – Cardiff Beechwoods SAC).</p>	<p style="text-align: center;">✓</p>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
Residential areas: all other villages within settlement limits		
<p><b>Settlement Boundaries</b> <b>SP5</b></p> <p>The Plan defines settlement boundaries in order to:</p> <p>A Define the area within which development would normally be allowed, taking into account material planning considerations</p> <p>B Promote the full and effective use of urban land and thus concentrate development within settlements</p> <p>C Prevent the coalescence of settlements, ribbon development and fragmented development</p> <p>D Prevent inappropriate development in the countryside</p>	<p>'No effect' policy :4/5.</p> <p>Policy concentrates development in urban areas (settlements) and steers development away from sensitive areas.</p>	<p><b>X</b></p>
<p><b>Place Making</b> <b>SP6</b></p> <p>Development proposals should contribute to creating sustainable places by having full regard to the context of the local, natural and built environment and its special features through:</p> <p>A An appropriate mix of uses</p> <p>B A high standard of design that reinforces attractive qualities of local distinctiveness</p> <p>C Design in accordance with best practice in terms of designing out crime</p> <p>D A location and layout that reflects sustainable transport and accessibility principles and provides full, easy and safe access for all has been ensured</p> <p>E The incorporation of resource efficiency and passive solar gain through layout, materials, construction techniques; and the promotion of air, water and soil conservation; and where appropriate the use of sustainable drainage systems</p> <p>F The efficient use of land, including higher densities where development is close to key transport nodes</p> <p>G The incorporation and enhancement of existing natural heritage features</p> <p>H The incorporation of mitigation measures that improve and maintain air quality</p>	<p>'No effect' policy: 2/6.</p> <p>Includes environmental protection measures and is not spatially specific.</p>	<p><b>X</b></p>
<p><b>Planning Obligations</b></p>	<p>'No effect' policy: 7.</p>	<p><b>X</b></p>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<p><b>SP7</b></p> <p>The Council will seek to secure Planning Obligations (S106 Agreements) where they are necessary to remove obstacles of planned development, meet local needs and make development more sustainable. Such obligations will include:</p> <ul style="list-style-type: none"> <li>a) Infrastructure for walking, cycling, public transport, parking</li> <li>b) Schools and ancillary facilities</li> <li>c) Community facilities</li> <li>d) Strategic highways improvements in the Northern and Southern Connections Corridors</li> <li>e) Formal and informal open and leisure space</li> <li>f) Affordable housing; and</li> <li>g) Other facilities and services considered necessary</li> </ul>	<p>Supports development approaches that may have indirect benefits for European sites – e.g. more sustainable travel modes, reducing emissions and associated air pollution loads.</p>	
<p><b>Flood Risk</b> <b>SP8</b></p> <p>The Plan does not allocate development within Zone C of the floodplain unless it can be justified on the grounds that:</p> <ul style="list-style-type: none"> <li>A It is necessary to assist the regeneration of a principal town or key settlement</li> <li>B The potential consequences of a flooding event have been considered and found to be acceptable in accordance with national guidance</li> </ul>	<p>‘No effect’ policy: 1.</p> <p>Policy alone will not lead to development.</p>	<b>X</b>
<p><b>Minerals Safeguarding</b> <b>SP9</b></p> <p>The Council will contribute to the regional demand for a continuous supply of minerals by:</p> <ul style="list-style-type: none"> <li>A Safeguarding known reserves of coal, sand and gravel and hard rock taking into account relevant environmental, planning and transportation considerations</li> <li>B Maintaining a 10-year land-bank of permitted aggregate reserves in line with national guidance</li> </ul>	<p>‘No effect’ policy: 1.</p> <p>The policy itself will not lead to development. Minerals can only be worked where found, minerals working are not an identified risk</p>	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
	to SACs within the County Borough plan area.	
<p><b>Renewable Energy SP10</b></p> <p>The Council will require new developments to incorporate energy saving and renewable energy technologies where appropriate, in order to promote sustainable development</p>	<p>'No effect' policy: 1/2.</p> <p>Potential for indirect benefits for the natural environment through reduced energy demands/ fuel use/ emissions.</p>	<b>x</b>
<p><b>Waste Management SP11</b></p> <p>The Council will implement a sustainable, integrated approach to waste management, which minimises the production of waste and its impact on the environment, and maximises the use of unavoidable waste as a resource. To assist in this aim the following land-use commitments are made:</p> <ul style="list-style-type: none"> <li>• All allocated and protected class B2 industrial sites are designated as potentially suitable locations for new waste management facilities, which provides substantial choice in meeting the estimated land requirement of up to 10.4 ha</li> <li>• The Area of Search maps identified in the RWP are adopted as appropriate advice as to where developers should first seek sites for inbuilding and open air facilities</li> </ul>	<p>'No effect' policy: 4/6.</p> <p>Explicit policy commitments to avoid environmental impacts and development focused at existing industrial sites.</p>	<b>x</b>
<p><b>Conservation of Natural Heritage SP12</b></p> <p>The Council will protect, maintain, enhance and positively manage the natural heritage of the county</p>	<p>'No effect' policy: 6/7.</p> <p>Explicit policy protection for the</p>	<b>x</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
borough in the consideration of all development proposals within both the rural and built environment.	natural environment.	
<b>Countryside Recreation SP13</b>  Access to opportunities for enjoyment of Caerphilly County Borough will be promoted and encouraged where the proposals are sustainable in terms of its impact on the natural heritage, the local community and the rural environment within which they are located.	No effect policy: 6/7. Includes policy mitigation to address impacts on natural environment.	<b>x</b>
<b>Development of the Valleys Regional Park SP14</b>  Development proposals that contribute to the Valleys Regional Park will be permitted provided that there is no adverse impact on areas of recognised environmental or landscape importance	No effect policy: 6/7. Includes policy mitigation to address impacts on natural environment.	<b>x</b>
<b>Leisure Centre in the Heads of the Valleys Regeneration Area SP15</b>  The Council will support the development of a leisure centre within the Heads of the Valleys Regeneration Area	No effect policy: 2.	<b>x</b>
<b>Total Housing Requirements SP16</b>  The Council has made provision for the development of 8,625 new dwellings in the County Borough between 2006 and 2021	Uncertain effect.  Potential for impacts if housing location near to European site (potential urbanisation impacts) or if resource requirements (e.g. water) place indirect	<b>✓</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes -✓
	demands on European sites.	
<b>Affordable Housing Target SP17</b>  The Council will seek to negotiate through planning obligations for the provision of approximately 1,350 affordable dwellings between 2006 and 2021 in order to contribute to mixed communities	No effect policy: 2.	<b>X</b>
<b>Managing Employment Growth SP18</b>  The Council has made provision for the development of 96.6 hectares of employment land in the County Borough between 2006 and 2021. This requirement will be met principally through the allocation and protection of a range of employment sites including the following: A Business Parks B Primary Industrial Estates C Secondary Industrial Estates	No effect policy: 4. Development concentrated in urban areas.	<b>X</b>
<b>Promoting Commercial Development SP19</b>  The Council has made provision for the development of 29.3 hectares of commercial sites and identified three areas of commercial opportunity and two retail warehouse parks in order to enhance the commercial sector in terms of service provision and employment: A Commercial Development Sites B Commercial Opportunity Areas C Retail Warehouse Parks	No effect policy: 2.  Development locations will be dictated by lower tier policies.	<b>X</b>
<b>Protection of Strategic Leisure Network SP20</b>	No effect policy: 1/6.  Policy provides	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
The Council will protect important networks of public open space, natural green space and recreational facilities from inappropriate development	mitigation through ensuring recreational and natural green space available, particularly relevant where residential areas are proximal to SAC designations (Aberbargoed Grasslands SAC/ Cardiff Beechwoods SAC).	
<p><b>Transport Infrastructure Improvement SP21</b></p> <p>The Council will implement improvements to the existing transport infrastructure that:</p> <p>A Address social exclusion by increasing accessibility of services and facilities throughout the County Borough and/or</p> <p>B Assist in regenerating the Heads of the Valleys Regeneration Area through creating and improving transport links to the settlements in the Northern and Southern Connections Corridors, and/or</p> <p>C Reinforce the role and function of settlements, and/or</p> <p>D Reduce the level of traffic movements and/or congestion, within any identified air quality management area</p>	<p>No effect policy: 5.</p> <p>Indirect benefits through improvements to transport networks and aims to address air quality.</p>	<b>x</b>
<p><b>Transport Requirements for Development SP22</b></p> <p>The Council will encourage sustainable development that:</p>	<p>No effect policy: 5.</p> <p>Indirect benefits through</p>	<b>x</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes -✓
A Minimises the need to travel by promoting development in accessible locations B Supports the following transport mode hierarchy: i) walking and cycling, then ii) public transport, and finally iii) the car C Reduces both the length and number of car borne journeys D Provides safe routes for walking and cycling	improvements to transport networks and aims to address air quality.	
<b>Road Hierarchy SP23</b>  A road hierarchy is defined as follows: A The Core Network B County Routes C Distributor Roads D Access Roads	N/A	N/A
<b>Countywide Policies</b>		
<b>Sustainable Design and Construction CW1</b> In order to promote sustainable development within the County Borough, new-build development proposals will be expected to: A Be designed to be as close to zero carbon as is reasonable B Be designed and constructed to attain at least BREEAM 'Very Good' rating, where applicable	No effect policy: 7.	<b>x</b>
<b>Sustainable Transport, Accessibility &amp; Social Exclusion CW2</b>  Development proposals that are likely to generate a significant number of trips will only be permitted provided: A Walking and cycling are modes of travel which have been actively encouraged for short trips to	No effect policy: 1.	<b>x</b>



Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
nearby services and facilities, including public transport nodes B Provision has been made for ease of cycling, including secure bike storage and rider facilities C It has been demonstrated that where a significant number of freight trips will be generated, the least environmentally damaging route will be utilised		
<b>Amenity</b> <b>CW3</b>  Development proposals must satisfy the following requirements: A There is no unacceptable impact on the amenity of adjacent properties or land B The proposal would not result in over-development of the site and / or its surroundings C The proposed use is compatible with surrounding land-uses and would not constrain the development of neighbouring sites for their identified land-use D Where applicable, the viability of existing neighbouring land uses would not be compromised by virtue of their potential impact upon the amenity of proposed new residential development	No effect policy: 7.	<b>X</b>
<b>General Design Considerations</b> <b>CW4</b>  Development proposals must be accompanied by a design statement, except for householder developments or those without any external design elements  <b>CW 5</b>  Development proposals must exhibit good design which entails satisfying the following criteria: A The context of the site is respected and complemented in terms of its setting, scale, density, layout, access arrangements, design, materials and landscaping B Appropriate open space to serve the development is provided or maintained C An appropriate residential frontage design has been incorporated for all proposals for change of use to residential uses from any other use	No effect policy: 1.	<b>X</b>

<p><b>Policy References Deposit Local Development Plan</b></p>	<p><b>Potential effects (Criteria 1-7) Rationale/ Comments</b></p>	<p><b>Likely Significant Effect (LSE) No - x Yes - ✓</b></p>
<p>D Opportunities have been taken to provide for biodiversity and landscape enhancements</p>		
<p><b>Design Considerations Highways CW6</b></p> <p>Development proposals must satisfy the following highways requirements:                      A The proposal ensures the safe, effective, and efficient use of the transportation network                      B The proposal ensures that new access roads within private developments are designed to a standard that:                      i Reflects the design considerations contained in the Department for Transport’s Manual for Streets and TAN 18, and                      ii Promotes the interests of pedestrians, cyclists and public transport before that of the private car, and                      iii Safely and effectively accommodates the scale and nature of traffic which those roads are intended to serve                      C Parking, appropriate servicing and operational space have been provided in accordance with the CSS Wales Parking Standards 2008                      D Where applicable, where egress is required onto a designated access road in the road hierarchy, the proposal ensures that traffic movements and speeds are controlled through appropriate design, in order to ensure highway safety and amenity</p>	<p>No effect policy: 2. Indirect benefits from the promotion of sustainable transport modes – reduced emissions and improvements to overall air quality.</p>	<p><b>X</b></p>
<p><b>Design Considerations Telecoms Apparatus CW7</b></p> <p>Proposals for telecommunications apparatus including masts and antennae will be permitted providing:                      A They will make the most efficient use of facilities, by utilising existing apparatus or buildings where available                      B It has been demonstrated that their impact upon surroundings in visual and environmental terms is minimised as far as possible                      C The equipment can be safely accessed from the highway network without detriment to the</p>	<p>No effect policy: 5.  Policy includes strong mitigation through explicit avoidance of natural environmental impacts.</p>	<p><b>X</b></p>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
environment or local amenity		
<p><b>Natural Heritage Protection</b> <b>CW8</b></p> <p>Development proposals that affect locally designated natural heritage features, will only be permitted:                      A where they either maintain or enhance the main characteristics of designated Special Landscape Areas (SLA) or Visually Important Local Landscapes (VILL)                      B within, or in close proximity to sites designated as Sites of Importance for Nature Conservation (SINC), Local Nature Reserves (LNR), Regionally Important Geological Sites (RIGS), Green Corridors, or Local Priority Habitats and Species that either:                      i Maintain or enhance the ecological or geological importance of the designation, or                      ii Where the need for the development outweighs the ecological importance of the site, and compensatory provision is made, of the same standard and size to that lost as a result of the development</p>	<p>No effect policy: 6/7.</p> <p>Policy includes the avoidance, mitigation, compensation hierarchy.</p>	<p><b>X</b></p>
<p><b>Trees and Woodland Protection</b> <b>CW9</b></p> <p>Development proposals on sites containing trees and woodland, or which are bordered by one or more trees, will only be permitted provided that:                      A Where arboricultural surveys are required, they are received and approved, and any mitigation, compensation and / or management requirements are agreed before the application is determined, and                      B The trees and / or woodland and their root systems will be retained and adequately protected prior to, during and after, development takes place, or                      C It can be demonstrated that the need for the development outweighs the importance of the trees and / or woodlands, or                      D Where trees or woodland are removed, suitable replacements are planted within the development</p>	<p>No effect policy: 6/7.</p>	<p><b>X</b></p>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<p><b>Protection of Leisure Facilities CW10</b></p> <p>Proposals that would result in the loss of accessible natural greenspace or formal leisure facilities will not be permitted except where:</p> <p>A The proposed development provides compensatory provision of a scale and quality that is equal to or greater than that lost, or</p> <p>B The developer can demonstrate either that:</p> <p>i The leisure use is surplus to requirements for the area in accordance with the NPFA six-acre standard, or</p> <p>ii The accessible natural greenspace is surplus to requirements in accordance with the CCW Greenspace Toolkit</p>	No effect policy: 6/7.	<b>X</b>
<p><b>Protection of Community Facilities CW 11</b></p> <p>Proposals that would result in the loss of a community facility will not be permitted except where:</p> <p>A A comparable replacement facility can be provided by the developer either on or off site, and within easy and convenient access on foot or by bicycle, or</p> <p>B It can be demonstrated that the facility is surplus to requirements</p>	No effect policy: 1.	<b>X</b>
<p><b>Protection of Rural Commercial Facilities CW 12</b></p> <p>Proposals that would result in the loss of a village shop or public house will not be permitted except where:</p> <p>A The local community would continue to be served by another existing and comparable facility that is located within easy and convenient access by foot or bicycle; or</p> <p>B There is evidence that the current use is not, and could not reasonably be expected to become, financially viable; or</p> <p>C The developer can demonstrate that the premises, if non-operational, has been vacant for over a</p>	N/A	N/A

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<p>year and that the premises have been actively marketed for that use for lease or sale over a similar period of time at a reasonable rental or purchase price</p>		
<p><b>Affordable Housing Planning Obligation CW 13</b></p> <p>Legal agreements will be required to ensure that there is provision of an element of affordable housing, in accordance with an assessment of local need, for all allocated and windfall housing sites that:</p> <p>A Accommodate 10 or more dwellings; or                      B Exceed 0.3 ha in gross site area, or                      C Where the combined product of adjacent housing site proposals would exceed the thresholds set in A or B above</p> <p>Where there is evidence of need, the Council will seek to negotiate an affordable housing proportion of up to 25% of the total number of dwellings proposed on sites within the Heads of the Valleys Regeneration Area, and an affordable housing proportion of up to 40% of the total number of dwellings proposed on sites within the Northern Connections Corridor and the Southern Connections Corridor</p>	N/A	N/A
<p><b>Use Class Restrictions – Business &amp; Industry CW 14</b></p> <p>Development proposals on industrial estates will be subject to the following restrictions:</p> <p>A on sites allocated or identified as Business Parks, development will only be permitted if it is:</p> <ul style="list-style-type: none"> <li>i within use class B1</li> <li>ii to provide an ancillary facility or service to the primary employment use</li> </ul> <p>B on sites allocated or identified as Primary Sites, development will only be permitted if it is:</p> <ul style="list-style-type: none"> <li>i within use classes B1, B2 or B8</li> <li>ii an appropriate sui generis use</li> <li>iii to provide an ancillary facility or service to the primary employment use</li> </ul> <p>C on sites allocated or identified as Secondary Sites, development will only be permitted if it is:</p> <ul style="list-style-type: none"> <li>i within use classes B1, B2 or B8</li> </ul>	<p>N/A</p> <p>Policy focused development at industrial sites.</p>	N/A

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
ii an appropriate sui generis use iii to provide an ancillary facility or service to the primary employment use iv an acceptable commercial service unrelated to class B uses		
<p><b>Use Class Restrictions – Retail</b> <b>CW 15</b></p> <p>Development proposals incorporating a change of use from class A1 retail premises to another use will be subject to the following restrictions:</p> <p>A Within identified Principal Town Centres changes of use of the ground floors of class A1 retail premises to other uses will only be permitted where:</p> <ul style="list-style-type: none"> <li>i The commercial vacancy rate of the centre has been over 15% for over a year; and</li> <li>ii For a change to residential use the property is located on the edge of the centre</li> </ul> <p>B Within identified Primary Retail Areas, the change of use of the ground floors of class A1 retail premises to residential use will not be permitted</p> <p>C Within identified Primary Retail Areas, proposals for new, or the change of use of the ground floors of class A1 retail premises to other class A uses will only be permitted where the total cumulative number of such units would not exceed 10% of the total number of units within the Primary Area</p>	N/A	N/A
<p><b>General Locational Constraints</b> <b>CW 16</b></p> <p>Development proposals will be considered against the following criteria, where they apply:</p> <p>A Development proposals will not be permitted if they prejudice the implementation of wider comprehensive redevelopment or constrain the development of any adjacent site for its allocated land-use</p> <p>B Within settlement boundaries proposals for all types of development accord with the role and function of the settlement within which they are located, and</p> <p>C Outside settlement boundaries proposals will not be permitted unless the proposed development is</p>	No effect policy: 1/2.	<b>x</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
either: i Associated with either agriculture, forestry or the winning and working of minerals; or ii For the conversion, rehabilitation or replacement of rural buildings and dwellings, or iii For recreation and leisure proposals that are suitable in a countryside location; or iv Associated with the provision of public utilities, infrastructure and waste management facilities that cannot reasonably be located elsewhere; or v Associated with the reclamation / treatment of derelict or contaminated land		
<b>Locational Constraints - Retailing CW 17</b>  Outside of the defined Principal Town Centres proposals for new retail stores or for additional retail floorspace will only be permitted where: A The vitality and viability of nearby Principal Town Centres will not be undermined, taking into account the cumulative effects of other approved retail developments, recently completed developments and Plan commitments, and B The proposal would not undermine the Council’s retail strategy, a Town Centre Action Plan or any regeneration plans that the Council has formally approved, and C The proposal is for a new retailing unit of 1000m2 or less in size, or the change of use to such a size, and where it is to serve neighbourhood needs, or is ancillary to another commercial use	N/A	N/A
<b>Locational Constraints – Retail Warehousing CW 18</b>  Proposals for new retail warehouse units, or for change of use to retail warehouse units, on sites outside of the designated Retail Warehouse Parks must have first sought to locate within them if the units are intended to serve their respective catchment areas Within the designated Retail Warehouse Parks, proposals will only be permitted if they are for either new build, or changes of use to, retail warehouse use	N/A	N/A
<b>Locational Constraints – Rural Development and Diversification</b>	N/A	N/A

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<p><b>CW 19</b></p> <p>Rural Development and Diversification schemes will be permitted where:</p> <p>A They are consistent in scale and compatible with their rural location</p> <p>B That where buildings are required to deliver the scheme, existing buildings are re-used where possible, or the new buildings relate to an existing group of buildings</p> <p>C They will be complimentary to, and not prejudice, the operation of the existing business</p>		
<p><b>Locational Constraints – Conversion and Replacement of Buildings in the Countryside</b></p> <p><b>CW 20</b></p> <p>The conversion of a building outside the settlement boundaries will be permitted where it meets the following criteria:</p> <p>A The building is related to an existing complex of buildings</p> <p>B The proposed scale, form, siting, design and materials are appropriate for a rural location</p> <p>C Conversion is justified by demonstrating that:</p> <p>i The building is not makeshift in nature and is of permanent, substantial construction, and</p> <p>ii The building is capable of re-use without materially changing its existing character or impact upon the surrounding countryside</p> <p>D Replacement is justified by demonstrating that:</p> <p>i The building is structurally unsound and not capable of conversion or rehabilitation without major alteration or reconstruction, and / or</p> <p>ii The existing use is no longer suitable or appropriate for the building and it can be demonstrated that all other appropriate alternatives for re-use have been examined</p>	N/A	N/A
<p><b>Locational Constraints - Gypsy and Traveller Caravan Sites</b></p> <p><b>CW 22</b></p> <p>Proposals for Gypsy and Traveller caravan sites, including on land outside of defined settlement boundaries, will be permitted provided:</p>	<p>No effect policy: 2.</p> <p>Includes provision to ensure amenity and</p>	<b>x</b>



<p><b>Policy References Deposit Local Development Plan</b></p>	<p><b>Potential effects (Criteria 1-7) Rationale/ Comments</b></p>	<p><b>Likely Significant Effect (LSE) No - x Yes -✓</b></p>
<p>A The site is well related to community facilities and services B The site can accommodate residential and home-based business uses without detriment to amenity and character of the area C The site is capable of being served by utilities including waste disposal and recovery</p>	<p>character protected.</p>	
<p><b>Locational Constraints - Minerals CW 23</b></p> <p>Development proposals which may impact on minerals safeguarding areas will be considered against the following requirements, as applicable: A Proposals for permanent development uses within identified mineral safeguarding areas will not be approved unless: i The applicant can demonstrate that the mineral is no longer of any value or potential value, or ii The mineral can be extracted satisfactorily prior to the development taking place, or iii There is an overriding need for the development, or iv The development comprises infill development within a built up area or householder development or an extension to an existing building B Proposals for development uses of a temporary nature within identified mineral safeguarding areas will not be approved unless they can be completed and the site restored to a condition that does not inhibit mineral extraction within the timescale that the mineral is likely to be needed</p>	<p>N/A</p>	<p>N/A</p>
<p><b>Locational Constraints - Quarry Buffer Zones CW 24</b></p> <p>Development proposals for sensitive or minerals development will not be permitted within the quarry buffer zones identified on the proposals map</p>	<p>N/A</p>	<p>N/A</p>
<p><b>Supplementary Planning Guidance CW 25</b></p> <p>Supplementary Planning Guidance will be prepared, where appropriate, for</p>	<p>N/A <i>Sets overarching/ Strategic Framework for lower level policies.</i></p>	<p>N/A</p>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes -✓
the following purposes: A To complement and amplify the policies contained in the Plan B To provide design guidance for particular sites identified in the Plan C To provide generic guidance for the design and layout of particular classes / types of development D To provide detailed procedures and requirements for specific planning issues and matters		
<b>Area Specific Policies: Heads of the Valleys Regeneration Area (HOVRA)</b>		
<b>Green Wedges</b> <b>SI 1</b> Green Wedges are identified and will be protected at the following locations: SI 1.1 Llechryd and Rhymney SI 1.2 Rhymney and Abertyswg SI 1.3 Fochriw and Pontlottyn SI 1.4 Between Brithdir and Tirphil SI 1.5 Aberbargoed and Pengam SI 1.6 Argoed and Markham	No effect policy: 6/7.  Potential for positive impacts where green wedges, increase/enhance buffers around sites supporting species and habitats movements.	<b>x</b>
<b>Special Landscape Areas (SLAs)</b> <b>NH 1</b> Special Landscape Areas are identified and will be protected at the following locations: NH 1.1 Upper Rhymney Valley NH 1.2 Gelligaer Common	No effect policy: 6/7.	<b>x</b>
<b>Visually Important Local Landscapes (VILLs)</b> <b>NH 2</b> Visually Important Local Landscapes are identified and will be protected at the following locations: NH 2.1 Northern Rhymney Valley NH 2.2 Manmoel	No effect policy: 6/7.	<b>x</b>
<b>Sites of Importance for Nature Conservation (SINCs)</b> <b>NH 3</b> Sites of Importance for Nature Conservation are identified and will be	No effect policy: 6/7.	<b>x</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
protected at the following locations: NH 3.1 River Rhymney NH 3.2 Pen March and Traed y Milwyr, Llechryd NH 3.3 Bute Town, Llechryd and Rhymney Grasslands, Rhymney NH 3.4 Nant Bargoed Rhymni NH 3.5 Tair Carreg Moor, North West of Fochriw NH 3.6 Cwm-Llydrew Wood, South of Fochriw NH 3.7 Nant Bargod Flush, South of Fochriw NH 3.8 Cefn y Brithdir, South of Pontlottyn NH 3.9 Mile End Pond, Abertysswg NH 3.10 Y Graig Mire, South of Abertysswg NH 3.11 River Sirhowy NH 3.12 River Ebbw NH 3.13 Coed Cefn-Rhychdir, North of New Tredegar NH 3.14 Troed-Rhiw'r-Fuwch, North West of New Tredegar NH 3.15 Parc Cwm Darran Larch Plantation, Deri NH 3.16 Cefn Gelligaer, West of Deri NH 3.17 Craig Ysgwydd-Gwyn, Deri NH 3.18 Ysgwydd-Gwyn-Isaf Wood, South of Deri NH 3.19 Coed Deri-Newydd, Deri NH 3.20 Pont Caradog and Nant Llan Woodlands, East of Deri NH 3.21 Tir-y-Ferch-Gryno, Brithdir NH 3.22 Coed-y-Moeth and Cwmsyflog Hillside, Cwmsyflog NH 3.23 Mynydd Manmoel, North of Manmoel NH 3.24 Twyn y Bleiddiaid, South East of Manmoel NH 3.25 Coed Waun-Bleiddian, North of Hollybush NH 3.26 Hollybush Spring, Hollybush NH 3.27 Llwyn-Bach Woodland, South of Hollybush		

