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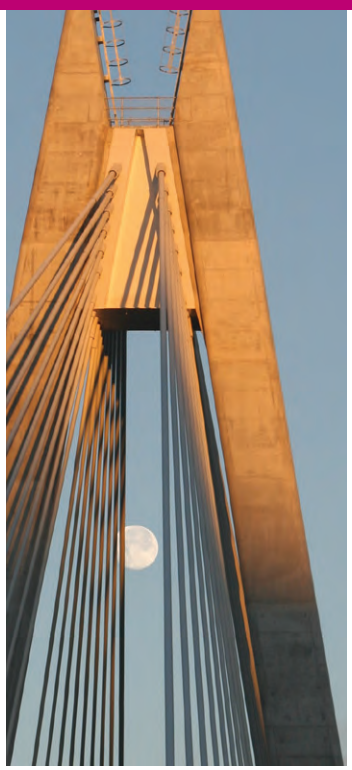
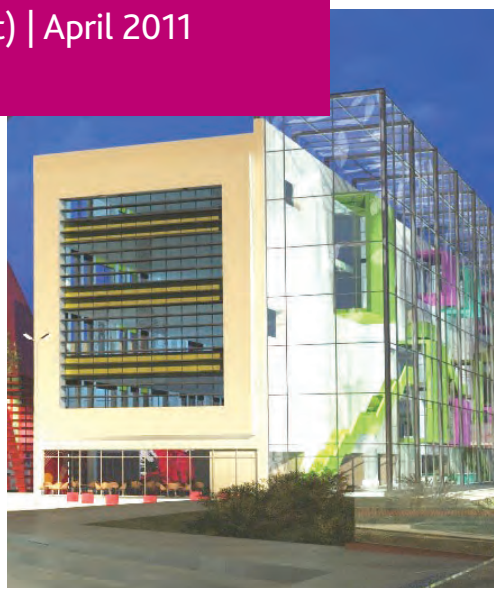
Blaenau Gwent County Borough Council Deposit Local Development Plan

Habitats Regulations Assessments (Screening Report) | April 2011





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CAPITA SYMONDS

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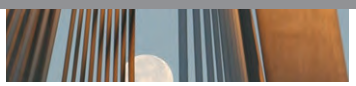
Deposit Local Development Plan
Habitats Regulations Assessment (Screening Report)



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01	27/04/2011	Previously issued to the client as a draft in Jan 2010. The client then consulted with CCW and EAW. This version of the HRA report (April 2011) incorporates the comments from CCW and changes requested by the client	Seymour D'Oyley	Darren Wright

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1. Executive Summary

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). This report details the HRA Screening for Blaenau Gwent County Borough Council (BGCBC) Deposit Local Development Plan (LDP). It sets out the methods and findings and the conclusions of the Screening Assessment.

The Screening Report identified the potential for the Deposit Local Development