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
NH 3.28 Nant-y-Felin Wood, North East of Markham NH 3.29 Markham Tips, North of Markham NH 3.30 Pen-yr-Heol Meadows, Markham NH 3.31 Markham Railway Line, Markham NH 3.32 Pen-Rhiw'r-Eglwys, East of Markham NH 3.33 Hafodrisclawdd, East of Markham NH 3.34 Pen-y-Waun, South of Markham NH 3.35 Markham Colliery, North of Markham NH 3.36 Coed Argoed, East of Bedwellty NH 3.37 Bedwellty Churchyard, Bedwellty NH 3.38 Land opposite St Sannan's Church, Bedwellty NH 3.39 Nant Cwm-Crach, Bedwellty NH 3.40 Nant-Gau and Darran Woodlands, North of Oakdale NH 3.41 Caeau Cwm-Corwg, North of Oakdale		
<p><b>Waste Facilities Site to serve more than One Local Authority Area</b>  <b>WM 1</b> A site has been identified as suitable for the location of waste management facilities to serve more than one local authority area, as follows:                      WM 1.1 Cwmbargoed Washery Site, north west of Fochriw</p>	No effect policy: 5.  Site located approx 5km distant from Aberbargoed Grasslands SAC.	<b>x</b>
<p><b>Allocated Housing Sites</b>  <b>HG1</b> Land has been allocated for housing across the Heads of the Valleys Regeneration area as follows:                      Site Name Settlement Size (ha) Units                      HG 1.01 Land to the South of Merthyr Road Princetown 4.02 140                      HG 1.02 Land East of Llechryd Bungalow Llechryd 1.10 39                      HG 1.03 Old Barrell Store + Rhymney 0.63 15                      HG 1.04 Lower Hill Street Rhymney 0.30 10                      HG 1.05 Maerdy Garage adjacent to Maerdy House + Rhymney 0.79 16</p>	Potential effect with regard to highlighted policies.  613 dwellings includes 245 adjacent to Aberbargoed Grasslands SAC	✓

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes -✓
HG 1.06 Maerdy Crossing Rhymney 2.40 57 HG 1.07 Former depot south of Pontlottyn Link Road Pontlottyn 1.02 36 HG 1.08 Heol Evan Wynne + Pontlottyn 1.13 10 HG 1.09 Greensway Abertysswg 0.82 28 HG 1.10 Land fronting Waun Terrace + Abertysswg 7.08 133 HG 1.11 Land adjacent to Brynglas + Pontlottyn 1.20 56 HG 1.12 Land off Railway Terrace Fochriw 4.20 147 HG 1.13 Land at Graig Rhymney + New Tredegar 2.61 30 HG 1.14 Land fronting South View Terrace New Tredegar 0.56 20 HG 1.15 Land adjacent to Abernant Road Markham 2.34 82 HG 1.16 Bedwellty Road Aberbargoed 7.34 180 HG 1.17 Land adjacent to Gelynos Avenue + Argoed 0.72 13 HG 1.18 Aberbargoed and District Hospital Aberbargoed 0.56 20 HG 1.19 Aberbargoed Plateau Aberbargoed 11.80 245 HG 1.20 YGG Cwm Rhymni + Bargoed 0.62 28 # HG 1.21 Gilfach Fargoed (Phase 2) Gilfach 1.50 53 HG 1.22 Bedwellty Comprehensive School Aberbargoed 1.88 74 TOTAL 54.62 1432		
<b>Employment Allocations</b> <b>EM 1</b> The following site is allocated for development within use classes B1, B2 and B8: Site Name Settlement Size (ha) Type EM 1.1 Land at Heads of the Valleys + Rhymney 5.2 Primary Site	No effect policy: 5.	X
<b>Employment Site Protection</b> <b>EM 2</b> The following sites are protected for employment uses, in line with their status in the employment site hierarchy: EM 2.1 Land at New Tredegar Primary site EM 2.2 Heads of the Valleys, Rhymney Secondary site EM 2.3 Capital Valley, Rhymney Secondary site	Potential effect in relation to highlighted policies. (Air, water pollution).	✓

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
EM 2.4 Maerdy, Rhymney Secondary site EM 2.5 Angel Lane, Aberbargoed Secondary site EM 2.6 Bowen, Aberbargoed Secondary site		
<b>Principal Town Centre Boundary</b> <b>CM 1</b> A boundary for the Principal Town Centre in the Heads of the Valleys Regeneration Area is defined as follows: CM 1.1 Bargoed	N/A	N/A
<b>Protection of Primary Areas of Principal Town Centres</b> <b>CM 3</b> A Primary Retail Area is identified at the following location: CM 3.1 Hanbury Square, Bargoed	No effect policy: 4.	x
<b>Town Centre &amp; Key Settlement Development Sites</b> <b>CM 4</b> The following Principal Town Centre & Key Settlement sites are allocated for development: Site Name Settlement Size (ha) Proposal Type CM 4.1 The Lawn Rhymney 7.3 Retail CM 4.2 Southern Car Park Bargoed 2.7 Foodstore, Retail, Cinema CM 4.3 Former Cinema, Hanbury Square + Bargoed 0.1 Offices	No effect policy: 4.	x
<b>Commercial Opportunity Area</b> <b>CM 5</b> A Commercial Opportunity Area is identified at the following location: CM 5.1 High Street, Bargoed	No effect policy: 4.	x
<b>Community Facilities</b> <b>CF 1</b> The following sites are allocated for new community facilities: CF 1.1 North of Rhymney Cemetery, Rhymney – <i>Cemetery extension</i> CF 1.2 The Lawn, Rhymney – <i>Health &amp; Social Care Resource Centre Further education</i> CF 1.3 Bryn Awel Primary School, Rhymney – <i>New school</i> CF 1.4 Fochriw Youth Centre, Fochriw – <i>New youth centre</i> CF 1.5 Leisure Centre, New Tredegar – <i>New youth centre</i> CF 1.6 Hangar 81, Aberbargoed – <i>New youth centre</i>	Potential effect with regard to highlighted policies. Proximity to SAC, potential for increased recreation, litter/ vandalism.	✓

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
CF 1.7 Adjacent to Ysgol Bro Sannan, Aberbargoed – <i>School extension</i> CF 1.8 Aberbargoed Plateau, Aberbargoed – <i>Fire station</i> CF 1.9 Hanbury Road Baptist Chapel, Bargoed – <i>Library</i> CF 1.10 Gilfach Street, Gilfach – <i>Health centre</i>		
<b>Protection of Formal Open Spaces</b> <b>LE 1</b> Land is protected for open space and parkland uses at: LE 1.1 War Memorial Park, Rhymney LE 1.2 Wellington Way, Rhymney LE 1.3 The Green, Abertysswg LE 1.4 King George’s Field, Markham LE 1.5 Bargoed Park, Bargoed	No effect policy: 7.	<b>x</b>
<b>Allocation of Country Parks</b> <b>LE 2</b> Land is allocated for a new Country Park at: LE 2.1 Markham Colliery Site, Markham	No effect policy: 7.	<b>x</b>
<b>Protection of Country Parks</b> <b>LE 3</b> Country Parks are protected at the following locations: LE 3.1 Bryn Bach Park, Rhymney / Tredegar LE 3.2 Parc Cwm Darran, Deri LE 3.3 Parc Coetir Bargod, Bargoed	No effect policy: 7.	<b>x</b>
<b>Formal Leisure Facilities</b> <b>LE 4</b> Land is identified for leisure facilities including playing pitches at: LE 4.1 North of Glan y Nant, Rhymney LE 4.2 Former MaClaren Colliery, Abertysswg LE 4.3 Pont Bren, Deri LE 4.4 Former Bedwellty Comprehensive School, Aberbargoed LE 4.5 West of Gilfach, Gilfach	Uncertain effect in relation to highlighted policy. Recreational facilities proximal to SAC may result increased wider recreational pressures.	✓
<b>Protection of Informal Open Spaces</b> <b>LE 5</b> Land is safeguarded for informal recreation and community uses at:	No effect policy: 7.	<b>x</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
LE 5.1 North of Memorial Park, Rhymney LE 5.2 Between Cwmsyflog & Brithdir, New Tredegar		
<b>Tourism Proposals</b> <b>TM 1</b> The following site is allocated for tourism related activities: TM 1.1 Bryn Bach Park, Rhymney / Tredegar	No effect policy: 7.	<b>x</b>
<b>Cycle Routes</b> <b>TR 1</b> Land will be safeguarded to facilitate the following improvements to the cycle route network: TR 1.1 Completion of the Rhymney Valley Linear Cycle Route TR 1.2 Completion and Extension of Cycle Route NCN 46 TR 1.3 Bargoed Country Park to Bowen Industrial Estate TR 1.4 Extension to the Sirhowy Valley Cycle Route TR 1.5 Local Links to Bargoed Town Centre TR 1.6 Link from Fochriw to NCN 46 via Rhaslas Pond TR 1.7 Local Cycle Link from Argoed to Oakdale	No effect policy: 7.	<b>x</b>
<b>Park &amp; Ride Facilities</b> <b>TR 4</b> The following stations have been identified for new or improved park and ride provision: TR 4.1 Rhymney TR 4.2 Bargoed	No effect policy: 4.	<b>x</b>
<b>New Roads to Facilitate Development</b> <b>TR 7</b> The following highway scheme is identified to facilitate new development: TR 7.1 Aberbargoed to Bedwellty Relief Road	Potential effect. Increased air pollution, run off/ discharges, dust, land take in area proximal to SAC.	✓
<b>Regeneration Led Highway Improvements</b> <b>TR 8</b> The following highway scheme is identified to facilitate the regeneration of the Heads of the Valleys Area TR 8.1 A469 Bargoed and A4049 Aberbargoed to Rhymney	Potential effect. Increased air pollution, run off/ discharges, dust, land	✓



Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
	take in area proximal to SAC.	
<b>Area Specific Policies: Northern Connections Corridor</b>		
<b>Green Wedges</b> <b>SI 1</b> Green Wedges are identified and will be protected at the following locations: SI 1.7 West of Nelson SI 1.8 Gelligaer, Penybryn and Penpedairheol SI 1.9 Pengam and Blackwood SI 1.10 Penpedairheol, Gilfach and Tir y Berth SI 1.11 Cefn Hengoed, Hengoed and Ystrad Mynach SI 1.12 Maesycwmmmer, Pontllanfraith and Fleur de Lys SI 1.13 Maesycwmmmer and Ystrad Mynach SI 1.14 Blackwood, Oakdale and Penmaen SI 1.15 Blackwood, Cwm Gelli and Cefn Fforest SI 1.16 Croespenmaen and Treowen	No effect policy: 6/7.  Potential for positive impacts where green wedges, increase/enhance buffers around sites supporting species and habitats movements.	<b>X</b>
<b>Special Landscape Areas (SLAs)</b> <b>NH 1</b> Special Landscape Areas are identified and will be protected at the following locations: NH 1.2 Gelligaer Common NH 1.3 Mynydd Eglwysilian	No effect policy: 6/7.	<b>X</b>
<b>Visually Important Local Landscapes (VILLs)</b> <b>NH 2</b> A Visually Important Local Landscapes is identified and will be protected at: NH 2.3 Abercarn	No effect policy: 6/7.	<b>X</b>
<b>Sites of Importance for Nature Conservation (SINCs)</b> <b>NH 3</b> Sites of Importance for Nature Conservation are identified and will be protected at: NH 3.1 River Rhymney	No effect policy: 6/7.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
NH 3.11 River Sirhowy NH 3.12 River Ebbw NH 3.40 Nant-Gau and Darran Woodlands, North of Oakdale NH 3.42 Gwerthnor-Isaf Wood, South of Bargoed NH 3.43 Britannia Wood, South of Aberbargoed NH 3.44 Ty'n-y-Pwll Wood and Tip, South of Aberbargoed NH 3.45 Mynydd Pen-y-Fan, South East of Manmoel NH 3.46 Pen-y-Fan-Fach Grasslands, Glandwr NH 3.47 Nant Gwynt Woodland, Glandwr NH 3.48 Pen-y-Fan Pond and Meadows, West of Pentwyn NH 3.49 Coed Trinant, East of Pentwyn NH 3.50 Pentwyn Fields, Pentwyn NH 3.51 Pottery Road Slopes, East of Gelligaer NH 3.52 Waun Rydd, Gelligaer NH 3.53 Land South of Gelligaer Infants School, Gelligaer NH 3.54 Cwm Afon Railway Line, West of Nelson NH 3.55 Cwm Afon, West of Nelson NH 3.56 Wern Woodland, Nelson NH 3.57 Brooklands Marsh, North of Nelson NH 3.58 Tredomen Tip Ponds, Nelson NH 3.59 Llancaiach-Fawr Meadows, Llancaiach NH 3.60 Coed Gelliau'r-Gwellt, East of Llancaiach NH 3.61 Nant Caeach, North of Llancaiach NH 3.62 Cefn Hengoed Hillside, North of Hengoed NH 3.63 Penallta Meadows, West of Hengoed NH 3.64 Gelligaer Court Meadows, North of Penpedairheol NH 3.65 Tir Jack Slopes, East of Penpedairheol NH 3.66 Upper Trelyn Woodland, South of Pengam		

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
NH 3.67 Blackwood Golf Club Woodland, Cefn Fforest NH 3.68 Coed y Gelli, North of Cefn Fforest NH 3.69 Cwm Gelli Wood and Meadow, North of Cefn Fforest NH 3.70 Blackwood Riverside Woodlands, North East of Blackwood NH 3.71 Penmaen Carr, East of Blackwood NH 3.72 Coed Duon, Blackwood NH 3.73 Cefn Fforest Eco Park, Blackwood NH 3.74 Penllwyn Woodlands, Pontllanfraith NH 3.75 Nant yr Odyn, East of Pontllanfraith NH 3.76 Crown Estate Meadows, Pontllanfraith NH 3.77 Trelyn Woodland and Meadow, Pontllanfraith NH 3.78 Crown Roundabout Marsh, Pontllanfraith NH 3.79 Enterprise Way Grasslands, Pontllanfraith NH 3.80 Coed Penallta and Railway Line, Ystrad Mynach NH 3.81 Tir-Twyn Woodlands, Ystrad Mynach NH 3.82 Coedcae Mawr, Ystrad Mynach NH 3.83 Maesycwmmmer Woodland and Meadows, Maesycwmmmer NH 3.84 Bryn Ysgafn Meadow, Fleur De Lys NH 3.85 Victoria Road Slopes, Fleur De Lys NH 3.86 Penmaen Woodlands, Penmaen NH 3.87 Cwm Dows Valley, East of Penmaen NH 3.88 Coed Cwm Philkins, East of Penmaen NH 3.89 Cyncoed Fields, East of Penmaen NH 3.90 Pentwyn-Isaf Woodlands, Pentwynmawr NH 3.91 Glan-Brynar Woodlands, Pentwynmawr NH 3.92 Greenlands Meadow, Pentwynmawr NH 3.93 Ton-y-Pistyll Fields, Pentwynmawr NH 3.94 Valentec Nature Reserve, North of Croespenmaen		

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
NH 3.95 Pen-Rhiw Bengi Marsh, Oakdale NH 3.96 Nant Philkins Fields, Oakdale NH 3.97 Remploy Factory Grounds, Oakdale NH 3.98 Penyfan Industrial Estate Woodland, Oakdale NH 3.99 Pant-Glas Meadow, Trinant NH 3.100 Crumlin Old Farm Meadows, Crumlin NH 3.101 Cwm Kendon, Crumlin NH 3.102 Llanerch-Isaf Woodland, Crumlin NH 3.103 Coed Goferau, Crumlin NH 3.104 Pontbren, North of Crumlin NH 3.105 Coedcae Watkin Dafydd, East of Crumlin NH 3.106 Ty-Mawr Wood, Rhiw NH 3.107 Pant-Ysgawen Fields, Treowen NH 3.108 Pennar-Ganol, South of Newbridge NH 3.109 Pen-Rhiw-Bica, South of Newbridge NH 3.110 Coed Gawni, East of Newbridge NH 3.111 Coed Cil-Lonydd, East of Newbridge NH 3.112 Mynydd Maen, East of Newbridge NH 3.113 Coedcae Newydd, Gelligroes NH 3.114 Ty Bach Marsh, East of Wyllie NH 3.115 Heol-Ddu Woodlands, Wyllie NH 3.116 Llanbradach Fawr Woodlands, North of Llanbradach NH 3.117 Mynydd Bach Slopes, East of Llanbradach NH 3.118 Coed Mawr, North of Llanbradach NH 3.119 Mynydd Eglwysilan, North of Senghenydd NH 3.120 Land at Tair Waun Uchaf Isaf and Cwmheldeg Farm, Senghenydd NH 3.121 Nant Cae-Dudwg Mire, North of Senghenydd		
<b>Quarry Buffer Zones</b>	No effect policy: 5.	<b>x</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<p><b>MN 1</b> Buffer zones are identified around the following quarries:  MN 1.1 Bryn Quarry  MN 1.2 Hafod Fach Quarry</p>		
<p><b>Allocated Housing Sites</b>  <b>HG 1</b> Land has been allocated for housing across the Northern Connections Corridor as follows:  Site Name Settlement Size (ha) Units  HG 1.23 Land within curtilage of the Pentwyn Inn + Trinant 0.4 19  HG 1.24 Navigation Colliery Crumlin 4.20 145  HG 1.25 Land off Brynhoward Terrace Oakdale 2.20 77  HG 1.26 Allotment Garden, Llwyn on Lane + Oakdale 1.37 49  HG 1.27 Site of GB Engineering and adjacent industrial land Croespenmaen 8.20 287  HG 1.28 Blackwood Ambulance Station Blackwood 0.68 24  HG 1.29 Pencoed Avenue + Cefn Fforest 1.87 65  HG 1.30 Land east of Bryn Road Cefn Fforest 0.68 24  HG 1.31 Land north of Glanyrafon, Ford Road + Fleur-de-Lys 0.63 21  HG 1.32 Oak Terrace Fleur-de-Lys 0.69 21  HG 1.33 Tiryberth Hengoed 4.95 173  HG 1.34 Penallta Colliery + Ystrad Mynach 31.87 444  HG 1.35 Penallta Yard + Ystrad Mynach 0.29 10  HG 1.36 Land at New Road Ystrad Mynach 0.54 18  HG 1.37 Land off Penallta Road Ystrad Mynach 1.70 60  HG 1.38 Land off Valley View + Hengoed 1.46 31  HG 1.39 Greenhill Primary School Gelligaer 2.8 32  HG 1.40 Land to the east of Handball Court Nelson 3.36 90  HG 1.41 Former Cattle Market Site + Nelson 0.62 12  HG 1.42 Land at Gellideg Heights Maesycwmmmer 3.91 137  HG 1.43 Land at Ty Pwll + Pantside 0.64 16  HG 1.44 The Stores, Albertina Road + Newbridge 0.41 10</p>	No effect policy: 5.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
HG 1.45 Land at Fields Park Newbridge 2.30 80 HG 1.46 Pennar Lane + Newbridge 4.00 63 HG 1.47 Chris Bowen Garage + Newbridge 0.08 16 TOTAL 79.85 1924		
<b>Employment Allocations</b> <b>EM 1</b> The following sites are allocated for employment uses, in line with their status in the employment hierarchy: Site Name Settlement Size (ha) Type EM 1.2 Ty Du Nelson 18.8 Business park EM 1.3 Plateau 1, Oakdale Business Park Oakdale 30.2 Primary site EM 1.4 Plateau 2, Oakdale Business Park + Oakdale 7.0 Primary site EM 1.5 Plateau 3, Oakdale Business Park Oakdale 3.4 Primary site EM 1.6 Plateau 4, Oakdale Business Park + Oakdale 4.3 Primary site EM 1.7 South extension, Penyfan Croespenmaen 2.4 Primary site EM 1.8 Hawtin Park north + Gellihaf 4.5 Primary site EM 1.9 Dyffryn Business Park north Ystrad Mynach 4.9 Primary site EM 1.10 Dyffryn Business Park south Ystrad Mynach 6.3 Primary site EM 1.11 Penallta Extension + Hengoed 1.6 Secondary site	No effect policy: 5.	<b>X</b>
<b>Employment Site Protection</b> <b>EM 2</b> The following sites are protected for employment uses, in line with their status in the employment hierarchy: EM 2.7 Dwr Cymru Welsh Water Offices, Nelson Business park EM 2.8 Tredomen Park, Ystrad Mynach Business park EM 2.9 Plateau 2, Oakdale Business Park Primary site EM 2.10 Penyfan, Croespenmaen Primary site EM 2.11 North Celynen, Newbridge Primary site EM 2.12 Hawtin Park, Gellihaf Primary site EM 2.13 Dyffryn Business Park Primary site	No effect policy: 5.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
EM 2.14 Croespenmaen Primary site EM 2.15 Britannia, Pengam Secondary site EM 2.16 St. David's, Pengam Secondary site EM 2.17 New Road, Tiryberth Secondary site EM 2.18 Penallta Secondary site EM 2.19 Newbridge Road, Pontllanfraith Secondary site EM 2.20 Tram Road, Pontllanfraith Secondary site EM 2.21 Switchgear, Pontllanfraith Secondary site EM 2.22 Penmaen Secondary site EM 2.23 Woodfieldside, Penmaen Secondary site EM 2.24 Caerphilly Road, Ystrad Mynach Secondary site		
<b>Principal Town Centre Boundaries</b> <b>CM 1</b> Boundaries for the Principal Town Centres in the Northern Connections Corridor are defined as follows: CM 1.2 Blackwood CM 1.3 Ystrad Mynach	N/A	N/A
<b>Retail Warehouse Park Boundaries</b> <b>CM 2</b> A boundary for the Retail Warehouse Centre in the Northern Connections Corridor is defined as follows: CM 2.1 Blackwood Gate, Blackwood	No effect policy: 4.	<b>X</b>
<b>Protection of Primary Areas of Principal Town Centres</b> <b>CM 3</b> A Primary Retail Area is identified at the following location: CM 3.2 High Street, Blackwood	No effect policy: 4.	<b>X</b>
<b>Town Centre &amp; Key Settlement Development Sites</b> <b>CM 4</b> The following Principal Town Centre & Key Settlement sites are allocated for retail, commercial leisure, and office developments: Site Name Settlement Size (ha) Proposal Type CM 4.4 Car Park Site, Rear of High Street Blackwood 0.1 Offices	No effect policy: 4.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
CM 4.5 Gateway Site + Newbridge 0.3 Offices CM 4.6 Penallta Colliery Ystrad Mynach 2.0 Retail, Offices		
<b>Commercial Opportunity Area</b> <b>CM 5</b> A Commercial Opportunity Area is identified at the following location: CM 5.2 High Street, Blackwood	No effect policy: 4.	<b>X</b>
<b>Community Facilities</b> <b>CF 1</b> The following sites are allocated for new community facilities: CF 1.11 East of Gelligaer Cemetery, Gelligaer – <i>Cemetery extension</i> CF 1.12 Greenhill Primary School, Gelligaer – <i>New school</i> CF 1.13 Maesglas School, Gelligaer – <i>GP surgery</i> CF 1.14 Ysgol Penalltau, Ystrad Mynach – <i>New school</i> CF 1.15 Oakfield Street, Ystrad Mynach – <i>GP surgery</i> CF 1.16 Ystrad Fawr, Ystrad Mynach – <i>Local General Hospital</i> CF 1.17 Town centre, Newbridge – <i>Library</i> CF 1.18 Panside, Newbridge – <i>Community centre</i> CF 1.19 Adjacent to Recreation Ground, Hafodyrynys – <i>Community centre</i>	No effect policy: 4.	<b>X</b>
<b>Protection of Formal Open Spaces</b> <b>LE 1</b> Land is protected for open space and parkland uses at: LE 1.6 Trelyn Park, Fleur De Lys LE 1.7 Wern Crescent, Nelson LE 1.8 Institute Field, Hengoed LE 1.9 Ystrad Mynach Park, Ystrad Mynach LE 1.10 Maesycwmmmer Park, Maesycwmmmer LE 1.11 The Bryn, Pontllanfraith LE 1.12 Libanus Fields, Pontllanfraith LE 1.13 Sir Harold Finch Memorial Park, Blackwood LE 1.14 Recreation Ground, Oakdale LE 1.15 The Circle, Oakdale	No effect policy: 7.	<b>X</b>



Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
LE 1.16 Islwyn Park, Pontllanfraith LE 1.17 Caertwmpyn Park, Newbridge LE 1.18 Newbridge Rugby Ground, Newbridge		
<b>Protection of Country Parks</b> <b>LE 3</b> Country parks are protected at the following locations: LE 3.4 Parc Penallta, Ystrad Mynach LE 3.5 Penyfan Pond, Croespenmaen	No effect policy: 7.	<b>X</b>
<b>Formal Leisure Facilities</b> <b>LE 4</b> Land is identified for leisure facilities including playing pitches at: LE 4.6 Former Colliery Waste Tip, Panside LE 4.7 Adjacent to Ysgol Penalltau, Ystrad Mynach LE 4.8 Former Hospital, Ystrad Mynach	No effect policy: 7.	<b>X</b>
<b>Protection of Informal Open Spaces</b> <b>LE 5</b> Land is identified for informal recreation and community uses at: LE 5.3 Former Oakdale Colliery, Oakdale LE 5.4 Adjacent to Vernon Place, Croespenmaen LE 5.5 Rear of Oakdale Terrace, Penmaen LE 5.6 Rear of Pencoed Avenue, Cefn Fforest LE 5.7 Upper Trelyn, Blackwood LE 5.8 Trelyn Farm, Blackwood LE 5.9 South of Islwyn Park, Pontllanfraith LE 5.10 South of Leisure Centre, Newbridge LE 5.11 Former Colliery Waste Tip, Panside LE 5.12 Ynys Las, Nelson LE 5.13 Adjacent River Rhymney, Tiryberth LE 5.14 Adjacent to River Rhymney, Hengoed LE 5.15 South of Brynawel Road, Hengoed LE 5.16 Maesycwmmmer Meadows, Maesycwmmmer	No effect policy: 7.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<b>Tourism Proposals</b> <b>TM 1</b> Sites are allocated for tourism related activities at: TM 1.2 South of Llancaiach Fawr, Nelson TM 1.3 Maesycwmmmer Mill, Maesycwmmmer TM 1.4 Gelligroes Mill, Gelligroes TM 1.5 Nantcarn Valley, Cwmcarn	No effect policy: 5.	<b>X</b>
<b>Cycle Routes</b> <b>TR 1</b> land will be safeguarded to facilitate the following improvements to the cycle route network: TR 1.8 Rhymney Valley Linear Cycle Route - Heads of the Valleys to Bedwas / Caerphilly Northern TR 1.9 Network Links from Blackwood / Pontllanfraith TR 1.10 Newbridge / Crumlin to Crosskeys & Sirhowy Valley / Pontllanfraith Cycle Link TR 1.11 Local Links from Crumlin TR 1.12 Local Link from Penallta to Ystrad Mynach	No effect policy: 7.	<b>X</b>
<b>New Rail Passenger Service</b> <b>TR 2</b> The following railway line will be protected to facilitate the reopening of the line for passenger services TR 2.1 Cwmbargoed rail line between Ystrad Mynach and Bedlinog	No effect policy: 5.	<b>X</b>
<b>New Rail Stations</b> <b>TR 3</b> The Council will identify and safeguard land at the following locations for new rail stations: TR 3.1 Nelson TR 3.2 Crumlin	No effect policy: 4.	<b>X</b>
<b>Park &amp; Ride Facilities</b> <b>TR 4</b> The following stations have been identified for new or improved park and ride provision: TR 4.3 Pengam TR 4.4 Ystrad Mynach	No effect policy: 7.	<b>X</b>
<b>Transport Improvement Schemes – Northern Connections Corridor</b>	No effect policy: 4.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<p><b>TR 5</b> The following strategic network improvements have been identified in respect of the Northern Connections Corridor obligation:                      TR 5.1 A467 Newbridge to Crosskeys                      TR 5.2 A472 Gelligroes Roundabout                      TR 5.3 A472 Trecelyn Roundabout                      TR 5.4 A467 Newbridge to Crumlin                      TR 5.5 A472 Ystrad Mynach to Nelson                      TR 5.6 A469 Pengam Crossroads Junction                      TR 5.7 Newbridge Interchange</p>		
<p><b>New Roads to Facilitate Development</b>  <b>TR 7</b> The following highway scheme is identified to facilitate new development:                      TR 7.2 Cwm Du Junction / Maesycwmmmer Junction</p>	No effect policy: 4.	<b>X</b>
<b>Area Specific Policies: Southern Connections Corridor</b>		
<p><b>Green Wedges</b>  <b>SI 1</b> Green Wedges are identified and will be protected at the following locations:                      SI 1.17 Cwmfelinfach and Treowen                      SI 1.18 Newbridge and Abercarn                      SI 1.19 Cwmcarn and Pontywaun                      SI 1.20 Risca and Rogerstone                      SI 1.21 Llanbradach and Pwll-y-Pant                      SI 1.22 Bedwas and Caerphilly                      SI 1.23 Abertridwr and Caerphilly                      SI 1.24 Machen, Graig-y-Rhacca ad Waterloo</p>	No effect policy: 6/7.  Potential for positive impacts where green wedges, increase/enhance buffers around sites supporting species and habitats movements.	<b>X</b>
<p><b>Special Landscape Areas (SLAs)</b>  <b>NH 1</b> Special Landscape Areas are identified and will be protected at the following locations:</p>	No effect policy: 6/7.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
NH 1.4 North Caerphilly NH 1.5 South Caerphilly NH 1.6 Mynydd y Lan		
<b>Visually Important Local Landscapes (VILLs)</b> <b>NH 2</b> Visually Important Local Landscapes are identified and will be protected at the following locations: NH 2.3 Abercarn NH 2.4 South of Caerphilly	No effect policy: 6/7.	<b>X</b>
<b>Sites of Importance for Nature Conservation (SINCs)</b> <b>NH 3</b> Sites of Importance of Nature Conservation will protected in the following locations: NH 3.1 River Rhymney NH 3.11 River Sirhowy NH 3.12 River Ebbw NH 3.122 Pwllgwinau, East of Newbridge NH 3.123 Gwyddon Valley Woodlands, Abercarn NH 3.124 Cwm Pennar, Abercarn NH 3.125 Tyle-Coch Wood, North of Abercarn NH 3.126 Coed Ffordd-Fawr, Abercarn NH 3.127 Cwm Hafod-Fach Woodlands, North of Abercarn NH 3.128 Distillery Pond, Abercarn NH 3.129 Mynydd y Lan, West of Cwmcarn NH 3.130 Sychpant Farm, West of Cwmcarn NH 3.131 Cil-Fynydd, Cwmcarn NH 3.132 Mynydd y Lan Woodlands, Cwmcarn NH 3.133 Cwm Gofapi Woods, Cwmcarn NH 3.134 Cwmcarn Slopes, Cwmcarn NH 3.135 Crumlin Arm of the Monmouth/ Brecon Canal	No effect policy: 6/7.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
NH 3.136 Coed Mam-Gu, Crosskeys NH 3.137 Twmbarlwm, North of Risca NH 3.138 Cwm-y-Nant, Risca NH 3.139 Ty-Sign Meadows, Risca NH 3.140 Mynydd Machen, West of Risca NH 3.141 Coed y Mochyn, Risca NH 3.142 Darran woodland, Fernlea NH 3.143 Risca Quarry, Fernlea NH 3.144 Nant-y-Draenog, East of Wyllie NH 3.145 Pontgam Terrace Meadows, Wyllie NH 3.146 Craig y Prisiad Woodlands, Ynysddu NH 3.147 Mynydd y Grug, West of Cwmfelinfach NH 3.148 Twyn yr Oerfel, South of Cwmfelinfach NH 3.149 Sirhowy Country Park Meadows, Cwmfelinfach NH 3.150 Nant Hafod Tudor, East of Cwmfelinfach NH 3.151 Ochrwyth Grasslands, Ochrwyth NH 3.116 Llanbradach Fawr Woodlands, North of Llanbradach NH 3.152 Nant Owen Field, North of Llanbradach NH 3.117 Mynydd Bach Slopes, East of Llanbradach NH 3.153 Mynydd Dimlaith and Cwm-y-Bwch, South East of Llanbradach NH 3.154 Coed y Brain, Penyrheol NH 3.155 Nant y Aber NH 3.156 Ty'n-y-Parc, Abertridwr NH 3.157 Craigyfedw, Abertridwr NH 3.158 Cwm yr Aber, South of Abertridwr NH 3.159 Mynydd Meio, South of Abertridwr NH 3.118 Mynydd Eglwysilan, North of Senghenydd NH 3.160 Nant Cae'r-Moel Swamp and Woodland, Senghenydd		

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
NH 3.161 Glawnant Field, Senghenydd NH 3.162 Gypsy Lane Wetland, South of Groeswen NH 3.163 Caerphilly Common, South of Caerphilly NH 3.164 Warren Drive Meadow, South of Caerphilly NH 3.165 Nant Gwaunybara Mire, East of Caerphilly NH 3.166 Ty-Melyn Coppice, South of Watford Park, Caerphilly NH 3.167 Coed y Maerdy, East of Caerphilly NH 3.168 Thornhill Quarries, Thornhill NH 3.169 Caerphilly/ Machen Disused Railway, East of Trethomas NH 3.170 Berth Goch Wood, North of Trethomas NH 3.171 Graig-y-Rhacca Woodlands, Graig-y Rhacca NH 3.172 Graig-y-Rhacca Grasslands, Graig-y-Rhacca NH 3.173 Machen Woodlands, Machen NH 3.174 Coed Pen-Llyn, Machen NH 3.175 Tudor Gardens Quarry, Machen NH 3.176 Coed Cefn-Pwll-Du, South of Machen NH 3.177 Coed Craig Ruperra, East of Draethen NH 3.178 Ruperra Castle and Grounds, Draethen NH 3.179 Ruperra Woodlands, East of Draethen NH 3.180 Coedcefnporth, Cefn Mably NH 3.181 Wernddu Woodlands, Rudry NH 3.182 Cefn Onn Ridge, South of Wern Ddu NH 3.183 Mynydd Rudry Common, Rudry NH 3.184 Rudry Woodlands, Rudry NH 3.185 Coed y Squire and Coedcae, Rudry NH 3.186 Blaengwynlais Meadows NH 3.187 Nant Du Woodland, Rudry NH 3.188 Cwm-Crynant Woodland, South of Rudry		

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
NH 3.189 Nant Fawr, South of Rudry		
<b>Quarry Buffer Zones</b> <b>MN 1</b> A buffer zone is identified around the following quarry: MN 1.3 Machen Quarry	No effect policy: 5.	<b>X</b>
<b>Allocated Housing Sites</b> <b>HG 1</b> Land has been allocated for housing across the Southern Connections Corridor as follows: Site Name Settlement Size (ha) Units HG 1.48 Land west of the A467 and Afon Ebbw + Abercarn 8.7 269 HG 1.49 Twyncarn House Cwmcarn 0.39 26 # HG 1.50 Land at Hillary Rise + Pontywaun 1.10 20 HG 1.51 Land adjacent to Pen-y-Cwarel Road Wyllie 1.60 56 HG 1.52 Land north east of Llanarth Wattsville 2.16 30 Street + HG 1.53 Land at Station Approach, Risca + Risca 0.51 10 HG 1.54 Rom River + Risca 1.9 38 HG 1.55 Brooklands Road, Council Service Site Pontymister 0.39 14 HG 1.56 106 / 106A and Car Park, Commercial Street + Pontymister 0.4 35 HG 1.57 Eastern part of land adjacent to River Ebbw Pontymister 1.38 48 HG 1.58 Suflex Factory Pontymister 2.1 88 HG 1.59 Tyn y Waun Farm + Machen 0.77 10 HG 1.60 Waterloo Works + Waterloo 17.00 545 HG 1.61 Former Petrol Filling Station, Newport Road + Trethomas 0.19 10 HG 1.62 The Grove + Trethomas 0.46 13 HG 1.63 Bedwas Colliery Bedwas 36.22 400 HG 1.64 St. James Primary School Caerphilly 2.98 49 HG 1.65 Land at Venosa Trading Estate Caerphilly 4.55 130 HG 1.66 Land at Pontypandy Industrial Estate + Caerphilly 7.58 199 HG 1.67 St. Ilans Comprehensive Caerphilly 12.67 200 HG 1.68 Cardiff Road / Pentrebanne Street + Caerphilly 1.12 127	No effect policy: 4/5.  Cumulative development in and around Caerphilly has the potential to increase recreational pressures on neighbouring green spaces. Cardiff Beech Woods SAC which lies on the plan boundary to the South West of Caerphilly (3km distant) is subject to and vulnerable to recreational pressures. Given the focus of placing larger housing development within the urban envelop and more proximal recreational alternative, the	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
HG 1.69 Land between Van Road / Maes Glas, and the Railway + Caerphilly 1.77 62 HG 1.70 Gas Works Site, Mill Road + Caerphilly 2.20 55 HG 1.71 Caerphilly Miners Hospital Caerphilly 3.26 114 HG 1.72 Castlegate + Caerphilly 24.1 259 HG 1.73 Hendre Infants School Caerphilly 0.46 16 HG 1.74 Cwm lfor Primary School Caerphilly 2.8 46 HG 1.75 Land east of Coedcae Road Abertridwr 0.78 27 HG 1.76 Windsor Colliery Abertridwr 5.51 193 HG 1.77 Land below Coronation Terrace + Senghenydd 0.76 12 HG 1.78 Jeremy Oils + Llanbradach 1.80 45 TOTAL 147.6 3146	potential impacts arising from additional housing development in these areas are not considered significant.	
<b>Employment Allocations</b> <b>EM 1</b> The following sites are allocated for employment uses, in line with their status in the employment hierarchy: Site Name Settlement Size (ha) Type EM 1.12 Land at Caerphilly Business Park + Caerphilly 3.6 Primary site EM 1.13 Land at Nine Mile Point + Cwmfelinfach 1.1 Secondary site EM 1.14 Land at Trecenydd + Caerphilly 2.2 Secondary site EM 1.15 Land at Western + Caerphilly 1.1 Secondary site		
<b>Employment Site Protections</b> <b>EM 2</b> The following sites are protected for employment uses: EM 2.25 Pantglas, Bedwas Primary site EM 2.26 Caerphilly Business Park Primary site EM 2.27 Prince of Wales, Abercarn Secondary site EM 2.28 Nine Mile Point, Cwmfelinfach Secondary site EM 2.29 Blackvein, Wattsville Secondary site EM 2.30 Newtown, Crosskeys Secondary site EM 2.31 Park Road, Risca Secondary site	No effect policy: 4.	X



Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
EM 2.32 Rogerstone Park, Pontymister Secondary site EM 2.33 Bedwas House, Bedwas Secondary site EM 2.34 Pontygwindy Road, Caerphilly Secondary site EM 2.35 Trecenydd, Caerphilly Secondary site EM 2.36 Western, Caerphilly Secondary site		
COMMERCIAL DEVELOPMENT <b>Principal Town Centre Boundaries</b> <b>CM 1</b> Boundaries for the Principal Town Centres in the Southern Connections Corridor are defined as follows: CM 1.4 Risca / Pontymister CM 1.5 Caerphilly	N/A	N/A
<b>Retail Warehouse Park Boundaries</b> <b>CM 2</b> A boundary for the Retail Warehouse Centre in the Southern Connections Corridor is defined as follows: CM 2.2 Crossways, Caerphilly	No effect policy: 4.	<b>X</b>
<b>Protection of Primary Areas of Principal Town Centres</b> <b>CM 3</b> Primary Retail Areas have been identified at the following locations: CM 3.3 Castle Court, Caerphilly CM 3.4 Cardiff Road, Caerphilly	No effect policy: 4.	<b>X</b>
<b>Town Centre &amp; Key Settlement Development Sites</b> <b>CM 4</b> The following Principal Town Centre & Key Settlement sites are allocated for retail, commercial leisure, and office developments: Site Name Settlement Size (ha) Proposal Type CM 4.7 Former Palace Cinema + Risca / Pontymister 0.2 Food Store CM 4.8 Adjacent to Lidl Risca / Pontymister 0.5 Retail CM 4.9 Foundry Site Risca / Pontymister 5.6 Food Superstore CM 4.10 Crossways Extension + Caerphilly 3.3 Retail Warehousing CM 4.11 Crossways Redevelopment + Caerphilly 2.3 Retail Warehousing	No effect policy: 4.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
CM 4.12 Park Lane Caerphilly 0.3 Commercial Leisure CM 4.13 Cardiff Road + Caerphilly 1.1 Food Store, other Retail CM 4.14 Castlegate + Caerphilly 3.5 Retail, Offices, Hotel		
Commercial Opportunity Area CM 5 A Commercial Opportunity Area is identified at the following location: CM 5.3 Castle Street, Caerphilly	No effect policy: 4.	<b>X</b>
<b>Community Facilities</b> <b>CF 1</b> The following sites are allocated for new community facilities: CF 1.20 West/east of Abercarn Cemetery, Abercarn – <i>Cemetery extensions</i> CF 1.21 Pencerrig Street, Llanbradach – <i>GP surgery</i> CF 1.22 Senghenydd Health Centre, Senghenydd – <i>GP surgery</i> CF 1.23 Ysgol Ifor Bach, Senghenydd – <i>New school</i> CF 1.24 Cwm Ifor Primary School, Caerphilly – <i>New school</i> CF 1.25 Adjacent to Penyrheol Cemetery, Caerphilly – <i>Cemetery extension</i> CF 1.26 Hendre Junior School, Caerphilly – <i>School extension</i> CF 1.27 St Ilan’s School, Caerphilly – <i>Relocate schools</i> CF 1.28 St James Primary School, Caerphilly – <i>New school</i> CF 1.29 Cardiff Road Redevelopment, Caerphilly – <i>Library</i> CF 1.30 Castlegate, Caerphilly – <i>GP surgery/residential home for elderly</i> CF 1.31 Old Nantgarw Road, Caerphilly – <i>New cemetery</i> CF 1.32 Workmen’s Hall & environs, Bedwas – <i>Cultural centre</i> CF 1.33 Bedwas Colliery, Bedwas – <i>New school</i> CF 1.34 Cray Valley Paint Works Site, Waterloo – <i>New school</i> CF 1.35 Crosskeys Youth Centre, Crosskeys – <i>New youth centre</i> CF 1.36 Former Bus Depot, Crosskeys – <i>College extension</i> CF 1.37 Palace Cinema, Risca – <i>Library</i> CF 1.38 Brooklands, Risca – <i>Adult education centre</i> CF 1.39 South of Danygraig Cemetery, Risca – <i>Cemetery extension</i>	No effect policy: 4/7.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<b>Protection of Formal Open Spaces</b> <b>LE 1</b> Land is protected for open space and parkland uses at: LE 1.19 Cwmcarn Green, Cwmcarn LE 1.20 Waunfawr Park, Crosskeys LE 1.21 Tredegar Park, Risca LE 1.22 Ty Isaf Recreation Ground, Pontymister LE 1.23 Pontymister Athletic Ground, Pontymister LE 1.24 Senghenydd Welfare Park, Senghenydd LE 1.25 Abertridwr Park, Abertridwr LE 1.26 Llanbradach Park, Llanbradach LE 1.27 Aneurin Park/Penyrrheol Cemetery, Caerphilly LE 1.28 Morgan Jones Park, Caerphilly LE 1.29 Land fronting Bedwas Road, Caerphilly LE 1.30 Dafydd Williams Park/Crescent Road, Caerphilly LE 1.31 Adjacent to Church and War Memorial, Machen	No effect policy: 7.	<b>X</b>
<b>Allocation of Country Parks</b> <b>LE 2</b> Land is allocated for a new Country Park at: LE 3.6 Bedwas Riverside Park, Bedwas – Pocket Park	No effect policy: 7.	<b>X</b>
<b>Formal Leisure Facilities</b> <b>LE 4</b> Land is identified for leisure facilities including playing pitches at: LE 4.9 Wingfield Tip, Llanbradach LE 4.10 Bedwas Colliery, Bedwas LE 4.11 Adjacent to Bedwas Comprehensive School, Bedwas LE 4.12 St Ilan's School, Caerphilly LE 4.13 Adjacent to St Cenydd School, Caerphilly LE 4.14 Castlegate, Caerphilly	No effect policy: 7.	<b>X</b>
<b>Protection of Informal Open Spaces</b> <b>LE 5</b> Land is identified for informal recreation and community uses at:	No effect policy: 7.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
LE 5.17 West of Commercial Street, Senghenydd LE 5.18 Heritage Park, Abertridwr LE 5.19 Risca Quarry, Risca LE 5.20 Holly Road, Risca LE 5.21 North of Pontymason Lane, Risca LE 5.22 Energlyn Sidings, Caerphilly LE 5.23 Pontypandy, Caerphilly LE 5.24 East of Mornington Meadows, Caerphilly		
<b>Tourism Proposals</b> <b>TM 1</b> Sites are allocated for tourism related activities at: TM 1.6 Monmouthshire & Brecon Canal, Crumlin Arm TM 1.7 Rhymney Riverside Walk, Bedwas TM 1.8 Caerphilly Castle Grounds, Caerphilly	No effect policy: 5.	<b>X</b>
<b>Cycle Routes</b> <b>TR 1</b> Land will be safeguarded to facilitate the following improvements to the cycle route network: TR 1.13 Rhymney Valley Linear Cycle Route - Heads of the Valleys to Bedwas / Caerphilly Southern TR 1.14 Caerphilly Basin Radial Routes TR 1.15 Link from Crosskeys NCN47 to Newbridge	No effect policy: 7.	<b>X</b>
<b>New Rail Stations</b> <b>TR 3</b> The Council will safeguard land at the following location for a new rail station: TR 3.3 Energlyn	No effect policy: 4.	<b>X</b>
<b>Park &amp; Ride Facilities</b> <b>TR 4</b> The following station has been identified for new or improved park and ride provision: TR 4.5 Llanbradach	No effect policy: 4.	<b>X</b>

Policy References Deposit Local Development Plan	Potential effects (Criteria 1-7) Rationale/ Comments	Likely Significant Effect (LSE) No - x Yes - ✓
<p><b>Transport Improvement Schemes – Caerphilly Basin</b>  <b>TR 6</b> The following strategic network improvements have been identified in respect of the Caerphilly Basin Obligation:            TR 6.1 Taffwys Walk            TR 6.2 Trecenydd Roundabout            TR 6.3 Pwlylpant Roundabout            TR 6.4 Bedwas Bridge Roundabout            TR 6.5 Piccadilly Gyratory            TR 6.6 Penrhos to Pwlylpant            TR 6.7 Pwlylpant to Bedwas</p>	No effect policy: 4/5.	<b>X</b>
<p><b>New Roads to Facilitate Development</b>  <b>TR 7</b> The following highway scheme is identified to facilitate new development            TR 7.3 Bedwas Colliery Access Road</p>	No effect policy: 4.	<b>X</b>

## Appendix 3 Plans, Programmes and Projects Review

### National

<b>National</b>	
<b>People, Places, Futures: The Wales Spatial Plan (update) 2008:</b> <a href="http://wales.gov.uk/consultations/currentconsultation/improveps/wspconsult/?lang=en">http://wales.gov.uk/consultations/currentconsultation/improveps/wspconsult/?lang=en</a>	
<b>Plan Type</b>	<b>Regional Spatial Strategy</b>
<b>Plan Owner/ Competent Authority</b>	<b>Welsh Assembly</b>
<b>Currency</b>	<b>Adopted 2004</b>
<b>Region/Geographic Coverage</b>	<b>Wales</b>
<b>Sector</b>	<b>Planning</b>
<b>Related work SA/SEA HRA/AA</b>	<b>SEA of the Wales Spatial Plan Update 2008:</b> <a href="http://wales.gov.uk/consultations/currentconsultation/improveps/wspconsult/?lang=en">http://wales.gov.uk/consultations/currentconsultation/improveps/wspconsult/?lang=en</a>
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p>The Wales Spatial Plan sets out an agenda for the sustainable development of Wales over the next 20 years. The purpose of the update is to reflect new drivers of change and to give status to the Area work which has developed over the past two years. The plan aims to make South East Wales a networked city-region able to provide quality of life for the population and to be able to compete with comparable areas in the UK and the EU for investment and growth.</p> <p>The pattern of housing development across South East Wales is seen as developing a greater mix and balance of housing in the Heads of the Valleys and Connections Corridor whilst ensuring that development in the Coastal Belt of South East Wales does not undermine this housing market. There should also be a targeted action to secure a supply of affordable</p>	<ul style="list-style-type: none"> <li>▪ Direct loss of habitat through development - One of the three Strategic Opportunity Areas identified is 'the area around Llantrisant and North West Cardiff'; Cardiff Beech Woods SAC is in close proximity to this.</li> <li>▪ Housing and employment growth 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.</li> <li>▪ New communities require increased infrastructure – potential for land take, pollution increase, disturbance/ severance of habitats and species.</li> <li>▪ Growth in the requirement for waste management/ transport disposal from new communities and businesses has the potential to increase pollution, and introduce land take issues.</li> <li>▪ Recreation pressures may result from housing developments near/ adjacent to Natura 2000 sites.</li> </ul>

<b>National</b>	
<b>People, Places, Futures: The Wales Spatial Plan (update) 2008:</b> <a href="http://wales.gov.uk/consultations/currentconsultation/improveps/wspconsult/?lang=en">http://wales.gov.uk/consultations/currentconsultation/improveps/wspconsult/?lang=en</a>	
<p>housing.</p> <p>Three Strategic Opportunity Areas (SOA) were identified as offering potential regional benefits from their sustainable development. These areas are: developments linked to the dualling of the Heads of the Valleys road (A465); the area around Llantrisant and North West Cardiff which has seen major growth over the past 30 years; and development in the Vale of Glamorgan linked to the proposed St Athan military training academy.</p> <p>The Plan states that improvements to transport are essential to making the city-region work, and to the regeneration of Valleys communities, highlighting the importance of external transport links, such as the M4, east/west rail links and Cardiff International Airport.</p>	<ul style="list-style-type: none"> <li>▪ Atmospheric pollution generated as a result of housing, employment and transport growth.</li> </ul>

<b>National</b>	
<b>Property Strategy for Employment in Wales 2004- 2008:</b> <a href="http://new.wales.gov.uk/topics/businessandconomy/property/Prop-strat/?lang=en">http://new.wales.gov.uk/topics/businessandconomy/property/Prop-strat/?lang=en</a>	
<b>Plan Type</b>	<b>Employment Strategy</b>
<b>Plan Owner/ Competent Authority</b>	<b>Welsh Development Agency</b>
<b>Currency</b>	<b>2004 - 2008</b>
<b>Region/Geographic Coverage</b>	<b>Wales</b>
<b>Sector</b>	<b>Planning</b>
<b>Related work SA/SEA HRA/AA</b>	<b>N/A</b>
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>

National	
Property Strategy for Employment in Wales 2004- 2008: <a href="http://new.wales.gov.uk/topics/businessandconomy/property/Prop-strat/?lang=en">http://new.wales.gov.uk/topics/businessandconomy/property/Prop-strat/?lang=en</a>	
<p>The Property Strategy for Employment in Wales 2004-2008 sets out the Welsh Assembly Government's approach for employment sites and buildings across Wales. The document aims to provide a framework to ensure that Wales can provide high quality employment sites and premises in the right locations for inward investors and indigenous businesses.</p> <p><b>Premier Business Park</b> (1) - focused on M4/capital of Wales One park is needed for Wales as a whole, with a land requirement of some 100-300 acres (40-121 hectares). The current lack of such a premier business park is a major weakness in Wales' current property armoury and investor offer. Only the "Greater Cardiff" area can in principle meet the criteria set out in the strategy.</p> <p><b>Business Parks</b> (6) - 2/3 on M4 Corridor.</p> <p><b>Strategic Sites</b> (15/20) -concentrated on large centres of population with proximity to the primary road network.</p> <p><b>Strategic Mixed Use Sites</b> (5-10) - to complement the business parks and strategic sites network.</p> <p><b>Special Category Sites</b> (1) - but with other sites having 'key' sector roles</p> <p><b>City/Town Centre Office Sites</b></p>	<ul style="list-style-type: none"> <li>■ Direct loss of habitat through development - There are 2 SACs in close proximity to the M4 and within 15km of Caerphilly, these are:             <ul style="list-style-type: none"> <li>○ River Usk SAC</li> <li>○ Cardiff Beech Woods SAC</li> </ul> </li> <li>■ Employment growth may lead to increased transport movements.</li> <li>■ New development requires increased infrastructure - potential for land take, pollution increase, disturbance/ severance of habitats and species.</li> <li>■ Growth in the requirement for waste management/ transport disposal from new businesses has the potential to increase pollution, and introduce land take issues.</li> <li>■ Recreation pressures may result from developments near/ adjacent to Natura 2000 sites.</li> <li>■ Atmospheric pollution generated as a result of employment and transport growth.</li> </ul>



<b>National</b>	
<b>Property Strategy for Employment in Wales 2004- 2008:</b> <a href="http://new.wales.gov.uk/topics/businessandconomy/property/Prop-strat/?lang=en">http://new.wales.gov.uk/topics/businessandconomy/property/Prop-strat/?lang=en</a>	
<p>Extensive network based on the main centres of population and existing critical mass, supplemented by smaller scale opportunities</p> <p>The following areas are recommended for early consideration:</p> <ul style="list-style-type: none"> <li>- major settlements</li> <li>▪ Cardiff/Cardiff Bay</li> <li>▪ Swansea</li> <li>▪ Newport</li> <li>▪ Wrexham</li>   <li>- other settlements</li> <li>▪ Caerphilly</li> <li>▪ Cwmbran</li> <li>▪ Merthyr Tydfil</li> <li>▪ Carmarthen</li> <li>▪ Newtown</li> <li>▪ Bangor</li> <li>▪ Colwyn Bay</li> </ul> <p><b>Industrial Estates/Local Sites</b> 50-70 – to serve essentially sub-regional and local markets.</p>	

<b>National</b>	
<b>Wales Transport Strategy 2006:</b> <a href="http://new.wales.gov.uk/consultations/closed/busandeconclocons/951740/?lang=en">http://new.wales.gov.uk/consultations/closed/busandeconclocons/951740/?lang=en</a>	
<b>Plan Type</b>	Transport
<b>Plan Owner/ Competent Authority</b>	Welsh Assembly Government – Transport Wales
<b>Currency</b>	Consultation document (ended Oct 2006)
<b>Region/Geographic Coverage</b>	Wales – with regional sections including South East Wales Transport Alliance (SEWTA) region
<b>Sector</b>	Transport
<b>Related work SA/SEA HRA/AA</b>	N/A
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p>The Wales Transport Strategy (WTS) Consultation Document is the 'parent document' to RTPs and sets out how the Welsh Assembly Government proposes to deliver its transport duty to 2030.</p> <p>The WTS vision is: 'To provide a framework that connects national, regional and local policy to maximise the contribution that transport can make to achieving a sustainable future for Wales, where actions for social, economic and environmental improvement work together to create positive change'.</p> <p>The WTS seeks to maximise the contribution transport can make to delivering 15 social, economic and environmental outcomes:</p> <p><b>Social</b></p> <ul style="list-style-type: none"> <li>▪ Improving access to healthcare</li> <li>▪ Improving access to education and life-long learning</li> <li>▪ Improving access to shopping and leisure facilities</li> <li>▪ Encouraging healthy lifestyles</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improving the efficient, reliable and sustainable movement of people and freight as well as reducing the contribution of transport to greenhouse gas emissions will help to mitigate or offset any increase in diffuse air pollution as a result of this Strategy.</li> </ul>

<b>National</b>	
<b>Wales Transport Strategy 2006:</b> <a href="http://new.wales.gov.uk/consultations/closed/busandeconclocons/951740/?lang=en">http://new.wales.gov.uk/consultations/closed/busandeconclocons/951740/?lang=en</a>	
<ul style="list-style-type: none"> <li>▪ Improving the actual and perceived safety of travel</li> </ul> <p><b>Economic</b></p> <ul style="list-style-type: none"> <li>▪ Improving connectivity (links) within Wales and internationally</li> <li>▪ Improving the efficient, reliable and sustainable movement of people</li> <li>▪ Improving the efficient, reliable and sustainable movement of freight</li> <li>▪ Improving access to employment opportunities</li> <li>▪ Improving access to key visitor attractions</li> <li>▪ Increasing the use of more sustainable materials in the maintenance of Wales' transport assets and in the provision of new transport infrastructure</li> </ul> <p><b>Environmental</b></p> <ul style="list-style-type: none"> <li>▪ Reducing the contribution of transport to greenhouse gas emissions, adapting to the impacts of climate change and reducing the contribution of transport on air pollution and other harmful pollutant emissions</li> <li>▪ Reducing the negative impact of transport on the local environment - water pollution, land contamination, noise and vibration, light pollution and links between communities</li> <li>▪ Reducing the negative impact of transport on our heritage - landscape, townscape, historical environment and Wales' distinctiveness</li> <li>▪ Reducing the negative impacts of transport on biodiversity and increasing positive impacts</li> </ul>	

<b>National</b>	
<b>The Trunk Road Forward Programme 2002:</b> <a href="http://wales.gov.uk/topics/transport/roads/1397701/?lang=en">http://wales.gov.uk/topics/transport/roads/1397701/?lang=en</a>	

<b>National</b>	
The Trunk Road Forward Programme 2002: <a href="http://wales.gov.uk/topics/transport/roads/1397701/?lang=en">http://wales.gov.uk/topics/transport/roads/1397701/?lang=en</a>	
Plan Type	Transport
Plan Owner/ Competent Authority	Welsh Assembly Government – Transport Wales
Currency	Consultation document (ended Oct 2006)
Region/Geographic Coverage	Wales – with regional sections including South East Wales Transport Alliance (SEWTA) region
Sector	Transport
Related work SA/SEA HRA/AA	N/A
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p><b>Phase 1 (Start March 2007)</b> A465 Abergavenny to Gilwern</p> <ul style="list-style-type: none"> <li>▪ The scheme comprises the on-line widening of some 6km of the A465 between the existing Hardwick Roundabout and Glanbaiden junction, and then continues for just under 1km to Gilwern. Includes the areas: Hardwicke roundabout, Llanfoist, West of Llanfoist, Govilon and Gilwern East. <a href="http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section1.pdf?lang=en">http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section1.pdf?lang=en</a></li> </ul> <p>M4 Castleton to Coryton Widening</p> <ul style="list-style-type: none"> <li>▪ A 13.5km (8.0 mile) long scheme to widen from dual two lane to dual three lane motorway standard at an estimated cost of £71m. The main programme of construction work started in May 2007. Reconstruction and realignment of the motorway within the central reserve is currently underway between Junctions 30 and 32. This will continue until June 2008. The main widening will then follow in core phases: <ul style="list-style-type: none"> <li>○ June 2008 - November 2008: J30 to J32 - Westbound widening.</li> <li>○ November 2008 - April 2009: J29 to J30 - Eastbound</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ A465 Abergavenny to Gilwern - Runs in close proximity and across the River Usk SAC. Potential for disturbance at point which the A465 crosses the River Usk and for pollution as a result of construction activities.</li> <li>▪ M4 Castleton to Coryton Widening - Junction 32 of the M4 lies approximately 1.2km away from Cardiff Beech Woods SAC.</li> <li>▪ A465 Gilwern to Brynmawr - This section of the A465 runs directly through Cwm Clydach Woodlands SAC and Usk Bat Sites SAC. Potential for direct land take, increased disturbance for bat population and possible pollution as a result of construction activities.</li> <li>▪ New M4 Magor to Castleton - This development would involve the building of a bridge across the River Usk SAC. Potential for disturbance at point which the bridge crosses the River Usk and for pollution as a result of construction activities. There is potential for the bridge to have significant effects on migratory fish populations.</li> <li>▪ All the development proposed has the potential to increase levels of traffic and therefore contribute to an increase in diffuse air pollution.</li> </ul>

National	
The Trunk Road Forward Programme 2002: <a href="http://wales.gov.uk/topics/transport/roads/1397701/?lang=en">http://wales.gov.uk/topics/transport/roads/1397701/?lang=en</a>	
<p>widening.</p> <ul style="list-style-type: none"> <li>○ April 2009 - August 2009: J29 to J30 - Central Reserve works.</li> <li>○ August 2009 - December 2009: J29 to J32 - Westbound widening.</li> </ul> <p><b>Phase 2 (Could be ready to start by April 2010)</b> A465 Brynmawr to Tredegor</p> <ul style="list-style-type: none"> <li>■ The A465 Trunk Road is part of the Trans European Road Network and is an important strategic route in South Wales, linking the Midlands and Northern England to West Wales and Ireland. Includes the areas: The Dingle, Blaen-y-Cwm Reservoir, Garn Lydan, Rassau Industrial Estate East, Rassau Industrial Estate West and Nantylwch Junction (phase two). <a href="http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section3.pdf?lang=en">http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section3.pdf?lang=en</a></li> </ul> <p>A465 Gilwern to Brynmawr</p> <ul style="list-style-type: none"> <li>■ The A465 Trunk Road is part of the Trans European Road Network and is an important strategic route in South Wales, linking the Midlands and Northern England to West Wales and Ireland. Includes the areas: Gilwern East (phase two), Gilwern West, Maesygartha, Upper Clydach, Blackrock and Brynmawr. <a href="http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section2.pdf?lang=en">http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section2.pdf?lang=en</a></li> </ul> <p>New M4 Magor to Castleton</p>	

National	
<b>The Trunk Road Forward Programme 2002:</b> <a href="http://wales.gov.uk/topics/transport/roads/1397701/?lang=en">http://wales.gov.uk/topics/transport/roads/1397701/?lang=en</a>	
<ul style="list-style-type: none"> <li> <p>■ The Welsh Assembly Government has proposed a new dual 3-lane motorway link between Magor and Castleton as part of the optimum long-term wider integrated transport strategy for South-East Wales. The new dual 3-lane motorway will be 15 miles (24 km) long, linking Junction 23A at Magor and Junction 29 at Castleton. The route crosses the Gwent Levels, including several Sites of Special Scientific Interest (or SSSIs), so great care will be taken to minimise the effects on the SSSIs by using previous industrial land where feasible.</p> <p><a href="http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase2/NewM4/New_M4_PREFERRED_Route.pdf?lang=en">http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase2/NewM4/New_M4_PREFERRED_Route.pdf?lang=en</a></p> </li> </ul> <p><b>Phase 3 (Unlikely to start before April 2010)</b> A4042 Llanellen</p> <ul style="list-style-type: none"> <li> <p>■ A narrow bridge crossing with limited pedestrian facilities and narrow winding approach from the south.</p> </li> </ul> <p>Cardiff International Airport Access</p> <ul style="list-style-type: none"> <li> <p>■ The scheme is proposed to address access problems to Cardiff International Airport and Culverhouse Cross. Detailed investigations are underway to ascertain how well various options address the identified issues whilst taking into account environmental, social and economic considerations. As part of the ongoing study traffic surveys and roadside interviews with travellers on roads in the Vale of Glamorgan area will be carried out in early March 2008. It is anticipated that solutions which are considered to best address the issues will be the subject of a public consultation planned to start in July 2008. The study is</p> </li> </ul>	

National	
The Trunk Road Forward Programme 2002: <a href="http://wales.gov.uk/topics/transport/roads/1397701/?lang=en">http://wales.gov.uk/topics/transport/roads/1397701/?lang=en</a>	
<p>expected to be complete by the end of 2008.  <a href="http://new.wales.gov.uk/topics/transport/roads/NewRoads3/ImprovingAccessToCardiffAirport/?lang=en">http://new.wales.gov.uk/topics/transport/roads/NewRoads3/ImprovingAccessToCardiffAirport/?lang=en</a></p> <p>A465:A470 to Hirwaun</p> <p>A465 Dowlais Top to A470</p> <ul style="list-style-type: none"> <li>▪ Includes the areas: Dowlais Top Junction (phase two), Penywern, Galon Uchaf, Gurnos, Cefn Coed, A470 Junction and West of A470.</li> </ul> <p><a href="http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section5.pdf?lang=en">http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section5.pdf?lang=en</a></p> <p><b>On Hold</b></p> <p>A4042 Penperlleni                      A40 Abergavenny</p>	

<b>National</b>	
<b>Minerals Planning Policy Wales 2001:</b> <a href="http://new.wales.gov.uk/topics/planning/policy/minerals/mineralsplanning?lang=en">http://new.wales.gov.uk/topics/planning/policy/minerals/mineralsplanning?lang=en</a>	
<b>Plan Type</b>	Minerals & Waste
<b>Plan Owner/ Competent Authority</b>	Welsh Assembly Government
<b>Currency</b>	Published 2000
<b>Region/Geographic Coverage</b>	Wales
<b>Sector</b>	Minerals
<b>Related work SA/SEA HRA/AA</b>	N/A
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p><b>Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar Sites</b></p> <p>23. Minerals proposals within or likely to significantly affect potential and classified SPAs, designated, candidate or proposed SACs or Ramsar sites must be carefully examined in relation to the site's conservation objectives in order to ascertain whether or not they are likely to be significant in terms of the ecological objectives of the site. For the purpose of considering development proposals affecting them, potential SPAs and candidate SACs should be given the same protection and treated as classified SPAs and designated SACs. As a matter of policy, the Assembly has chosen to apply the same considerations to Ramsar sites. If a proposal individually or in combination with other proposals and sites with extant planning permission is likely have a significant effect on such a site, an appropriate assessment of the implications for the site must be made by the planning authority. If the proposal would adversely affect the integrity of the site (taking into account advice from the Countryside Council for Wales) and conditions would not remove this effect, planning</p>	No locations are specified. The document contains strong policies in regard to the protection of Natura 2000 and Ramsar sites.



National	
Minerals Planning Policy Wales 2001: <a href="http://new.wales.gov.uk/topics/planning/policy/minerals/mineralsplanning?lang=en">http://new.wales.gov.uk/topics/planning/policy/minerals/mineralsplanning?lang=en</a>	
<p>permission will not be granted unless there are:</p> <ul style="list-style-type: none"> <li>▪ no alternative solutions (i.e. alternative supplies cannot be made available at reasonable cost; and there is no scope for meeting the need in some other way); and,</li> <li>▪ imperative reasons of overriding public interest – including those of a social and economic nature. In determining this, authorities should have regard to considerations such as the need for the development in terms of UK mineral supply; and, the impact of permitting the development or refusing it on the local economy. The Assembly would consider the question of whether there are imperative reasons of overriding public interest for the development, taking account of advice from the Countryside Council for Wales, and bearing in mind the views of any other competent authority.</li> </ul> <p><b>Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)</b></p> <p>25. Minerals proposals within SSSIs or likely to affect them should be very carefully considered, and where the impact is likely to be significant they should be subject to the most rigorous examination, and the need for the mineral must be balanced against environmental and other relevant considerations. Particular care should be taken in assessing proposals that are likely to affect an SSSI which has been designated an NNR<sup>24</sup>. Consideration must always include an assessment of:</p> <ul style="list-style-type: none"> <li>▪ the need for the development in terms of UK considerations of mineral supply;</li> </ul>	

National	
Minerals Planning Policy Wales 2001: <a href="http://new.wales.gov.uk/topics/planning/policy/minerals/mineralsplanning?lang=en">http://new.wales.gov.uk/topics/planning/policy/minerals/mineralsplanning?lang=en</a>	
<ul style="list-style-type: none"> <li>▪ the impact of permitting the development or refusing it on the local economy;</li> <li>▪ whether alternative supplies can be made available at reasonable cost; and the scope for meeting the need in some other way;</li> <li>▪ any detrimental effect of the proposals on the nature conservation interest of the site in terms of habitat, protected species, bio-diversity, environment and landscape, and the extent to which that should be moderated; and,</li> <li>▪ in the case of extensions to existing quarries and other mineral extraction sites, the extent to which the proposal would achieve an enhancement to the nature conservation and biodiversity interest of the site.</li> </ul> <p><b>Proposals for opencast or deep-mine development or colliery spoil disposal will be expected to meet the following requirements otherwise they should not be approved:</b></p> <ul style="list-style-type: none"> <li>▪ within or likely to affect Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs), Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar Sites must meet the additional tests set out in paragraphs 23 and 25 above;</li> </ul>	

<b>National</b>	
<b>Welsh Coastal Tourism Strategy Draft Final Strategy Document 2007:</b> <a href="http://new.wales.gov.uk/docrepos/40371/403823114/403821/1257853/strategy?lang=en">http://new.wales.gov.uk/docrepos/40371/403823114/403821/1257853/strategy?lang=en</a>	
<b>Plan Type</b>	<b>Coastal Strategy</b>
<b>Plan Owner/ Competent Authority</b>	<b>Welsh Assembly Government</b>
<b>Currency</b>	<b>Published 2007</b>
<b>Region/Geographic Coverage</b>	<b>Wales</b>
<b>Sector</b>	<b>Planning</b>
<b>Related work SA/SEA HRA/AA</b>	
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p><b>South East – The Capital Network</b></p> <p>South East Wales is the most populous area of Wales with the coast zone being a main economic driver. Cardiff and Newport are both coastal located cities and the former has an important tourism role as a capital city, regional shopping and cultural centre, a major sporting venue and increasingly as a conference centre and the Ryder Cup at Newport in 2010.</p> <p>The regeneration of Cardiff Waterfront has created an important arc of leisure and recreation facilities around an impounded area of water. The area also has the more traditional seaside resorts of Barry and Penarth and in the Vale of Glamorgan an extensive length of Heritage Coast. In the east of the area the Gwent Levels are important for its wildlife particularly migrating birds.</p> <p>Elements to consider in the South East Spatial Plan Area</p> <ul style="list-style-type: none"> <li>▪ Establish and implement standards with regard to tourism facilities, information, accommodation and visitor</li> </ul>	<ul style="list-style-type: none"> <li>▪ Direct loss of habitat through development - Severn Estuary SPA, Ramsar and cSAC is present all along the Cardiff coastline.</li> <li>▪ Increased levels of tourism and employment may lead to increased transport movements.</li> <li>▪ Atmospheric pollution generated as a result of employment and transport growth.</li> <li>▪ Increased recreational pressure through water sports.</li> <li>▪ An increased level of waterborne transport and development along the coast has the potential to increase diffuse levels of water pollution.</li> </ul>

<b>National</b>	
<b>Welsh Coastal Tourism Strategy Draft Final Strategy Document 2007:</b> <a href="http://new.wales.gov.uk/docrepos/40371/403823114/403821/1257853/strategy?lang=en">http://new.wales.gov.uk/docrepos/40371/403823114/403821/1257853/strategy?lang=en</a>	
<p>expectations at popular coastal locations.</p> <ul style="list-style-type: none"> <li>▪ To consider the potential of identifying a pilot area as a 'Coastal Recreation Area'.</li> <li>▪ To continue to support the waterfront regeneration initiatives in Barry, Cardiff and Newport.</li> <li>▪ To consider the opportunities for enhancing the role of beach wardens and voluntary/coastcare groups in the management and maintenance of beaches.</li> <li>▪ To consider the potential of additional or new berths at Cardiff and Newport and the provision of visiting berths at existing marinas.</li> <li>▪ To consider the improvement of facilities for cruise liners and for passengers in Cardiff.</li> <li>▪ To consider opportunities for exploiting the potential of food, heritage and culture.</li> </ul>	

## Regional

Regional	
The South East Wales Consultation Draft Regional Waste Plan 1 <sup>st</sup> Revision Oct 2007: <a href="http://www.sewaleswasteplan.org/">http://www.sewaleswasteplan.org/</a>	
Plan Type	Waste & Minerals
Plan Owner/ Competent Authority	South East Wales Regional Waste Group
Currency	Consultation document (ended Dec 2007) Final document due 2008
Region/Geographic Coverage	Wales
Sector	Waste
Related work SA/SEA HRA/AA	Sustainability Appraisal & Life Cycle Analysis of the Strategic Waste Management Options (Environment Agency Wales, 2007).
Document Details	Potential impacts that could cause 'in-combination' effects
<p>The <b>estimated total land area required</b> in South East Wales for new in-building facilities by 2013 for the seven sub-Options ranges from between 48 hectares to 108 hectares. An analysis of the potentially available land area on existing B2 or major industry sites and B2 sites that have already been allocated in development plans has shown that in each UA area for which data is available there is, at the current time, a clear surplus of developable land with a B2 planning permission or proposed use to accommodate the highest estimate of the total land area required for new in-building waste management facilities. In South East Wales there is a total of 734 developable hectares of land with a B2 planning permission or proposed use.</p> <p><b>Biodiversity</b> - The footprint of statutory designated sites, including Special Areas of Conservation, Ramsar sites, Sites of Special Scientific Interest, National Nature Reserves and Special Protection Areas have all been <b>designated as absolute areas of constraint</b>, constituting areas that are unsuitable for</p>	<p>Natura 2000 sites are designated as absolute areas of constraint, constituting areas that are unsuitable for waste management facilities. In addition, impacts on designated sites as a result of placing waste management facilities nearby have been considered.</p>

Regional	
The South East Wales Consultation Draft Regional Waste Plan 1 <sup>st</sup> Revision Oct 2007: <a href="http://www.sewaleswasteplan.org/">http://www.sewaleswasteplan.org/</a>	
<p>waste management facilities. These have subsequently been omitted from the search. In addition, impacts on designated sites as a result of placing waste management facilities nearby have been considered. This has been undertaken by applying buffer areas around the footprint of designated sites, which present areas of some constraint. As the distance from the designated sites increases, the level of constraint decreases as reflected by the lowering weighting. The buffer zones vary depending on the importance of the designated site; buffers have been derived from information held within current planning policy regarding siting development near such sites, the weightings are appropriate to this and reflect the distance from the designated site, as well as the type of waste facility. For biodiversity issues, the Areas of Search subsequently reflect areas that are considered to be constrained by virtue of planning policy, reflected at the broad, national level. By excluding sites of nature conservation importance and applying buffers around them representing constraints, the permanent negative effects on biodiversity, including flora and fauna, are minimised.</p>	

Regional	
South East Wales Transport Alliance: Outline of the Regional Transport Plan Jan 2007 <a href="http://www.sewta.gov.uk/PDF/OutlineRTP-Feb07.pdf">http://www.sewta.gov.uk/PDF/OutlineRTP-Feb07.pdf</a>	
Plan Type	Regional Transport Plan
Plan Owner/ Competent Authority	South East Wales Transport Alliance
Currency	Consultation document (ended Oct 2006) Final document due March 2008

<b>Regional</b>	
South East Wales Transport Alliance: Outline of the Regional Transport Plan Jan 2007 <a href="http://www.sewta.gov.uk/PDF/OutlineRTP-Feb07.pdf">http://www.sewta.gov.uk/PDF/OutlineRTP-Feb07.pdf</a>	
Region/Geographic Coverage	Wales – with regional sections including South East Wales Transport Alliance (SEWTA) region
Sector	Transport
Related work SA/SEA HRA/AA	SEA Scoping Report completed on Outline Regional Transport Plan <a href="http://www.sewta.gov.uk/strategy.htm">http://www.sewta.gov.uk/strategy.htm</a>
<b>Document Details</b>	
<p>Our vision is "to provide a modern, integrated and sustainable transport system for south east Wales that increases opportunity, promotes prosperity and protects the environment; where public transport, walking, cycling and sustainable freight provide real travel alternatives".</p> <p>Our priorities build on our vision. They set the general direction of the Plan by answering the question "what really matters?"</p> <ul style="list-style-type: none"> <li>▪ To improve access to services, facilities and employment, particularly by public transport, walking and cycling.</li> <li>▪ To provide a transport system that increases the use of sustainable modes of travel.</li> <li>▪ To reduce the demand for travel.</li> <li>▪ To develop an efficient and reliable transport system with reduced levels of congestion and improved transport links within the SEWTA region and to the rest of Wales, the UK and Europe.</li> <li>▪ To provide a transport system that encourages healthy and active lifestyles, is safer and supports local communities.</li> <li>▪ To reduce significantly the emission of greenhouse gases and air pollution from transport.</li> <li>▪ To ensure that land use development in south east Wales is</li> </ul>	<p><b>Potential impacts that could cause 'in-combination' effects</b></p> <ul style="list-style-type: none"> <li>▪ The key focus of the outline regional transport plan is to rebalance capital investment away from road building towards public transport, walking and cycling, this includes investment in travel planning measures.</li> <li>▪ The overarching aim of this plan is to seek long term sustainable transport solutions. Key objectives include seeking a modal shift for private and freight transports onto more sustainable modes, reducing the impact of the transport system on the natural environment, reducing greenhouse gas emissions from transport, and reducing traffic growth and congestion.</li> <li>▪ The in-combination effect of the Regional Transport Plan with the Caerphilly Local Development Plan is likely to be positive in the long term.</li> <li>▪ The shared approach of these plans to deliver more sustainable transport and travel solutions for commercial and private traffic provides strong support for overarching aims to reduce air pollution which can contribute to the reduction of damaging effects to habitats and species.</li> </ul>

Regional	
<b>South East Wales Transport Alliance: Outline of the Regional Transport Plan Jan 2007</b> <a href="http://www.sewta.gov.uk/PDF/OutlineRTP-Feb07.pdf">http://www.sewta.gov.uk/PDF/OutlineRTP-Feb07.pdf</a>	
<p>supported by sustainable transport measures.</p> <ul style="list-style-type: none"> <li>▪ To make better use of the existing transport system.</li> <li>▪ To play a full role in regenerating south east Wales.</li> </ul> <p>Our main problems are:</p> <ul style="list-style-type: none"> <li>▪ Too many people are excluded from fully participating in society because their transport is poor.</li> <li>▪ People see the transport system as being unsafe. They fear the impact of motor traffic on their local communities.</li> <li>▪ We have become over-dependent on the motor car. That leads to high levels of traffic congestion and consequently an inefficient transport system.</li> <li>▪ Carbon emissions hasten climate change and motor traffic degrades the environment.</li> </ul> <p>Our strategy has five practical cornerstones:</p> <ul style="list-style-type: none"> <li>▪ Reducing the demand for travel through better land use planning and local service provision;</li> <li>▪ Providing safer neighbourhoods for people to live in and to walk and cycle;</li> <li>▪ Providing a much improved public transport system for medium and longer distance travel;</li> <li>▪ Getting the best out of the existing highways, particularly the core highway network;</li> <li>▪ Working with others to seek joint solutions to problems.</li> </ul>	



<b>Regional</b>	
SEWTA Rail Strategy Study Jan 2006: <a href="http://www.sewta.gov.uk/PDF/RailStrategy.pdf">http://www.sewta.gov.uk/PDF/RailStrategy.pdf</a>	
Plan Type	Rail Strategy
Plan Owner/ Competent Authority	South East Wales Transport Alliance
Currency	2009 - 2018
Region/Geographic Coverage	Wales – with regional sections including South East Wales Transport Alliance (SEWTA) region
Sector	Transport
Related work SA/SEA HRA/AA	N/A
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p>In summary the strategy includes:</p> <ul style="list-style-type: none"> <li>▪ Additional rolling stock to strengthen peak trains to provide for passenger growth and to avoid overcrowding and rolling stock renewal;</li> <li>▪ Station improvements including improved station facilities, information, security and access - including additional parking;</li> <li>▪ Reliability and capacity improvements; changes to the network to reduce delays and improve the ability to cope with performance problems; specifically at Cardiff Central, Cardiff Queen Street, Barry, Cogan Junction and Llandaff;</li> <li>▪ Frequency enhancements on existing lines; improving the levels of service on selected routes to meet passengers' expectations and increase the transfer of car trips to rail; specifically new services on the Abergavenny, Chepstow, Ebbw Vale, Rhymney Valley, Taff Vale and Vale of Glamorgan Lines. Additional services to the north of Cardiff are required to cope with the growth in passenger demand and will require a significant investment in the capacity of the network at and between Cardiff Queen Street and</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improvements to the rail network could lead to a reduction in car use and improvements to air quality in the region.</li> </ul>

Regional	
SEWTA Rail Strategy Study Jan 2006: <a href="http://www.sewta.gov.uk/PDF/RailStrategy.pdf">http://www.sewta.gov.uk/PDF/RailStrategy.pdf</a>	
<p>Cardiff Central stations;</p> <ul style="list-style-type: none"> <li>■ New stations on existing lines; improving access to the rail network and integrated with the development of improved services; specifically at Caerleon, Magor with Undy, Llanwern, Coedkernew and St Mellons. With those on the main line between Cardiff and Severn Tunnel sited on the Relief Lines;</li> <li>■ Network extensions and new stations; to investigate further improving access to the rail network through extending to Ebbw Vale Town and from Pontyclun to Beddau (with stations at Talbot Green, Llantrisant, Gwaun Meisgyn &amp; Beddau); and</li> <li>■ Rail - Link Bus Services; to extend the reach of the rail services to communities remote from the network, specifically providing access to the Valleys to the north of Cardiff and Newport.</li> </ul>	

<b>Regional</b>	
<b>Turning Heads... A Strategy for the Heads of the Valleys 2020:</b> <a href="http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/TransportPublications/565049/HoV_TurningHeads_eng.pdf?lang=en">http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/TransportPublications/565049/HoV_TurningHeads_eng.pdf?lang=en</a>	
Plan Type	Regional Spatial Planning and Regeneration Strategy
Plan Owner/ Competent Authority	Welsh Assembly Government
Currency	June 2006
Region/Geographic Coverage	Heads of the Valleys covering parts of the administrative areas of (Rhondda Cynon Taf, Merthyr Tydfil, Caerphilly, Blaenau Gwent)
Sector	Planning/ Regeneration
Related work SA/SEA HRA/AA	SA/SEA Report <a href="http://new.wales.gov.uk/topics/businessandconomy/property/HofV/hofv-about/?lang=en">http://new.wales.gov.uk/topics/businessandconomy/property/HofV/hofv-about/?lang=en</a>
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p>Strategy set within context of Wales Spatial Plan - sets a shared vision for planning for the Heads of the Valleys.</p> <p><b>Preferred Approach - Option A 'Developing Balanced Communities'</b></p> <ul style="list-style-type: none"> <li>▪ mix strong employment opportunities with distinctive communities.</li> <li>▪ provide mix of housing, retail, leisure/ tourism.</li> <li>▪ exploit internal and external employment opportunities including along M4 corridor.</li> </ul> <p>Public Sector Investment for 2006-09 includes:</p> <ul style="list-style-type: none"> <li>▪ Environment c£300m, including improvements to Merthyr Tydfil, Ebbw Vale, Bargoed, Abertillery, Blaenavon and Mountain Ash Town Centres.</li> <li>▪ Economy c£500m including the next phase of the A465(T) dualling.</li> <li>▪ Tourism and leisure - c£50m, including local authority</li> </ul>	<ul style="list-style-type: none"> <li>▪ Direct loss of habitat through development - One of the three Strategic Opportunity Areas identified is 'the area around Llantrisant and North West Cardiff'; Cardiff Beech Woods SAC is in close proximity to this.</li> <li>▪ Housing and employment growth 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.</li> <li>▪ Atmospheric pollution generated as a result of housing, employment and transport growth.</li> <li>▪ The A465 runs in close proximity and across the River Usk SAC and runs directly through Cwm Clydach Woodlands SAC and Usk Bat Sites SAC. There is the potential for direct land take, increased disturbance and increased levels of diffuse air pollution.</li> </ul>

<b>Regional</b>	
<b>Turning Heads... A Strategy for the Heads of the Valleys 2020:</b> <a href="http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/TransportPublications/565049/HoV_TurningHeads_eng.pdf?lang=en">http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/TransportPublications/565049/HoV_TurningHeads_eng.pdf?lang=en</a>	
<p>investment in community facilities.</p> <ul style="list-style-type: none"> <li>▪ Continued major public investment in the area, including the regeneration of the former Ebbw Vale Steelworks site.</li> <li>▪ Housing renewal £0.6billion investment in social housing stock between now and 2012.</li> </ul> <p><b>Key Strategic Goals include:</b></p> <p><b>SP2: A Perception Changing Landscape</b> With stakeholders, we will develop and implement a number of key strategic landscape-scale environmental enhancements, concentrating on key corridors and gateways such as the A465(T) Heads of the Valleys Road, and approaches to the former Ebbw Vale Steelworks and Hirwaun.</p> <p><b>SP5: Joined-Up Solutions for Business</b> Informed by market demand, we will actively encourage developers to improve and expand the range of business premises in the area, including within town centres, to help the Heads of the Valleys become a realistic investment option alongside centres such as Newport and Cardiff. This will be supported by good community and public transport links connecting people with jobs and services - integrated into the wider South East Wales Transport Plan.</p>	

<b>Regional</b>	
<b>Outline Regional Transport Plan for South West Wales Jan 2007:</b> <a href="http://www.swwitch.net/images/users/1/RTP/RTP%20Outline.pdf">http://www.swwitch.net/images/users/1/RTP/RTP%20Outline.pdf</a>	

<b>Regional</b>	
Outline Regional Transport Plan for South West Wales Jan 2007: <a href="http://www.swwitch.net/images/users/1/RTP/RTP%20Outline.pdf">http://www.swwitch.net/images/users/1/RTP/RTP%20Outline.pdf</a>	
Plan Type	Regional Transport Plan
Plan Owner/ Competent Authority	South West Wales Integrated Transport Consortium (SWWITCH)
Currency	2008 - 2013
Region/Geographic Coverage	South West Wales
Sector	Transport
Related work SA/SEA HRA/AA	
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p>Vision for the south west Wales RTP</p> <p>Our vision for south west Wales is to improve transport and access within and beyond the region to facilitate economic development and the development and use of more sustainable and healthier modes of transport.</p> <p>Objectives for the south west Wales RTP:</p> <ul style="list-style-type: none"> <li>▪ To improve access to employment, business opportunities and tourism to support the sustainable growth of the regional economy.</li> <li>▪ To improve access to education and training to facilitate increasing skill levels in south west Wales.</li> <li>▪ To improve access to health care to support a healthier south west Wales population.</li> <li>▪ To improve the range and quality of, and awareness about, sustainable transport options to improve health and fitness.</li> <li>▪ To improve the efficiency, reliability and sustainability of the movement of people and freight within and beyond south west Wales.</li> <li>▪ To improve integration between policies, service provision and modes of transport in south west Wales.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No specific locations for new development identified though it is possible that the plan could lead to increase in diffuse air pollution.</li> <li>▪ However, key priorities within the Plan will help to mitigate or offset any increase in diffuse air pollution as a result of this Strategy. These include improving the quality, affordability and awareness of public transport, walking, cycling and car sharing and making the movement of people and freight more sustainable, safer and more secure, reliable and efficient.</li> </ul>

Regional	
<b>Outline Regional Transport Plan for South West Wales Jan 2007:</b> <a href="http://www.swwitch.net/images/users/1/RTP/RTP%20Outline.pdf">http://www.swwitch.net/images/users/1/RTP/RTP%20Outline.pdf</a>	
<ul style="list-style-type: none"> <li>▪ To implement measures which make a positive contribution to improving air quality and reducing the impact of transport on ill health and Climate Change.</li> <li>▪ To implement measures which help to reduce the negative impact of transport across the region on the natural and built environment.</li> <li>▪ To improve road safety and personal security in south west Wales.</li> </ul> <p>RTP Key Priorities:</p> <ul style="list-style-type: none"> <li>▪ Improving access to jobs and business opportunities to help the local economy to prosper, including addressing congestion issues in urban areas and at pinch points in networks.</li> <li>▪ Promoting social inclusion through better partnership working to facilitate improved access to a range of services and activities including health, education and leisure.</li> <li>▪ Improving the quality, affordability and awareness of public transport, walking, cycling and car sharing.</li> <li>▪ Making the movement of people and freight more sustainable, safer and more secure, reliable and efficient.</li> </ul>	

<b>Regional</b>	
<b>Regional Transport Plan for Mid Wales 2006:</b> <a href="http://www.tracc.gov.uk/english/pdfs/tracc_rtp_prior_outline.pdf">http://www.tracc.gov.uk/english/pdfs/tracc_rtp_prior_outline.pdf</a>	
<b>Plan Type</b>	Regional Transport Plan
<b>Plan Owner/ Competent Authority</b>	Mid Wales Transport Consortium (TraCC)
<b>Currency</b>	2008 - 2013
<b>Region/Geographic Coverage</b>	South West Wales
<b>Sector</b>	Transport
<b>Related work SA/SEA HRA/AA</b>	
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p>The Vision for TraCC's RTP is:</p> <p>'To plan for and deliver an integrated transport system in Mid Wales that facilitates economic development, ensures access for all to services and opportunities, sustains and improves the quality of community life and respects the environment.'</p> <p>TraCC RTP Objectives</p> <ul style="list-style-type: none"> <li>▪ To improve safety for all transport users;</li> <li>▪ To improve accessibility to services, jobs and facilities for all sectors of society;</li> <li>▪ To improve the quality and integration of the public transport system including the role of community transport;</li> <li>▪ To provide, promote and improve sustainable forms of transport;</li> <li>▪ To improve the efficiency and use of the highway network including connectivity to other regions;</li> <li>▪ To maintain and improve the existing highway and transport infrastructure;</li> <li>▪ To minimise the impact of movement on the local and</li> </ul>	<ul style="list-style-type: none"> <li>▪ No specific locations for new development identified though it is possible that the plan could lead to increase in diffuse air pollution.</li> </ul>

<b>Regional</b>	
<b>Regional Transport Plan for Mid Wales 2006:</b> <a href="http://www.tracc.gov.uk/english/pdfs/tracc_rtp_prior_outline.pdf">http://www.tracc.gov.uk/english/pdfs/tracc_rtp_prior_outline.pdf</a>	
<p>global environment; and</p> <ul style="list-style-type: none"> <li>To ensure that transport, the need to travel and accessibility issues are paramount in land use decisions.</li> </ul>	

<b>Catchment Abstraction Management Strategies</b>	
<b>The Taff and Ely Catchment Abstraction Management Strategy 2006</b>	
<b>Plan Type</b>	<b>Catchment Abstraction Management Strategy</b>
<b>Plan Owner/ Competent Authority</b>	<b>Environment Agency Wales</b>
<b>Currency</b>	<b>2006-2010</b>
<b>Region/Geographic Coverage</b>	<b>Taff and Ely Catchment</b>
<b>Sector</b>	<b>Water</b>
<b>Related work SA/SEA HRA/AA</b>	
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p>The document sets out how the Environment Agency Wales will manage water abstraction from the Taff and Ely catchment until 2010. The strategy provides the framework for any decision on an abstraction license application.</p> <p>The Taff and Ely have a total catchment area of approximately 576 km<sup>2</sup>, which encompasses the River Taff, the River Ely and their respective tributaries. A large groundwater abstraction occurs at Ely Wells (in the lower Ely catchment) providing water for operations at Aberthaw Power Station. In the upper areas of the catchment there are carboniferous limestone and sandstone units (capable of supporting significant yields), which are currently not being used to their full potential.</p>	<p>Under the Habitats Regulations the Environment Agency Wales has a duty to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. Water efficiency is also tested by the EA before a new license is granted. If the assessment of a new application shows that it could have an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license.</p> <p>The catchment has been split into 3 Water Resource Management Units (WRMU) and 1 Groundwater Management Unit (GWMU). The document states that two of the WRMUs and the GWMU are over licensed. The WRMU that contains the River Ely has water available for abstraction.</p> <p>Blaen Cynon SAC falls within WRMU 6 which according to the CAMS is over</p>



	licensed. The Resource availability status of WRMU 6 is that there will be no water available by 2016. A reduction in the water table could affect the devil's-bit scabious, which prefers moist soils. The Marsh Fritillary Butterfly requires this plant species as it is their larval food.
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<b>Catchment Abstraction Management Strategies</b>	
The Ebbw and Lwyd Catchment Abstraction Management Strategy 2006: <a href="http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315612/?version=1&amp;lang=e">http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315612/?version=1&amp;lang=e</a>	
<b>Plan Type</b>	<b>Catchment Abstraction Management Strategy</b>
<b>Plan Owner/ Competent Authority</b>	<b>Environment Agency Wales</b>
<b>Currency</b>	<b>2006-2010</b>
<b>Region/Geographic Coverage</b>	<b>Ebbw and Lwyd Catchment</b>
<b>Sector</b>	<b>Water</b>
<b>Related work SA/SEA HRA/AA</b>	<b>Details – hyperlink or reference to document</b>
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p>The document sets out how the Environment Agency Wales will manage water abstraction from the Ebbw and Lwyd catchment until 2010. The strategy provides the framework for any decision on an abstraction license application.</p> <p>The Ebbw and Lwyd CAMS cover an area of approximately 330 km<sup>2</sup> and encompasses the River Ebbw, River Sirhowy and the River Lwyd as well as their respective tributaries. The area extends from the mountainous landscape and steep river channels in the north to the urbanised valley floors in the south. The main urban areas associated with the River Lwyd are Cwmbran and Blaenavon. The main urban areas, which are situated on the Ebbw River are Ebbw Vale and Risca. The River Sirhowy passes through the towns of Tredegar and</p>	<p>Under the Habitats Regulations the Environment Agency Wales has a duty to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. Water efficiency is also tested by the EA before a new license is granted. If the assessment of a new application shows that it could have an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license.</p> <p>The catchment has been split into 3 Water Resource Management Units (WRMU). The document states that WRMU 1 (Ebbw and Sirhowy) is over abstracted, WRMU 2 (Lwyd) has no water available and WRMU 3 (Lwyd) is over licensed.</p> <p>The River Usk SAC lies outside the boundary of the Ebbw and Lwyd CAMS.</p>

<p>Blackwood. In this CAMS area water is abstracted from both surface water and groundwater for agriculture, industry, domestic use and public water supply.</p>	<p>The River Lwyd (WRMU 10 &amp; 14) however is a tributary of the River Usk and could therefore have an influence on water flow within the lower reaches of the River Usk SAC. The site is sensitive to changes in water flow and eutrophication, which can both be influenced by levels of abstraction.</p> <p>The Severn Estuary SAC, SPA and Ramsar sites are all sensitive to changes in the hydrological regime. All CAMS in SE Wales drain into the Severn Estuary and therefore have the potential to affect the habitats and species reliant on the estuary.</p>
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<p><b>Catchment Abstraction Management Strategies</b></p>	
<p><b>The Rhymney Catchment Abstraction Management Strategy 2006:</b> <a href="http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315605/?version=1&amp;lang=_e">http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315605/?version=1&amp;lang=_e</a></p>	
<p><b>Plan Type</b></p>	<p><b>Catchment Abstraction Management Strategy</b></p>
<p><b>Plan Owner/ Competent Authority</b></p>	<p><b>Environment Agency Wales</b></p>
<p><b>Currency</b></p>	<p><b>2006-2010</b></p>
<p><b>Region/Geographic Coverage</b></p>	<p><b>Rhymney Catchment</b></p>
<p><b>Sector</b></p>	<p><b>Water</b></p>
<p><b>Related work SA/SEA HRA/AA</b></p>	<p><b>Details – hyperlink or reference to document</b></p>
<p><b>Document Details</b></p>	
<p>The document sets out how the Environment Agency Wales will manage water abstraction from the Rhymney catchment until 2010. The strategy provides the framework for any decision on an abstraction license application.</p> <p>The Rhymney CAMS area, some 221km<sup>2</sup>, comprises the hydrological surface water catchment to the River Rhymney and Roath Brook catchment (Cardiff). This includes the River Rhymney and all its tributaries, but not the Rhymney Estuary.</p>	<p><b>Potential impacts that could cause ‘in-combination’ effects</b></p> <p>Under the Habitats Regulations the Environment Agency Wales has a duty to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. Water efficiency is also tested by the EA before a new license is granted. If the assessment of a new application shows that it could have an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license.</p> <p>The catchment has been split into 4 Water Resource Management Units</p>

<p>The catchment can be divided into two main parts: a steep-sided, wet, mountainous upper valley with limited floodplain and short steep tributaries, and a flatter wider valley below Machen, where the river assumes a lowland meandering character. Being a narrow valley with limited floodplain, towns lie in close proximity to and on the banks of the main river and its tributaries.</p> <p>Thus, urban development and historical industrial developments have resulted in extensive riverbank protection works and a loss of riverine habitats. Despite this the main river and tributaries follow a largely natural course with many of the watercourses remaining tree-lined.</p> <p>Within Cardiff, the Brook and its tributaries have been modified by man including diversions, culverting, revetments and reprofiling.</p>	<p>(WRMU). The document states that WRMU 1, 2 and 3 all have water available. WRMU 6 has no water available. All the WRMUs are combined surface water/groundwater units.</p> <p>Aberbargoed Grasslands SAC is situated within WRMU 3, which according to the CAMS has water available for abstraction. The CAMS states that the Aberbargoed Grasslands SAC " <i>will be taken into consideration during the licence determination process for applications within its vicinity</i>".</p>
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<b>Catchment Abstraction Management Strategies</b>	
<b>The Usk Catchment Abstraction Management Strategy 2006:</b> <a href="http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315618/?version=1&amp;lang=_e">http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315618/?version=1&amp;lang=_e</a>	
Plan Type	Catchment Abstraction Management Strategy
Plan Owner/ Competent Authority	Environment Agency Wales
Currency	2007-2013
Region/Geographic Coverage	Usk Catchment
Sector	Water
Related work SA/SEA HRA/AA	Details – hyperlink or reference to document
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>

<p>The document sets out how the Environment Agency Wales will manage water abstraction from the Rhymney catchment until 2013. The strategy provides the framework for any decision on an abstraction license application.</p> <p>The Usk CAMS covers an area of approximately 1169 km<sup>2</sup> and encompasses the River Usk and its tributaries, but not the Usk Estuary. The main settlements within the catchment are Abergavenny, Brecon, Brynmawr, Crickhowell, Gilwern, Llanelly Hill, Llanfoist, Newport, Raglan, Sennybridge and Usk.</p> <p>In this CAMS area water is taken from both surface water and groundwater resources. Water is abstracted for public water supply, navigation, agriculture, commerce/industry, domestic use, spray irrigation, horticultural watering, lake/pond maintenance, fish farming and hydropower generation.</p> <p>The River Usk is a sandstone river of considerable ecological diversity, which provides an important wildlife corridor, an essential migration route and a key breeding area for many nationally and internationally important species.</p> <p>The ecology of the River Usk SAC is currently affected by, or at risk of being affected by, a number of factors including abstraction. As a competent and relevant authority, the Environment Agency has a statutory duty, under the Habitats Regulations, to ensure that the integrity of the riverine ecosystem is maintained or restored through sustainable water resources management.</p>	<p>Under the Habitats Regulations the Environment Agency Wales has a duty to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. Water efficiency is also tested by the EA before a new license is granted. If the assessment of a new application shows that it could have an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license.</p> <p>The catchment has been split into 3 Water Resource Management Units (WRMU). The document states that WRMU 1 (Sor Brook) has water available, WRMU 2 (River Usk) is over licensed and WRMU 18 (Bettws/Malpas Brook) is over licensed.</p> <p>The River Usk SAC, Usk Bat Sites SAC and Coed y Cerrig SAC are situated within WRMU 2, which according to the CAMS is over licensed.</p> <p>The River Usk SAC is sensitive to any changes in the hydrological regime, more specifically any changes to water flow and quality.</p> <p>Usk Bat Sites SAC are primarily designated for the population of Lesser Horseshoe Bats. Abstraction levels are unlikely to have a direct effect on the bat population but could have issues for the habitats the bats use for feeding. The Blanket Bog protected as a qualifying feature is sensitive to hydrological change.</p> <p>Coed y Cerrig SACs naturally high, largely spring-fed water table is essential to the Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>.</p>
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<b>Catchment Abstraction Management Strategies</b>	
The Wye Catchment Abstraction Management Strategy March 2008: <a href="http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315621/?version=1&amp;lang=_e">http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315621/?version=1&amp;lang=_e</a>	
Plan Type	Catchment Abstraction Management Strategy
Plan Owner/ Competent Authority	Environment Agency Wales
Currency	2008 - 2014
Region/Geographic Coverage	Wye Catchment
Sector	Water
Related work SA/SEA HRA/AA	
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p><b>Document Details</b></p> <p>The document sets out how the Environment Agency Wales will manage water abstraction from Wye catchment until 2014. The strategy provides the framework for any decision on an abstraction license application.</p> <p>The Wye CAMS covers an area of 4171 km<sup>2</sup>, encompasses the Rivers Wye, Lugg and their tributaries, and spans the border of England and Wales. The main urban areas within the catchment are Hereford, Monmouth, Leominster, Ross-on-Wye and Hay-on-Wye.</p>	<p>Under the Habitats Regulations the Environment Agency Wales has a duty to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. Water efficiency is also tested by the EA before a new license is granted. If the assessment of a new application shows that it could have an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license.</p> <p>The Environment Agency has a statutory duty, to ensure that the integrity of the riverine SAC ecosystem is maintained or restored through sustainable water resources management. As part of this duty, they have to ensure that permissions (abstraction licences, discharge consents, radioactive substance authorisations, waste management licences and integrated pollution control (IPC) authorisations) do not have an adverse effect on the integrity of the designated SAC species.</p> <p>The catchment has been split into 4 Water Resource Management Units (WRMU). The document states that all 4 WRMUs are assessed to have 'no water available'.</p> <p>The River Wye ultimately flows into the Severn Estuary. Therefore any impact</p>

	to the Severn Estuary caused by changes to the water resource management of the catchment needs is considered as part of the CAMS process.
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## Local Development Plans

Local Development Plans	
Blaenau Gwent County Borough Council Local Development Plan: <a href="http://www.blaenau-gwent.gov.uk/environment/7732.asp">http://www.blaenau-gwent.gov.uk/environment/7732.asp</a>	
Plan Type	Local Development Plan
Plan Owner/ Competent Authority	Blaenau Gwent County Borough Council
Currency	Issues Consultation Apr – Dec 07, Preferred Strategy Sept-Nov 08
Region/Geographic Coverage	Blaenau Gwent County Borough Council administrative boundaries
Sector	Planning
Related work SA/SEA HRA/AA	SA/SEA Scoping Report <a href="http://www.blaenau-gwent.gov.uk/environment/7732.asp">http://www.blaenau-gwent.gov.uk/environment/7732.asp</a>
Document Details	
LDP at vision and strategy options stage.	<b>Potential impacts that could cause 'in-combination' effects</b>
<p><b>Timetable:</b>            Early participation Apr – Dec07            Preferred Strategy Sep- Nov 08            Deposit Plan Sep-Nov 09            Examination Dec-Feb '11            Adoption Aug'11</p> <p>Issues paper presented in July 2007 designed to focus debate on issues of strategic significance for the County Borough. Workshops held between July 2007 and Nov 2007</p>	<p><b>Overarching Development Pressures</b></p> <p>LDP impacts will be dependant on the Preferred Strategy options.</p> <p>Generic effects related to development/ growth scenarios include:</p> <ul style="list-style-type: none"> <li>▪ Potential for land take/ habitat fragmentation</li> <li>▪ Increased demand for water resources/ abstraction/ hydrological impacts</li> <li>▪ Increased traffic movements, contributions to atmospheric pollution loading</li> <li>▪ Growth in requirements for waste management facilities, increased</li> </ul>

Local Development Plans	
Blaenau Gwent County Borough Council Local Development Plan: <a href="http://www.blaenau-gwent.gov.uk/environment/7732.asp">http://www.blaenau-gwent.gov.uk/environment/7732.asp</a>	
<p>focused on developing option.</p> <p><b>Options presented:</b></p> <ol style="list-style-type: none"> <li>1. UDP Regeneration (Decline – Urban Containment)</li> <li>2. Growth and Regeneration (Growth - Head of Valleys focus)</li> <li>3. Balanced and Interconnected Communities (Trend – equalise growth)</li> <li>4. Alternative option – (main focus not indicated)</li> </ol>	<p>demand for minerals</p> <ul style="list-style-type: none"> <li>▪ Increased recreational pressure from existing/ new populations</li> </ul> <p><b>SAC Specific Issues</b></p> <ul style="list-style-type: none"> <li>▪ Cym Clydach Woodlands SAC within the County Borough Boundary is vulnerable to urbanisation impacts (e.g. illegal waste dumping activities made possible by roads passing through the site) and increased recreational pressures (e.g. from greater access due to the construction of a cycle route through the site).</li> </ul>

Local Development Plans	
Brecon Beacons National Park Authority Interim Unitary Development Plan 2007: <a href="http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/deposit-udp">http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/deposit-udp</a>	
Plan Type	Unitary Development Plan
Plan Owner/ Competent Authority	Brecon Beacons National Park Authority
Currency	2001 - 2016
Region/Geographic Coverage	Brecon Beacons National Park Authority administrative boundaries
Sector	Planning
Related work SA/SEA HRA/AA	N/A
Document Details	Potential impacts that could cause 'in-combination' effects
<p><b>Part 1 Policy 11:</b> Ensuring Access to Employment Opportunities Proposals for appropriate commercial development will be permitted where they:</p> <ol style="list-style-type: none"> <li>i. enable the creation and expansion of businesses which support and diversify the rural economy;</li> </ol>	<p><b>Overarching Development Pressures</b></p> <ul style="list-style-type: none"> <li>▪ Enhanced growth implies potential land take and habitat fragmentation issues (the SA/SEA identified enhanced growth as resulting in higher environmental impacts on biodiversity and landscape). Land without statutory designation can act as corridors</li> </ul>

Local Development Plans	
<b>Brecon Beacons National Park Authority Interim Unitary Development Plan 2007:</b> <a href="http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/deposit-udp">http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/deposit-udp</a>	
<ul style="list-style-type: none"> <li>▪ retain existing employment uses;</li> <li>▪ utilise redundant buildings or brownfield sites;</li> <li>▪ use local skills, products or resources including natural resources in a sustainable way;</li> <li>▪ use existing transport routes and facilitate the use of alternative modes of transport;</li> <li>▪ are reasonably accessible to adequate services and utilities;</li> <li>▪ facilitate mixed-use development; or</li> <li>▪ support Welsh culture.</li> </ul> <p>ii. Development proposals that cause unacceptable adverse impacts to the commercial vitality and viability of the area will not be permitted.</p> <p>iii. A number of sites are allocated for commercial use under Policies SS4 and SS5. The supply and demand for land for commercial uses will be regularly reviewed.</p> <p><b>Part 1 Policy 12:</b> Supply of Housing Land The UDP will make provision for 1980 new dwellings.</p> <p><b>Policy SS1: Housing Land in the First Tier Settlements</b> Within the First Tier Settlements of Brecon, Hay-on-Wye, Crickhowell, Sennybridge, Talgarth, Gilwern, and Govilon, are allocated for residential development of 6 or more units.</p> <p>The majority of development will be focused in the North and South East of the National Park.</p>	<p>and linkages for protected habitats and species.</p> <ul style="list-style-type: none"> <li>▪ Housing and employment growth - increased transport movements and associated air pollutants - e.g. as a result of development in the Heads of the Valleys Regeneration Area which may lead to commuting across administrative boundaries.</li> <li>▪ Water abstraction for new development - potential to impact surface and groundwater.</li> <li>▪ Recreational pressures from housing/ development that is close to European sites.</li> </ul> <p><b>Policy Q1: Sites of European Importance</b> Proposals for development which may have an unacceptable impact on a European Site or potential European Site will not be permitted unless:</p> <ol style="list-style-type: none"> <li>i. the proposed development is directly connected with or necessary for the protection, enhancement and positive management of the site for conservation purposes;</li> <li>ii. the proposed development will not have an unacceptable impact on the conservation objectives associated with the site or the integrity of the site;</li> <li>iii. where the site supports priority habitats and/or species, there are reasons of public health or safety why the development should proceed;</li> <li>iv. where the site supports interests not identified as a priority, there are imperative reasons of overriding public interest why the development should proceed; and</li> <li>v. there is no alternative solution.</li> </ol>



Local Development Plan	
Cardiff Local Development Plan Preferred Strategy 2006-2021	
Plan Type	Local Development Plan
Plan Owner/ Competent Authority	Cardiff Council
Currency	2006-2021
Region/Geographic Coverage	Cardiff Council administrative boundary
Sector	Planning
Related work SA/SEA HRA/AA	<p>Cardiff Council Local Development Plan 2006 – 2021 Initial Sustainability Appraisal Report 2007:  <a href="http://www.cardiff.gov.uk/content.asp?Parent_Directory_id=2865&amp;nav=2870,3139,3154,3952">http://www.cardiff.gov.uk/content.asp?Parent_Directory_id=2865&amp;nav=2870,3139,3154,3952</a></p> <p>HRA Screening of the County Council of the City and County of Cardiff Local Development Plan Preferred Strategy Sept 2007.  <a href="http://www.cardiff.gov.uk/ObjView.asp?Object_ID=9788">www.cardiff.gov.uk/ObjView.asp?Object_ID=9788</a></p>
Document Details	Potential impacts that could cause 'in-combination' effects
<p>The document sets out the Council's objectives for the development and use of land in Cardiff and policies to implement them. It also presents the key strategic growth and spatial options available.</p> <p>Provision will be made for between 22,750 and 24,750 new dwellings in Cardiff over the plan period (2006-21).</p> <p>The LDP will accommodate 23,200 new jobs in Cardiff between 2006 and 2021.</p> <p>The City Centre and Bay Waterfront areas will be the main focus for leisure and tourism development, which includes the International Sports Village.</p> <p>In terms of transport the LDP will give priority to developing</p>	<p><b>Overarching Development Pressures</b></p> <ul style="list-style-type: none"> <li>▪ Housing and employment growth may lead to increased transport movements - the potential for in-combination effect is greater where housing sites are in proximity to Natura 2000 sites.</li> <li>▪ Atmospheric pollution is likely to be the main impact of the Preferred Strategy on sites outside of Cardiff.</li> </ul> <p><b>SAC Specific Issues</b></p> <ul style="list-style-type: none"> <li>▪ Increased transport movements and therefore increased emissions have the potential for in-combination effects on Cardiff Woods SAC as the site is sensitive to atmospheric pollution.</li> <li>▪ Increased recreational pressure on Cardiff Beech Woods SAC. The woodland is easily accessible to the public and some places are subject to significant visitor pressure.</li> </ul>

Local Development Plan	
Cardiff Local Development Plan Preferred Strategy 2006-2021	
<p>an efficient, integrated and sustainable transport system for Cardiff and linking to its hinterland. Proposals identified as a means to achieve this are:</p> <ul style="list-style-type: none"> <li>▪ Additional park &amp; ride facilities;</li> <li>▪ New public transport interchange beside Cardiff Central Station;</li> <li>▪ New station to serve the St Mellons area;</li> <li>▪ A major extension to the segregated public transport network; and</li> <li>▪ Strategic highway improvements.</li> </ul>	

Local Development Plans	
Merthyr Tydfil County Borough Council Local Development Plan 2006 – 2021 Preferred Strategy 2007	
Plan Type	Local Development Plan
Plan Owner/ Competent Authority	Merthyr Tydfil County Borough Council
Currency	2006-2021
Region/Geographic Coverage	Merthyr Tydfil County Borough Council administrative boundary
Sector	Planning
Related work SA/SEA HRA/AA	Merthyr Tydfil County Borough Council Local Development Plan 2006 – 2021 Initial Sustainability Appraisal Report 2007: <a href="http://www.merthyr.gov.uk/NR/rdonlyres/44264E40-25BE-4E87-B1ED-073AC92246E9/0/MTCBC_LDP_0621_ISus_Report_April2007.pdf">http://www.merthyr.gov.uk/NR/rdonlyres/44264E40-25BE-4E87-B1ED-073AC92246E9/0/MTCBC_LDP_0621_ISus_Report_April2007.pdf</a>
Document Details	Potential impacts that could cause 'in-combination' effects

Local Development Plans	
Merthyr Tydfil County Borough Council Local Development Plan 2006 – 2021 Preferred Strategy 2007	
<p>This document outlines the main development issues to be addressed in Merthyr Tydfil and sets out a vision and objectives for tackling these issues. It considers the spatial strategy options available and considers the development implications of following this particular route, including the major sites on which the strategy will depend.</p> <p>The LDP is pursuing an Enhanced Growth Strategy that aims to “facilitate a reduction in current levels of out migration from the County Borough so that population levels stabilise by 2011 and a 10- year period of enhanced growth is achieved thereafter”.</p> <p>Merthyr Tydfil is identified as a Primary Growth Area and will form the focus for the majority of development, with the town centre acting as the lynchpin for regeneration.</p> <p>The Enhanced Growth Strategy will provide the opportunity for:</p> <ul style="list-style-type: none"> <li>▪ substantial inward migration;</li> <li>▪ large scale provision of land for housing, employment, retail and leisure uses;</li> <li>▪ the potential development of an urban extension of up to 200ha on the southwestern flank of the Merthyr Tydfil Basin;</li> <li>▪ ongoing strategic highway improvements;</li> <li>▪ substantial improvements to services and infrastructure;</li> <li>▪ a new strategic employment site would be provided adjacent to the A4060; and</li> <li>▪ development of the former Merthyr Vale Colliery site.</li> </ul>	<p><b>Overarching Development Pressures</b></p> <ul style="list-style-type: none"> <li>▪ Enhanced growth implies potential land take and habitat fragmentation issues (the SA/SEA identified enhanced growth as resulting in higher environmental impacts on biodiversity and landscape). Land without statutory designation can act as corridors and linkages for protected habitats and species.</li> <li>▪ Enhanced growth seeks to focus (economic) development in the North at Merthyr Tyfil and in the south along the A469. Enhanced economic development has the potential to reduce outward commuting along the main transport corridors (A470 and the A465 Heads of the Valleys road). The long term effect of the LDP may result in reduced road traffic and associated atmospheric pollution issues.</li> </ul> <p><b>SAC Specific Issues</b></p> <ul style="list-style-type: none"> <li>▪ There are no European sites within the Count Borough Boundaries.</li> <li>▪ Blaen Cynon SAC (approx 5km) and Cardiff Beech Woods SAC (12.1km) are situated adjacent to major transport routes (A 470, A465) which intersect within the County Borough. LDP policies seek to reduce road based transportation, and air quality assessments in the County Borough (2004 most recent figures) show that no air quality objectives are being exceeded.</li> <li>▪ Improved emissions standards/ greater use of public transport likely to contribute to improvements in air quality – lessens likelihood of cumulative impacts at sensitive sites.</li> </ul>

Local Development Plans	
Merthyr Tydfil County Borough Council Local Development Plan 2006 – 2021 Preferred Strategy 2007	
<p>The options assumes net out migration can be turned into net in migration by 2011 and assumes an increase of 1,000 between 2011 and 2016 increasing to 2,300 from 2016 to 2021. The equates to a housing requirement of 3,800.</p> <p>The option assumes that population stability followed by growth will result in 1,850 additional jobs and a land requirement of 35ha by 2021.</p>	

Local Development Plans	
Newport City Council Unitary Development Plan (Adopted May 2006): <a href="http://www.newport.gov.uk/_dc/index.cfm?fuseaction=planning.udpinquiry&amp;contentid=DevXP002061">http://www.newport.gov.uk/_dc/index.cfm?fuseaction=planning.udpinquiry&amp;contentid=DevXP002061</a>	
Plan Type	Local Development Plan
Plan Owner/ Competent Authority	Newport City Council
Currency	1996 – 2011 (Adopted May 2006)
Region/Geographic Coverage	Newport City Council administrative boundary
Sector	Planning
Related work SA/SEA HRA/AA	N/A
Document Details	Potential impacts that could cause 'in-combination' effects
<p>The main emphasis of the plan is a "Brownfield" strategy. Newport has a considerable quantity of regeneration sites, and their redevelopment is a key aim of the plan. As well as conserving land, this also helps to achieve the objective of reducing the need to travel, and thereby contributes to sustainability.</p> <p>Housing</p>	<p><b>Overarching Development Pressures</b></p> <ul style="list-style-type: none"> <li>■ Housing and employment growth - increased transport movements and associated air pollutants - e.g. as a result of development in the Heads of the Valleys Regeneration Area which may lead to commuting across administrative boundaries.</li> <li>■ Water abstraction for new development – potential to impact surface and groundwater.</li> </ul>

Local Development Plans	
<b>Newport City Council Unitary Development Plan (Adopted May 2006):</b> <a href="http://www.newport.gov.uk/dc/index.cfm?fuseaction=planning.udpinquiry&amp;contentid=DevXP002061">http://www.newport.gov.uk/dc/index.cfm?fuseaction=planning.udpinquiry&amp;contentid=DevXP002061</a>	
<p><b>SP10</b> sufficient land will be made available to provide for additional dwellings as follows:                      1996-2001: 1800                      2001-2006: 2000                      2006-2011: 3700</p> <p>Each period is to be regarded as self-contained, with excesses or deficits of house building not being carried over into the next period. The land will be provided primarily on previously developed land in the following ways:</p> <ol style="list-style-type: none"> <li>i. existing commitments, sites under construction and completions since 1 January 1996;</li> <li>ii. new allocations as set out in policy h1;</li> <li>iii. infill and windfall site development within the settlement boundaries, not specifically allocated, to provide a further 400 dwellings. Further major housing development outside existing settlement boundaries will not be permitted.</li> </ol> <p>Major Road Schemes  <b>SP14</b> land will be safeguarded for the following strategic highway schemes:</p> <ol style="list-style-type: none"> <li>i. M4 relief road;</li> <li>ii. eastern extension of the southern distributor road along queensway through the llanwern steelworks site.</li> </ol> <p>Employment Land Requirement  <b>SP15</b> provision will be made for about 200 hectares of employment land for the period 1996-2011.</p> <p>Employment Sites  <b>SP16</b> new industrial and business development will be</p>	<ul style="list-style-type: none"> <li>■ Recreational pressures from housing/ development that is close to European sites.</li> </ul> <p><b>SAC Specific Issues</b></p> <ul style="list-style-type: none"> <li>■ Development of Brownfield sites in close proximity to the River Usk SAC could have the potential to significantly affect water quality as a result of construction activities. This also has implications for the River Severn SPA/ Ramsar/ cSAC as the River Usk flows into the Severn Estuary. Any development that would involve the building of a bridge across the River Usk SAC has the potential to have significant effects on migratory fish populations.</li> </ul> <p>Below are policies within the Plan that have specific reference to European sites.</p> <p><b>CE5</b> in the case of development proposals which would affect a European site or a Ramsar site:</p> <ol style="list-style-type: none"> <li>i. where there would be an adverse effect, the development will only be permitted if it is directly necessary for the beneficial management of the site, or if there are imperative reasons of over-riding public interest for the development and there is no alternative solution;</li> <li>ii. where the site also hosts a priority natural habitat or a priority species, development will only be permitted if it is directly necessary for human health, public safety or is directly connected with the beneficial management of the site.</li> </ol> <p><b>CE9</b> planning permission will not be granted for development which could disturb or adversely affect a species protected by European legislation unless:</p> <ol style="list-style-type: none"> <li>i. there is no alternative location for the proposed development and</li> </ol>

Local Development Plans	
<b>Newport City Council Unitary Development Plan (Adopted May 2006):</b> <a href="http://www.newport.gov.uk/dc/index.cfm?fuseaction=planning.udpinquiry&amp;contentid=DevXP002061">http://www.newport.gov.uk/dc/index.cfm?fuseaction=planning.udpinquiry&amp;contentid=DevXP002061</a>	
<p>located mainly in the following areas:</p> <ul style="list-style-type: none"> <li>i. Duffryn/Cleppa park;</li> <li>ii. South-East Newport;</li> <li>iii. riverside, dock and urban areas.</li> </ul> <p>Eastern Expansion Area  <b>SP26</b> an expansion area is allocated to the east of the city, to include the redundant part of the llanwern steelworks and land to the north between the steelworks and the m4 motorway, to provide for 1,700 dwellings and a mix of business, commercial, leisure and community uses in accordance with a masterplan. Peripheral expansion elsewhere will not be permitted. The development of greenfield sites must not be allowed to do harm to the regeneration of inner urban sites.</p>	<ul style="list-style-type: none"> <li>ii. appropriate mitigation measures can be implemented; it can be established on the advice of the relevant conservation bodies that the development proposed would not be detrimental to the protected species.</li> </ul>

Local Development Plans	
<b>Torfaen County Borough Council Local Development Plan Preferred Strategy 2006-2021 Consultation of Strategic Options and Preferred Strategy:</b> <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/LocalDevelopmentPlan/LocalDevelopmentPlan.aspx">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/LocalDevelopmentPlan/LocalDevelopmentPlan.aspx</a>	
Plan Type	Local Development Plan
Plan Owner/ Competent Authority	Torfaen County Borough Council
Currency	Preferred Strategy January 2008

<b>Local Development Plans</b>	
Torfaen County Borough Council Local Development Plan Preferred Strategy 2006-2021 Consultation of Strategic Options and Preferred Strategy: <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/LocalDevelopmentPlan/LocalDevelopmentPlan.aspx">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/LocalDevelopmentPlan/LocalDevelopmentPlan.aspx</a>	
Region/Geographic Coverage	Torfaen County Borough Council administrative boundaries
Sector	Planning
Related work SA/SEA HRA/AA	Torfaen County Borough Council Local Development Plan 2006 – 2021 Initial Sustainability Appraisal Report 2008: <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/InitialSustainabilityAppraisalReport.pdf">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/InitialSustainabilityAppraisalReport.pdf</a>
<b>Document Details</b>	
<p>This document sets out the Council's objectives and priorities for the development and use of land within Torfaen and its policies for implementing them.</p> <p>The Network of Integrated Communities Strategy would aim to ensure a network of integrated communities, focusing particularly on the two key settlements of Cwmbran and Pontypool to ensure that they are successful and function as service hubs for the surrounding settlements. Development will be emphasised along key transport routes and expanded settlements could potentially include Greenfield land.</p> <p>The LDP Preferred Strategy will make provision for 7,000 new dwellings in Torfaen over the period 2006 - 2021 primarily within the existing settlements and with a preference for brownfield sites,</p> <ul style="list-style-type: none"> <li>▪ of which: <ul style="list-style-type: none"> <li>○ 900 dwellings in North Torfaen Housing Market Area (Blaenavon and Abersychan Wards);</li> <li>○ 2,800 dwellings in Pontypool Housing Market Area; and</li> <li>○ 3,300 dwellings in Cwmbran Housing Market Area.</li> </ul> </li> </ul>	<p><b>Potential impacts that could cause 'in-combination' effects</b></p> <p>Generic effects related to development/ growth scenarios include:</p> <ul style="list-style-type: none"> <li>▪ Increased demand for water resources/ abstraction/ hydrological impacts.</li> <li>▪ Increased traffic movements, contributions to atmospheric pollution loading.</li> <li>▪ Growth in requirements for waste management facilities, increased demand for minerals.</li> <li>▪ Increased recreational pressure from existing/ new populations.</li> </ul> <p>Measures within the LDP may help to offset or mitigate some of these generic effects through:</p> <ul style="list-style-type: none"> <li>▪ Protecting and enhance important international, national, regional and local species and habitats, including: <ul style="list-style-type: none"> <li>○ European Protected Species;</li> <li>○ Special Areas of Conservation (SAC);</li> <li>○ Sites of Special Scientific Interest (SSSI);</li> <li>○ Local Nature Reserves (LNR); and</li> <li>○ Sites of Interest for Nature Conservation (SINC).</li> </ul> </li> <li>▪ Placing an emphasis on Public Transport, Cycling &amp; Walking schemes rather than road improvements and trying to ensure that developments</li> </ul>

Local Development Plans	
<b>Torfaen County Borough Council Local Development Plan Preferred Strategy 2006-2021 Consultation of Strategic Options and Preferred Strategy:</b> <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/LocalDevelopmentPlan/LocalDevelopmentPlan.aspx">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/LocalDevelopmentPlan/LocalDevelopmentPlan.aspx</a>	
<ul style="list-style-type: none"> <li>▪ and made up from:                             <ul style="list-style-type: none"> <li>○ 2,800 dwellings on sites already allocated, permitted or under construction (Jan 2006 JHLAS);</li> <li>○ 3,400 dwellings on New Site Allocations (10 or more dwellings);</li> <li>○ 400 dwellings in a 'Windfall Allowance'; and</li> <li>○ 400 dwellings on Small Sites (9 or less dwellings).</li> </ul> </li> <li>▪ with all Demolitions to be net against this target.</li> </ul> <p>The LDP proposes the following Strategic Housing Sites, detailed in Figure 1. (of 100 or more dwellings): -</p> <ol style="list-style-type: none"> <li>1. Boral Edenhall &amp; Candlewick Sites, Blaenavon;</li> <li>2. The British, Talywain;</li> <li>3. Mamhilad New Village, Nr Pontypool;</li> <li>4. Trevethin Comprehensive School;</li> <li>5. Rear of Twmpath Road / Dog Pound, Tranch, Pontypool;</li> <li>6. Pontypool College;</li> <li>7 &amp; 8. Possibly County Hospital or Panteg Steelworks;</li> <li>9. South Sebastopol, Cwmbran;</li> <li>10. County Hall, Cwmbran;</li> <li>11. Cwmbran Town Centre</li> <li>12. Former Police College &amp; adjacent land, Cwmbran;</li> <li>13. Llanfrechfa Grange Hospital;</li> <li>14. Malthouse Lane, Llantarnam, Cwmbran; and</li> </ol> <p>The LDP Preferred Strategy is that over the period 2006-2021 the plan will identify 60ha of land for general employment purposes within the urban area.</p> <p>The LDP proposes the following Strategic Employment Sites:</p>	<p>take measures to reduce the need to travel, reducing reliance on the motor car.</p> <ul style="list-style-type: none"> <li>▪ Protecting formal leisure facilities and the various typologies of open space and ensure new provision from development sites, including the use of S106 contributions.</li> <li>▪ Requiring a minimum 10% reduction in CO2 emissions (to the BREEAM Good level) from all major new developments;</li> <li>▪ Requiring a financial contribution from all non BREEAM Excellent (40% reduction in CO2 emissions) developments to improve the carbon footprint of existing buildings;</li> <li>▪ Requiring development to be resource efficient;</li> <li>▪ Requiring development to consider small to medium renewable energy generation;</li> <li>▪ Ensuring that developments are designed to be resilient to the likely future effects of climate change; and</li> <li>▪ Maintaining habitat connectivity to allow wildlife to adapt to a changing climate.</li> </ul> <p><b>SAC Specific Issues</b></p> <ul style="list-style-type: none"> <li>▪ There are no European sites within the County Borough Boundaries.</li> </ul>



Local Development Plans	
Torfaen County Borough Council Local Development Plan Preferred Strategy 2006-2021 Consultation of Strategic Options and Preferred Strategy: <a href="http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/LocalDevelopmentPlan/LocalDevelopmentPlan.aspx">http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/LocalDevelopmentPlan/LocalDevelopmentPlan.aspx</a>	
1. Kays & Kears, Blaenavon; 2. The British, Pontypool; 3. Mamhilad, Pontypool; 4. Panteg Steelworks, (South), Pontypool; 5. Craig y Felin, Cwmbran; 6. Llantarnam, Cwmbran.	

Local Development Plans	
Rhondda Cynon Taff County Borough Council Local Development Plan Preparation & Deposit: <a href="http://www.rhondda-cynon-taf.gov.uk/stellent/groups/public/documents/hcst/content.hcst?lang=en&amp;textonly=false&amp;xNodeID=2015">http://www.rhondda-cynon-taf.gov.uk/stellent/groups/public/documents/hcst/content.hcst?lang=en&amp;textonly=false&amp;xNodeID=2015</a>	
Plan Type	Local Development Plan
Plan Owner/ Competent Authority	Rhondda Cynon Taf County Borough Council
Currency	Preferred Strategy January 2007
Region/Geographic Coverage	Rhondda Cynon Taf County Borough Council administrative boundaries
Sector	Planning
Related work SA/SEA HRA/AA	Preferred Strategy SA/SEA and Habitats Regulations Assessment Screening <a href="http://www.rhondda-cynon-taf.gov.uk/stellent/groups/public/documents/hcst/content.hcst?lang=en&amp;textonly=false&amp;xNodeID=2015">http://www.rhondda-cynon-taf.gov.uk/stellent/groups/public/documents/hcst/content.hcst?lang=en&amp;textonly=false&amp;xNodeID=2015</a>
Document Details	Potential impacts that could cause 'in-combination' effects

Local Development Plans	
<b>Rhondda Cynon Taff County Borough Council Local Development Plan Preparation &amp; Deposit:</b> <a href="http://www.rhondda-cynon-taf.gov.uk/stellent/groups/public/documents/hcst/content/hcst?lang=en&amp;textonly=false&amp;xNodeID=2015">http://www.rhondda-cynon-taf.gov.uk/stellent/groups/public/documents/hcst/content/hcst?lang=en&amp;textonly=false&amp;xNodeID=2015</a>	
<p>LDP Preferred Strategy adopts a hybrid approach which combines a growth scenario where settlement geography allows (i.e. where lateral growth not limited by valley locations) with development that meets the needs of local communities.</p> <p>The Strategy divides the County Borough into Northern and Southern Areas. For the Northern Area the emphasis is on building sustainable communities and halting the processes of depopulation and decline. In the Southern Area the focus is on sustainable growth within settlement boundaries, taking advantage of the cross regional road and rail connections to promote economic development and commerce of a national and international caliber.</p> <p>The Strategy identifies the need for 14,850 dwellings during the plan period.</p> <p>The overall supply of employment land has been established at 195 hectares but analysis shows that it is not all appropriate for identified need (smaller, flexible space meeting the needs of micro-businesses).</p> <p>The Preferred Strategy includes 8 proposed strategic sites of more than 20 hectares (5 in the Northern Area and 3 in the Southern area) for a range of mixed use developments.</p>	<p><b>Overarching Development Pressures</b></p> <ul style="list-style-type: none"> <li>■ Potential for increased traffic movements and air pollution as a result of growth in road traffic in the Northern Area where enhanced development is sought.</li> <li>■ The promotion of commercial development in the southern transport corridors may also lead to induced traffic flows across the region with associated rises in background and localised air pollution.</li> </ul> <p><b>SAC Specific Issues</b></p> <ul style="list-style-type: none"> <li>■ Blaen Cynon SAC and Cardiff Beech Woods SAC, both within the County Borough Boundary, lie adjacent to major transport routes (A465 and A470 respectively).</li> <li>■ Both sites are easily accessible and Cardiff Beech Woods in particular has known vulnerabilities to air pollution and recreational pressures.</li> </ul>

**Minerals and Waste Strategies**

<b>Minerals &amp; Waste</b>
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<b>Blaenau Gwent County Borough Council Waste Strategy 2004:</b> <a href="http://www.blaenau-gwent.gov.uk/documents/Documents_Education/waste_strategy.pdf">http://www.blaenau-gwent.gov.uk/documents/Documents_Education/waste_strategy.pdf</a>	
<b>Plan Type</b>	<b>Municipal Waste Strategy</b>
<b>Plan Owner/ Competent Authority</b>	<b>Blaenau Gwent County Borough Council</b>
<b>Currency</b>	<b>Published 2004</b>
<b>Region/Geographic Coverage</b>	<b>Blaenau Gwent County Borough Council administrative boundaries</b>
<b>Sector</b>	<b>Waste</b>
<b>Related work SA/SEA HRA/AA</b>	<b>N/A</b>
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p><b>Vision Statement</b> The Council's vision statement is "to provide economic, efficient and effective public services which seek to enhance the quality of life of the people of Blaenau Gwent".</p> <p><b>Objective</b> Blaenau Gwent undertakes to provide all waste management services in line with Best Available Technology, having evaluated each process for Best Practicable Environmental Option, Proximity Principle and Environmental Impact Assessment. Furthermore, any such technologies employed shall comply with the principle of value for money delivery of services and take into account the wishes of the authority's stakeholders.</p> <p><b>Future Options for Waste Management</b>  Diversion of wastes will play a key role in our future waste management activities under the Landfill Directive, Article 5. Blaenau Gwent will need to achieve diversion rates of biodegradable municipal wastes (BMW), as a percentage, based on total 1995 municipal waste figures.</p>	<p>Potential for increased transport and associated impacts/ pollution incidents. CCBC LDP contains policies that promote a reduction in the number of car journeys, provision of safe routes for walking and cycling and the requirement for new developments to incorporate energy saving and renewable energy technologies. In the long-term this will help to mitigate or off-set any increase in atmospheric pollution and will lead to gradual improvements in air quality.</p> <p>Specific potential in-combination impacts cannot be explored in absence of specific waste locations.</p>

<b>Minerals &amp; Waste</b>	
<b>Blaenau Gwent County Borough Council Waste Strategy 2004:</b> <a href="http://www.blaenau-gwent.gov.uk/documents/Documents_Education/waste_strategy.pdf">http://www.blaenau-gwent.gov.uk/documents/Documents_Education/waste_strategy.pdf</a>	
<p>This equates to a diversion from landfill of 2,606 tonnes (assuming BMW composition at 30%) in 2010. Simultaneously, they will need to achieve a 40% recycling/composting rate (with at least 15% composting) by 2009/10.</p> <p>The public consultation exercise carried out under the Technical Advice Note (TAN) Group, has identified the preferred option as Mechanical Biological Treatment (MBT) with more Recycling and Composting. This is, therefore, likely to be the option selected under partnership arrangements.</p>	

<b>Minerals &amp; Waste</b>	
<b>Caerphilly County Borough Council Municipal Waste Management Strategy &amp; Litter Plan 2004:</b> <a href="http://www.caerphilly.gov.uk/yourservices/environment/rubbish-waste-recycling/mwms.htm">http://www.caerphilly.gov.uk/yourservices/environment/rubbish-waste-recycling/mwms.htm</a>	
<b>Plan Type</b>	<b>Municipal Waste Strategy</b>
<b>Plan Owner/ Competent Authority</b>	<b>Caerphilly County Borough Council</b>
<b>Currency</b>	<b>Published 2004</b>
<b>Region/Geographic Coverage</b>	<b>Caerphilly County Borough Council administrative boundaries</b>
<b>Sector</b>	<b>Waste</b>
<b>Related work SA/SEA HRA/AA</b>	<b>N/A</b>
<b>Document Details</b>	<b>Potential impacts that could cause 'in-combination' effects</b>
<p>The Strategy describes the current waste situation within the authority, what targets and objectives the authority needs to achieve and how it proposes to achieve them.</p> <p>Strategic aims for the period 2004/05 to 2006/07</p> <ol style="list-style-type: none"> <li>1. Continually improve the services we provide in terms of efficiency, reliability and customer focus.</li> <li>2. Adhere to the waste hierarchy in our management of waste issues.</li> <li>3. Divert 25% BMW from landfill by 2010 and start to make preparations for the later Landfill Directive targets of 50% diversion by 2013 and 65% diversion by 2020.</li> <li>4. Recycle and compost a minimum of 15% MSW by 2003/04, 25% by 2006/07 and 40% by 2009/10.</li> <li>5. Improve awareness raising programmes to reach a greater proportion of the population of Caerphilly County Borough.</li> <li>6. Increase participation rates in the kerbside recycling scheme and boost capture rates.</li> </ol>	<p>Potential for increased transport and associated impacts/ pollution incidents. CCBC LDP contains policies that promote a reduction in the number of car journeys, provision of safe routes for walking and cycling and the requirement for new developments to incorporate energy saving and renewable energy technologies. In the long-term this will help to mitigate or off-set any increase in atmospheric pollution and will lead to gradual improvements in air quality.</p> <p>The strategic aims outlined in the Strategy will help to move waste up the hierarchy reducing the amount of waste sent to landfill.</p> <p>Specific potential in-combination impacts cannot be explored in absence of specific waste locations.</p>

Minerals & Waste	
Caerphilly County Borough Council Municipal Waste Management Strategy & Litter Plan 2004: <a href="http://www.caerphilly.gov.uk/yourservices/environment/rubbish-waste-recycling/mwms.htm">http://www.caerphilly.gov.uk/yourservices/environment/rubbish-waste-recycling/mwms.htm</a>	
<ul style="list-style-type: none"> <li>7. Reduce the amount of waste that CCBC generates and set up schemes for the recycling and composting of council waste.</li> <li>8. Make provision for the collection of special wastes at civic amenity sites.</li> <li>9. Work closely with partners in all sectors to attain sustainable waste management.</li> <li>10. Continue to consult and communicate with residents and other stakeholders on matters of service delivery.</li> </ul>	

Minerals & Waste	
Cardiff Council Local Development Municipal Waste Management Strategy 2005: <a href="http://www.cardiff.gov.uk/content.asp?nav=2870%2C4049%2C4265&amp;parent_directory_id=2865">http://www.cardiff.gov.uk/content.asp?nav=2870%2C4049%2C4265&amp;parent_directory_id=2865</a>	
Plan Type	Municipal Waste Strategy
Plan Owner/ Competent Authority	Cardiff Council
Currency	2005 - 2010
Region/Geographic Coverage	Cardiff Council administrative boundaries
Sector	Waste
Related work SA/SEA HRA/AA	N/A
Document Details	Potential impacts that could cause 'in-combination' effects
This strategy provides a detailed plan for managing Cardiff's municipal waste to 2010, although consideration is also given to the requirements to 2020. Changes in legislation, taxation and attitudes to waste, dictate that a regular review of detail will be necessary every 3 years, with the first review to be undertaken in 2007.	Potential for increased transport and associated impacts/ pollution incidents. CCBC LDP contains policies that promote a reduction in the number of car journeys, provision of safe routes for walking and cycling and the requirement for new developments to incorporate energy saving and renewable energy technologies. In the long-term this will help to mitigate or off-set any increase in atmospheric pollution and will lead to gradual

Minerals & Waste	
<b>Cardiff Council Local Development Municipal Waste Management Strategy 2005:</b> <a href="http://www.cardiff.gov.uk/content.asp?nav=2870%2C4049%2C4265&amp;parent_directory_id=2865">http://www.cardiff.gov.uk/content.asp?nav=2870%2C4049%2C4265&amp;parent_directory_id=2865</a>	
<p>The strategy for Cardiff is as follows:</p> <p>Expansion of recycling, composting and reuse schemes for municipal waste such that the Welsh Assembly Government targets for each of the target years of 2006/07 and 2009/10 are met. Recycling and composting levels will increase to 50% by the year 2013, with significant recovery of value from energy from waste. Continued landfill of final residues will be required. Energy from Waste can be a standalone dedicated process itself, or part of other residual treatment technologies such as Mechanical Biological Treatment leading to the production of a refuse derived fuel.</p> <p>Predicted Land Requirements and Timescales for Delivery of the Municipal Waste Management Infrastructure</p> <p>The Strategy provides an indication of the likely land requirements for the principal elements of waste management infrastructure that will be required to deliver this strategy for Cardiff. These should be seen as being indicative only at this stage since there will be a number of site specific design issues that influence the actual requirements for each element.</p> <p>Indicative Land Requirements for Waste Infrastructure Technology:</p> <ul style="list-style-type: none"> <li>▪ Replacement Landfill             <ul style="list-style-type: none"> <li>○ Approx. 25 hectares over a life of (say) 10 year</li> </ul> </li> </ul>	<p>improvements in air quality.</p> <p>Specific potential in-combination impacts cannot be explored in absence of specific waste locations.</p>

Minerals & Waste	
<b>Cardiff Council Local Development Municipal Waste Management Strategy 2005:</b> <a href="http://www.cardiff.gov.uk/content.asp?nav=2870%2C4049%2C4265&amp;parent_directory_id=2865">http://www.cardiff.gov.uk/content.asp?nav=2870%2C4049%2C4265&amp;parent_directory_id=2865</a>	
<ul style="list-style-type: none"> <li>▪ Mechanical Biological Treatment Plant               <ul style="list-style-type: none"> <li>○ 2ha</li> </ul> </li> <li>▪ Energy from Waste Plant               <ul style="list-style-type: none"> <li>○ 2ha</li> </ul> </li> <li>▪ Materials Reclamation Facility extension               <ul style="list-style-type: none"> <li>○ Sufficient land available at existing site at Lamby Way</li> </ul> </li> <li>▪ Household Waste Recycling Centre (2 No. required)               <ul style="list-style-type: none"> <li>○ 1 each site</li> </ul> </li> <li>▪ Compost processing, in-vessel (including maturation area)               <ul style="list-style-type: none"> <li>○ 2ha</li> </ul> </li> <li>▪ Additional compost processing, open windrow               <ul style="list-style-type: none"> <li>○ 2ha</li> </ul> </li> <li>▪ 'Bring' points (approximately 35 required)               <ul style="list-style-type: none"> <li>○ 0.15-0.25ha each site (nominal area only)</li> </ul> </li> </ul>	

Minerals & Waste	
<b>Rhondda Cynon Taff County Borough Council Municipal Waste Strategy 2007:</b> <a href="http://www.rhondda-cynon-taf.gov.uk/stellent/groups/public/documents/hcst/content.hcst?lang=en&amp;textonly=false&amp;xNodeID=877&amp;dDocName=008130">http://www.rhondda-cynon-taf.gov.uk/stellent/groups/public/documents/hcst/content.hcst?lang=en&amp;textonly=false&amp;xNodeID=877&amp;dDocName=008130</a>	
Plan Type	Municipal Waste Strategy
Plan Owner/ Competent Authority	Rhondda Cynon Taff County Borough Council
Currency	Awaiting review
Region/Geographic Coverage	Rhondda Cynon Taff County Borough Council administrative boundaries
Sector	Waste
Related work SA/SEA HRA/AA	
Document Details	Potential impacts that could cause 'in-combination' effects



<b>Minerals &amp; Waste</b>	
<b>Rhondda Cynon Taff County Borough Council Municipal Waste Strategy 2007: <a href="http://www.rhondda-cynon-taf.gov.uk/stellent/groups/public/documents/hcst/content.hcst?lang=en&amp;textonly=false&amp;xNodeID=877&amp;dDocName=008130">http://www.rhondda-cynon-taf.gov.uk/stellent/groups/public/documents/hcst/content.hcst?lang=en&amp;textonly=false&amp;xNodeID=877&amp;dDocName=008130</a></b>	
Waste Strategy currently under review – publication delayed until 2008.	<p>Potential for increased transport and associated impacts/ pollution incidents.</p> <p>Specific potential in-combination impacts cannot be explored in absence of specific waste locations.</p>

## Appendix 4 Habitat Regulations Assessment Screening

### Pre-screening of European Sites outside Caerphilly County Borough Council boundaries

<p><b>Blaen Cynon SAC</b></p>	<ul style="list-style-type: none"> <li>This SAC lies adjacent to a housing estate, approximately 1 km south of the village of Penderyn, at an altitude of 220-265 m. Blaen Cynon contains an extensive complex of damp pastures and heaths supporting the largest metapopulation of marsh fritillary <i>Euphydryas aurinia</i> on the southern edge of the Brecon Beacons National Park. The marsh fritillary butterfly <i>Euphydryas aurinia</i> is found in a range of habitats in which its larval food plant, devil's-bit scabious <i>Succisa pratensis</i>, occurs.</li> </ul>
<p><b>Pre-screening assessment</b></p>	<ul style="list-style-type: none"> <li>Blaen Cynon SAC is approximately 13.51km from the CCBC boundary and is vulnerable to the effects of grazing, the management of surrounding habitats and parasites to name a few. CCW management plans state that there are no known off-site factors, such as pollution, that are affecting the marsh fritillary to any significant extent, although there is still much industry in the locality. The statutory body considers that the overwhelming issues of grazing and scrub encroachment would typically obscure the potential impacts any off-site issues. The site level management regime (e.g. the control of grazing, tree planting, and the establishment of appropriate drainage) is the most significant factor in maintaining site integrity and improving site condition against the conservation objectives in the long term. <b>It is assessed that the taking into account distance and site specific factors the CCBC LDP will not have significant effects, either alone or in-combination on Blaen Cynon SAC.</b></li> </ul>
<p><b>Brecon Beacons SAC</b></p>	<ul style="list-style-type: none"> <li>This SAC is located to the south of the town of Brecon and the Old Red Sandstone cliffs and escarpment is typical of the upland scenery within the National Park. The site is comprised of 4 different units contained within Brecon Beacons SSSI. Pen y Fan is the highest peak in south Wales. The site is of particular interest for the arctic-alpine plants and plant communities growing on the sandstone rocks and ledges on its precipitous mostly north and east facing cliffs. The escarpments also support stands of dry heath vegetation.</li> </ul>
<p><b>Pre-screening assessment</b></p>	<ul style="list-style-type: none"> <li>The Brecon Beacons SAC is approximately 10km from the CCBC boundary and is vulnerable to the effects of grazing, air pollution and recreation. CCW site information (<b>Appendix 1</b>) suggests that critical loads are being exceeded at this site and that much of the pollution arises from diffuse sources. Development in and Caerphilly County Borough has the potential to increase air pollution (through a combination of development [emissions from building stock] and a growth in road traffic. Population</li> </ul>

	<p>expansion may also lead to increased recreational pressures in the areas around population centres. Commitments to sustainable transport and renewables in the CCBC LDP Deposit Draft will act to mitigate growth in emissions from housing, transport and commerce. Air quality in CCBC currently complies with all government standards<sup>17</sup> and is expected to improve, and levels of Nitrogen Dioxide across Wales are monitored as decreasing<sup>18</sup>.</p> <ul style="list-style-type: none"> <li>▪ The SAC is relatively inaccessible (mountain side including cliffs) and unlikely to be impacted by local level recreational activities that may arise from new developments in Caerphilly. A recent Welsh survey showed that 50% of people travel less than 3 miles for recreational purposes (An Outdoor Recreation Survey for Wales, Sep 2006). <b>It is assessed that the likely impacts arising in relation to site sensitivities (taking into account policy mitigation measures) will not be significant alone or in-combination on Brecon Beacons SAC.</b></li> </ul>
<p><b>Cardiff Beech Woods SAC</b></p>	<ul style="list-style-type: none"> <li>▪ Cardiff Beech Woods lies to the north east of Cardiff and is intersected by the A4054 and the A470. The site contains one of the largest concentrations of <i>Asperulo-Fagetum</i> beech forests in Wales, and represents the habitat close to the western limit of its past native range in both the UK and Europe. The woods show mosaics and transitions to other types, including more acidic beech woodland and oak <i>Quercus</i> and ash <i>Fraxinus excelsior</i> woodland.</li> </ul>
<p><b>Pre-screening assessment</b></p>	<ul style="list-style-type: none"> <li>▪ A small area of the Cardiff Beech Woods SAC lies adjacent to the CCBC boundary. The site then extends approximately 4.35km out to the west of the CCBC boundary. The site's identified vulnerabilities relate to the effects of atmospheric pollution, recreation, mineral extraction, commercial forestry and non-native species. In 2004 the condition of the site was assessed as unfavourable - unclassified (<i>Aperulo-Fagetum</i> beech forest) and recovering (Tilio-Acerion forest of slopes, screes and ravines). CCW's view, based on their site management plans is that the site is still recovering from the undesirable effects of past management. Although, most if not all aspects of the SAC component units are improving in condition, the status is still short of favourable.</li> <li>▪ Castell Coch Woodlands and Fforestganol a Chwm Nofydd component units experience the most recreational pressure, and are popular for walking, climbing and mountain biking. The Taff trail runs</li> </ul>

<sup>17</sup> Living Environment Partnership (2006) *Living Environment Evidence Base*. Available online: <http://www.caerphilly.gov.uk/pdf/communityPlanning/living-environment-evidence-base.pdf>

<sup>18</sup> Welsh Air Quality Forum (2006) *Trends - Air Quality Indicators*. Available online: <http://www.welshairquality.co.uk/trend.php?t=1>

through part of the Castell Coch Woodlands site and the historic building of Castell Coch attracts many visitors, which increases the access pressure on the woodlands. The road section is becoming increasingly popular for climbing, which could be potentially damaging to trees at the top of the crag. CCW state in the site's management plan that measures to address the recreational use of the woodlands should focus on maintaining the network of public footpaths and access routes. By restricting recreational use of the woodlands to certain areas and paths, natural woodland processes can occur undisturbed away from these areas of recreational use. Development proposed in the Southern Connections Corridor is focused in the centre and north/ north east of Caerphilly. Considering that there is an already high level of recreation on site and that CCW views that most if not all aspects of the component sites are heading in the right direction in terms of condition, it is unlikely that the development proposed in the LDP will have significant adverse effects on the site as a result of increased recreation. Alternative recreational facilities within and around Caerphilly are more readily accessible to the existing and proposed resident population.

- CCW indicates in the management plan for the site, that there is no evidence to date that atmospheric pollution has had an adverse impact on the features of the site. Although given the sites location in industrialised South Wales, together with the presence of nearby quarrying and associated activities, there is the potential for localised atmospheric pollution. Development in Caerphilly County Borough has the potential to increase air pollution in the region, however current data indicates that air quality in CCBC complies with all government standards<sup>19</sup> and is expected to improve. Levels of Nitrogen Dioxide across Wales are also monitored as decreasing<sup>20</sup>. CCBC's LDP also contains policies that promote a reduction in the number of car journeys, provision of safe routes for walking and cycling and the requirement for new developments to incorporate energy saving and renewable energy technologies. In the long-term this will help to mitigate or off-set any increase in atmospheric pollution as a result of the LDP and should lead to gradual improvements in air quality. **Taking these factors into account it is assessed that the LDP is highly unlikely to impact significantly at this site.**

<sup>19</sup> Living Environment Partnership (2006) *Living Environment Evidence Base*. Available online: <http://www.caerphilly.gov.uk/pdf/communityPlanning/living-environment-evidence-base.pdf>

<sup>20</sup> Welsh Air Quality Forum (2006) *Trends - Air Quality Indicators*. Available online: <http://www.welshairquality.co.uk/trend.php?t=1>

<p><b>Cwm Cadlan SAC</b></p>	<ul style="list-style-type: none"> <li>This SAC is situated approximately 1km north-east of the village of Penderyn and about 4km north of Hirwaun, near Aberdare. The site has the largest recorded example of ‘Molinia meadows’ (or fen-meadow) in Wales. The typical form of purple moor-grass-meadow thistle (<i>Molinia caerulea</i> - <i>Cirsium dissectum</i>) fen-meadow is extensively developed, and there are clearly displayed transitions to a range of associated habitats, including base-rich flush and neutral grassland. Cwm Cadlan SAC also supports an outstanding suite of flushed short-sedge mire communities on glacial drift overlying Carboniferous limestone within the valley of the Nant Cadlan on the southern fringe of Brecon Beacons National Park.</li> </ul>
<p><b>Pre-screening assessment</b></p>	<ul style="list-style-type: none"> <li>Cwm Cadlan SAC is approximately 11.1km from the CCBC boundary and its vulnerabilities relate to the effects of grazing, scrub encroachment, changes in the hydrological regime, eutrophication and atmospheric pollution. Development in Caerphilly County Borough has the potential to increase air pollution along the ‘heads of the valleys’ transport corridor and connecting main routes by stimulating growth in road traffic on the A465. Air pollution, including from nitrogen is one of a number of factors assessed as being relevant at this site. However, the key sources of air pollution for this SAC have been identified as local - specifically dust from a neighbouring quarry is a recognised issue. Based on existing advice relating the effects of traffic-related pollution on designated habitats<sup>21,22</sup>, it is assessed that air pollution impacts at a site are most significant if a road carrying a significant proportion of new traffic [related to the plan] runs within 200 meters of a European site. Beyond this distance air pollution impacts that may arise from traffic fall to background levels. Cwm Cadlan SAC is not situated within 200m of any major roads and the policies proposed in the CCBC LDP will help to mitigate or offset increases in air pollution through reducing the need to travel and promoting a wide range of sustainable transport choices.</li> <li>The site falls within the Taff and Ely Catchment and Caerphilly is situated within the Usk Catchment, therefore the LDP is unlikely to have any adverse effects on water quality at the site. Under the Habitats Regulations the Environment Agency have to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. If the assessment of a new application shows that it could have an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license. Effectively this means that the River Taff and Ely along with their tributaries must be managed using flow restrictions to ensure that there is an appropriate flow contribution to European sites that are reliant on water levels.</li> </ul>

<sup>21</sup> English Nature (16 May 2006) letter to Runneymede Borough Council, ‘Conservation (Natural Habitats &c.) Regulations 1994, Runneymede Borough Council Local Development Framework’.

<sup>22</sup> Levett-Therivel (2006) Appropriate Assessment of the Draft South East Plan. Final Report.

	<ul style="list-style-type: none"> <li>The pre-screening assessment has shown that site level management regime (e.g. the control of grazing, fencing to prevent intrusion, the establishment of appropriate drainage) at Cwm Cadlan SAC is the most significant factor in maintaining site integrity and improving site condition against the conservation objectives in the long-term. The information provided on sites by CCW (summarised in Appendix 1) does however, suggest that over time, once management regimes take effect, issues such as air pollution will become more significant in determining the long term health of designated habitats. This is potentially an issue for monitoring regimes - including those established through the SA/SEA of the LDP for Caerphilly and neighbouring authorities. <b>On the basis of the factors considered it is assessed that the CCBC LDP is unlikely to have a significant effect at this SAC either alone or in combination with other plans.</b></li> </ul>
Cwm Clydach Woodlands SAC	<ul style="list-style-type: none"> <li>This SAC is situated on the southern side of the River Clydach valley, approximately 2km east, north east of Brynmawr and is in close proximity to the A465 Heads of the Valley Road. The site is of special interest for its stands of broadleaved woodland dominated by beech, intergrading with more open habitats, which together support a number of rare and scarce vascular plants including whitebeams <i>Sorbus spp.</i> and soft-leaved sedge <i>Carex montana</i>. There are important woodland and grassland fungi assemblages with rare species such as <i>Squamanita paradoxa</i>.</li> </ul>
Pre-screening assessment	<ul style="list-style-type: none"> <li>Cwm Clydach Woodlands SAC is approximately 8km from the CCBC boundary and is vulnerable to the effects of inappropriate woodland management, grazing, dumping and invasive alien plant species. CCW's management plans state that airborne acid and nutrient deposition are not a significant threat here as most of the woodland soils are well-buffered and nutrient-rich. <b>Given the favourable condition (Appendix 1) of the site and the distance from CCBC, it is assessed that that the LDP will not have significant effects alone or in-combination with other plans at this site.</b></li> </ul>
Llangorse Lake SAC	<ul style="list-style-type: none"> <li>The Langorse SAC is situated towards the head of the Afon Llynfi between the hills of Mynydd Llangorse and Allt yr Esgair. Llangorse Lake is a large shallow lake with a mean depth 2-3 metres lying in a natural depression of the Old Red Sandstone drift formed during the last glacial period. It is the largest natural lowland water in south Wales. It is one of the few natural eutrophic lakes in Britain and is of European importance in this context.</li> </ul>
Pre-screening assessment	<ul style="list-style-type: none"> <li>Llangorse Lake SAC is approximately 14.32 km from the CCBC boundary and is vulnerable to the effects, eutrophication, sediment run-off, recreation, non-native invasive species and management of surrounding habitats. The majority of Caerphilly County Borough's water supply comes from the River</li> </ul>

	<p>Taff and the Llandegfedd Reservoir (water abstracted from the lower River Usk)<sup>23</sup>. Therefore development proposed in the CCBC LDP is unlikely to have a significant affect on the water level of the lake. Given the distance from the site and the fact that Caerphilly County Borough is situated within a different River Catchment the CCBC LDP is unlikely to have significant affects on water quality at the site. CCW management plans state that much of the current pollution at this site is in the form of nutrients from the air and the many small watercourses entering the lake. Development in Caerphilly County Borough has the potential to increase air pollution in the region, however current data indicates that air quality in CCBC complies with all government standards<sup>24</sup> and is expected to improve. Levels of Nitrogen Dioxide across Wales are also monitored as decreasing<sup>25</sup>. <b>Taking these factors into account and significant topographical separation it is assessed that the LDP is highly unlikely to impact significantly at this site.</b></p>
<p><b>Severn Estuary SPA/Ramsar/c SAC</b></p>	<ul style="list-style-type: none"> <li>▪ The Severn Estuary is the largest coastal plain estuary in the UK with extensive mudflats and sandflats, rocky shore platforms, shingle and islands. Saltmarsh fringes the coast, backed by grazing marsh with freshwater and occasional brackish ditches. The estuary's classic funnel shape, unique in the UK, is a factor causing the Severn to have the second highest tidal range in the world (after the Bay of Fundy in Canada) at more than 12 meters. This tidal regime results in plant and animal communities typical of the extreme physical conditions of strong flows, mobile sediments, changing salinity, high turbidity and heavy scouring. The resultant low diversity invertebrate communities, that frequently include populations of ragworms, lugworms and other invertebrates in high densities, form an important food source for passage and wintering birds. The site is important in the spring and autumn migration periods for waders moving along the west coast of Europe, as well as in winter for large numbers of waterbirds including swans, geese, ducks and waders. These bird populations are regarded as internationally important.</li> </ul>
<p><b>Pre-screening assessment</b></p>	<ul style="list-style-type: none"> <li>▪ The Severn Estuary SPA/ Ramsar/ cSAC is approximately 5.7km to the South of the CCBC boundary and is vulnerable to the effects of disturbance, loss of habitat, water pollution, coastal squeeze and changes to the hydrodynamic and sedimentary regime. Information provided by the JNCC indicates that waterfowl are vulnerable to the accumulation of toxins through the food chain or through direct contact with toxic substances when roosting or feeding. At the current time there is</li> </ul>

<sup>23</sup> Environment Agency (2006) *The Usk Catchment Abstraction Management Strategy 2006*. Available online: <http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315618/?version=1&lang=e>

<sup>24</sup> Living Environment Partnership (2006) *Living Environment Evidence Base*. Available online: <http://www.caerphilly.gov.uk/pdf/communityPlanning/living-environment-evidence-base.pdf>

<sup>25</sup> Welsh Air Quality Forum (2006) *Trends - Air Quality Indicators*. Available online: <http://www.welshairquality.co.uk/trend.php?t=1>

no evidence to show that this is the case at this site, but the estuary is vulnerable to oil spills and JNCC states that there is a continuous discharge of toxins into the estuary, some of which bind to the sediments, although no specific sources or locations are identified. NE and CCW identify this is an area which requires further assessment. They also identify Bewick's swans as currently moderately vulnerable to toxic contamination. In terms of water quality issues the Severn Estuary is under greatest threat from point source pollution within the area of designation.

- In 2004 100% of rivers in Caerphilly County Borough which flow into the Estuary were fair or good in terms of chemical quality and 100% were fair / good in terms of biological quality<sup>26</sup>. Levels of nitrates and phosphates were consistently good over 2002 to 2004. Biology also improved considerably from 47.8% rated good in 2002 to 75.4% in 2004. Chemical rating has shown the greatest improvement, with 30% of rivers rated good in 2002 changing to 100% rated good in 2004. The EA set very strict quality standards for the final effluent that can be returned to rivers. Welsh water achieved 99.97% compliance of wastewater treatment works in 2006<sup>27</sup>. Given the favourable condition of source rivers, regulatory compliance measures, and the current favourable condition assessment for the Severn Estuary SAC component SSSIs, it is unlikely that development resulting from the CCBC LDP will have a significant effects on the Severn Estuary SPA/ Ramsar/ cSAC in relation to water quality.
- The majority of Caerphilly County Borough's water supply comes from the Reservoirs in the Brecon Beacons (Llwynon, Beacons and Cantref within the Watford area) and from Pontiscill (Ystrad Mynach, Llanbradach, Bedwas, Mornington Meadows) with a very small proportion sourced (around 1%) from the Llandegfedd Reservoir (water abstracted from the lower River Usk)<sup>28</sup>. Under the Habitats Regulations the Environment Agency have to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. If the assessment of a new application shows that it could have

<sup>26</sup> Living Environment Partnership (2006) *Living Environment Evidence Base*. Available online: <http://www.caerphilly.gov.uk/pdf/communityPlanning/living-environment-evidence-base.pdf>

<sup>27</sup> Welsh Water (2007) *Annual Report of the Quality and Environment Committee*. Available online: <http://www.dwrcymru.com/English/library/Reports/companyreports/dwrcymru/Annual%20Reports/2007/OECReport2007.pdf>

<sup>28</sup> Environment Agency (2006) *The Usk Catchment Abstraction Management Strategy 2006*. Available online: <http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315618/?version=1&lang=e>

<sup>29</sup> Welsh Water (2007) *Annual Report of the Quality and Environment Committee*. Available online: <http://www.dwrcymru.com/English/library/Reports/companyreports/dwrcymru/Annual%20Reports/2007/OECReport2007.pdf>



	<p>an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license. Effectively this means that all rivers and their tributaries that flow into the Severn Estuary must be managed using flow restrictions to ensure an appropriate flow contribution to the Severn Estuary. This ensures that water levels in the River Severn and the Estuary do not fall below critical levels.</p> <ul style="list-style-type: none"> <li>CCBC has made provision for the development of 9,750 new dwellings in the County Borough between 2006 and 2021. Policies contained within the CCBC LDP will also help to mitigate or offset increases in abstraction through measures such as ensuring high levels of sustainable design and construction, which require high levels of water efficiency. Welsh Water (WW) is the main supplier of water in the Caerphilly County Borough area. WW state that although rivers in Wales are in general less sensitive to low flow conditions than other parts of the UK, water still needs to be used efficiently. In 2006-07 WW reduced leakage to 209ML/d (2005-06: 224 ML/d), which is the largest improvement in reduced leakage in the sector<sup>29</sup>. There is a target set to reduce leakage to 195ML/d by 2010, which will help to mitigate or off-set the potential increase in water abstractions as a result of development proposed in the CCBC LDP. <b>Taking this into account along with the strict regulations surrounding new licenses for abstraction and the subsequent HRA carried out alongside each existing and new license, it is assessed that changes in future abstraction levels that result from the implementation of the CCBC will not have significant effects, either alone or in-combination on the integrity of the Severn Estuary SPA/ Ramsar/ cSAC.</b></li> </ul>
<p><b>The River Usk SAC</b></p>	<ul style="list-style-type: none"> <li>The River Usk rises in the Black Mountain range in the west of the Brecon Beacons National Park and flows east and then south, to enter the Severn Estuary at Newport. The overall form of the catchment is long and narrow, with short, generally steep tributaries flowing north from the Black Mountain, Fforest Fawr and Brecon Beacons, and south from Mynydd Epynt and the Black Mountains. The ecological structure and functions of the site are dependent on hydrological and geomorphological processes (often referred to as hydromorphological processes), as well as the quality of riparian habitats and connectivity of habitats. Animals that move around and sometimes leave the site, such as migratory fish and otters, may also be affected by factors operating outside the site. The River Usk is also important for its population of sea lamprey <i>Petromyzon marinus</i>. The site also supports a healthy population of brook lamprey <i>Lampetra planeri</i> and river lamprey <i>Lampetra fluviatilis</i> and is considered to provide exceptionally good quality habitat likely to ensure the continued survival of the species in this part of the UK. The site supports a range of Annex II fish species, which includes twaite shad <i>Alosa fallax</i>, salmon <i>Salmo salar</i> and bullhead <i>Cottus gobio</i>. The River Usk is also an important site for otters <i>Lutra lutra</i> in Wales.</li> </ul>

<b>Pre-screening assessment</b>	<ul style="list-style-type: none"> <li data-bbox="584 231 1908 686"> <p>■ The River Usk SAC is approximately 5km from the CCBC boundary and is vulnerable to the effects of water abstraction, eutrophication, diffuse pollution and barriers to migration. Development proposed in the CCBC LDP has the potential to increase abstraction levels, water pollution and an increase in airborne pollutants. The majority of Caerphilly County Borough's water supply comes from the Reservoirs in the Brecon Beacons (Llwynon, Beacons and Cantref within the Watford area) and from Pontiscill (Ystrad Mynach, Llanbradach, Bedwas, Mornington Meadows) with a very small proportion sourced (around 1%) from the Llandegfedd Reservoir (water abstracted from the lower River Usk. Under the Habitats Regulations the Environment Agency have to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. If the assessment of a new application shows that it could have an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license. Effectively this means that the River Usk and tributaries is managed using flow restrictions to ensure that there is an even level of flow. This ensures that water levels in the River Usk do not fall below critical levels.</p> </li> <li data-bbox="584 686 1908 1197"> <p>■ The River Usk CAMS (2007)<sup>30</sup> states that the biological quality of the Usk catchment is classified as 'Very Good' (43.4 %) and 'Good' (52.2 %), with the remaining 4.4 % classified as 'Fairly Good'. The chemical quality of the catchment is mainly 'Very Good' with 83.2 % (242.2 km) attaining a grade A, which is defined as a natural river ecosystem that is suitable for all abstractions; 16.1 % (46.8 km) is classed as 'Good', a river ecosystem that is at or close to natural and is suitable for all abstractions; and the remaining 0.7 % (2 km) is classed as 'Fairly Good'. Caerphilly County Borough's water supply comes from the River Taff and the Llandegfedd Reservoir (water abstracted from the lower River Usk). When water from the Usk is supplied to areas outside the catchment, such as Caerphilly County Borough, the water returned as treated sewage effluent is returned outside the Usk catchment<sup>31</sup>. This effectively means that Caerphilly County Borough's treated sewage effluent is not returned to the River Usk, and will not impact the water biological and chemical quality of this SAC. Abstraction for the CCBC population does [in conjunction with other abstractions] have the potential to lower the water table which can lead to eutrophication of the river, however, this is unlikely to have significant effects due to the strict flow restrictions set by the EA.</p> </li> </ul>
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<sup>30</sup> Environment Agency (2007) *The Usk Catchment Abstraction Management Strategy*. Available from: <http://publications.environment-agency.gov.uk/pdf/GEWA0307BLTO-e-e.pdf?lang=e>

<sup>31</sup> Environment Agency Wales. Local Environment Agency Plan: Rural Usk Area – Environmental Overview. Available online: <http://www.environment-agency.gov.uk/commondata/acrobat/uskov.pdf>

	<ul style="list-style-type: none"> <li>Given the distance of the SAC from the Caerphilly County Borough plan area and the availability of alternative sites for water based recreation it is unlikely that the CCBC LDP will result in a significant increase in recreation. <b>Taking the full range of issues that consider likely impacts against know SAC sensitivities and conservation objectives it is assessed that the CCBC LDP when implemented is unlikely to have significant effects on this SAC either alone or in combination with neighbouring LDPs.</b></li> </ul>
<p><b>Usk Bat Sites SAC</b></p>	<ul style="list-style-type: none"> <li>The Usk Bat Sites encompasses a series of lesser horseshoe bat roosts, upland habitats, woodlands and cave systems located around the valley of the River Usk near to Abergavenny.</li> </ul>
<p><b>Pre-screening assessment</b></p>	<ul style="list-style-type: none"> <li>The Usk Bat Sites SAC is approximately 6.75km from the CCBC boundary and the site’s identified vulnerabilities relate to the effects of disturbance, temperature change, habitat fragmentation and the deterioration of buildings used to roost. The Species Action Plan (part of the UK Biodiversity Action Plan) for the Lesser Horseshoe bat states that females forage within 2-3 km of the maternity roost<sup>32</sup>. Given that the site is 6.75km from CCBC’s boundary it is therefore highly unlikely that the development proposed in the LDP will result in significant adverse effects on the foraging area of the Lesser Horseshoe bat.</li> <li>CCW management plans identify that Lesser Horseshoe bats are very sensitive to disturbance, such as light and noise pollution and even the presence of a single person in close proximity can cause problems. A potential increase in recreation levels at the site could therefore have significant adverse affects. Taking into account the distance of CCBC’s population centres from the site and typical recreational patterns it is unlikely that LDP development will increase recreational pressures at this distance. <b>It is assessed that the LDP will not result in significant effects at this site (either alone or in combination with neighbouring LDPs).</b></li> </ul>

<sup>32</sup> UK BAP: Species Action Plan - Lesser Horseshoe Bat (*Rhinolophus hipposideros*). Available online: <http://www.ukbap.org.uk/UKPlans.aspx?ID=551>

**Screening Assessment of European Sites within Caerphilly County Borough Council boundaries**

Habitat Regulations Assessment Screening Table: Core Strategies					
Site	<b>ABERBARGOED GRASSLANDS</b> Unitary Authority Caerphilly Area (ha): 39.78 Site characterisation including conservation objectives detailed in Appendix 1.				
Local Development Plan Policies	Potential Effects on SAC	Risk of Likely Significant Effect (LSE)?	Potential Impacts – other Plans and Programmes (Appendix 3)	Risk from ‘In Combination’ Effects?	AA Required
<b>Development Strategy: Heads of the Valley Regeneration Area SP1:</b>	The Heads of the Valleys area includes the County Borough’s one SAC (Aberbargoed Grasslands) and potential impacts arising from developments in the area include: urbanisation and its associated effects (e.g. fly tipping, dog fouling, cat predation), recreational impacts, atmospheric pollution, water abstraction, pollution and noise pollution as an indirect effect.	Possible significant effects	<b>Transport Plans:</b> Potential for cumulative contributions to atmospheric emission from road developments - major road schemes located to the north (A465, Heads of the Valleys approx located to the north 7miles, due to start 2010). Potential for strong mitigation	Uncertain.  Potential for cumulative impacts from regional level transport schemes (air quality/	Yes

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Local Development Plan Policies	Potential Effects on SAC	Risk of Likely Significant Effect (LSE)?	Potential Impacts – other Plans and Programmes (Appendix 3)	Risk from 'In Combination' Effects?	AA Required
<b>Development Strategy – Development in the Northern Connections Corridor SP2</b>	Development at Greenfield sites has the potential to result in indirect effects at European sites where connectivity between habitats and related greenspace supports the overall integrity of the site. This is most relevant where the greenspace/ Greenfield sites are in close proximity to the designated habitats. The protection afforded to natural heritage through this policy provides a mitigation measure.	Possible significant effects	measure arising from Regional Transport Plan (promotion of sustainable travel options).  <b>Minerals and Waste:</b> Strong protection for N2k sites in regional waste and minerals strategies, cross-boundary impacts unlikely given policy safeguards. <b>Local Development Plans</b> Surrounding LDP HRAs	induced traffic loadings), although policy level mitigation strong.  Air pollution also relevant	

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Local Development Plan Policies	Potential Effects on SAC	Risk of Likely Significant Effect (LSE)?	Potential Impacts – other Plans and Programmes (Appendix 3)	Risk from ‘In Combination’ Effects?	AA Required
<b>Settlement Strategy SP4</b>	Effects will be dependant on the implementation of lower level policies. The potential for impacts are most likely where settlements are proximal to SAC sites (Bargoed – Aberbargoed Grasslands SAC)	Possible significant effects	(Cardiff, Torfaen) note atmospheric pollution as key potential ‘in-combination’ issue. Potential for cumulative effects from development (traffic growth – increased emissions/ acid deposition), topographical separation and travel patterns/ plans provide potential mitigation. Further assessment at AA phase.  Merthyr LDP HRA notes that no significant effect at current time but air pollution potential issue in long term when the effect of site level management actions at SAC have fulfilled their role.	cumulative impact from general development growth in neighbouring authorities (as driven by strategic level plans).  In-combination issues potentially more relevant where arising from local level/ project	

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<b>Local Development Plan Policies</b>	<b>Potential Effects on SAC</b>	<b>Risk of Likely Significant Effect (LSE)?</b>	<b>Potential Impacts – other Plans and Programmes (Appendix 3)</b>	<b>Risk from ‘In Combination’ Effects?</b>	<b>AA Required</b>
<b>Total Housing Requirements SP16</b>	Potential for impacts if housing location near to European site (potential urbanisation impacts) or if resource requirements (e.g. water) place indirect demands on European sites.	Possible significant effects	<b>Strategy for the Heads of Valleys</b> – regeneration aspirations reflected in LDP. Potential effects identified through screening LDP	scale activities.	

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Local Development Plan Policies	Potential Effects on SAC	Risk of Likely Significant Effect (LSE)?	Potential Impacts – other Plans and Programmes (Appendix 3)	Risk from 'In Combination' Effects?	AA Required
<b>Allocated Housing Sites</b> <b>HG 1.16</b> Bedwelty Road Aberbargoed 7.34 180 <b>HG 1.17</b> Land adjacent to Gelynos Avenue + Argoed 0.72 13 <b>HG 1.18</b> Aberbargoed and District Hospital Aberbargoed 0.56 20 <b>HG 1.19</b> Aberbargoed Plateau Aberbargoed 11.80 245 <b>HG 1.20</b> YGG Cwm Rhymni + Bargoed 0.62 28 <b>HG 1.21</b> Gilfach Fargod (Phase 2) Gilfach 1.50 53 <b>HG 1.22</b> Bedwelty Comprehensive School Aberbargoed 1.88 74	Range of potential impacts associated with urbanisation and development of housing: <ul style="list-style-type: none"> <li>▪ Increased recreational pressures (including dog walking)</li> <li>▪ Potential changes to water quality/ runoff/ point source pollution</li> <li>▪ Predation impacts from domestic pets where relevant</li> <li>▪ Increased likelihood of vandalism (burning/ litter/ pollution incidents)</li> <li>▪ Increased air pollution (growth in localised traffic emissions and emissions from domestic sources)</li> <li>▪ Introduction of invasive species</li> <li>▪ Loss of green 'buffer' space around habitats</li> <li>▪ Direct impacts from trampling/ habitat removal</li> </ul>	Yes			



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<b>Local Development Plan Policies</b>	<b>Potential Effects on SAC</b>	<b>Risk of Likely Significant Effect (LSE)?</b>	<b>Potential Impacts – other Plans and Programmes (Appendix 3)</b>	<b>Risk from ‘In Combination’ Effects?</b>	<b>AA Required</b>
<b>Community Facilities</b> CF 1.6 Hangar 81, Aberbargoed – <i>New youth centre</i> CF 1.7 Adjacent to Ysgol Bro Sannan, Aberbargoed – <i>School extension</i> CF 1.8 Aberbargoed Plateau, Aberbargoed – <i>Fire station</i>	Potential for increased recreational impacts and associated pressures outlined above.	Possible significant effects			
<b>Formal Leisure Facilities</b> LE 4.4 Former Bedwellty Comprehensive School, Aberbargoed	Potential for increased recreational impacts and associated pressures outlined above.	Possible significant effects			

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Local Development Plan Policies	Potential Effects on SAC	Risk of Likely Significant Effect (LSE)?	Potential Impacts – other Plans and Programmes (Appendix 3)	Risk from ‘In Combination’ Effects?	AA Required
<b>New Roads to Facilitate Development</b> <b>TR 7</b> The following highway scheme is identified to facilitate new development: TR 7.1 Aberbargoed to Bedwellty Relief Road	Potential for increases in air/ water pollution (increased emissions, runoff), changes to water quality.	Possible significant effects			
<b>Regeneration Led Highway Improvements</b> <b>TR 8</b> The following highway scheme is identified to facilitate the regeneration of the Heads of the Valleys Area TR 8.1 A469 Bargoed and A4049 Aberbargoed to Rhymney	Potential for increases in air/ water pollution (increased emissions, runoff), changes to water quality.	Possible significant effects			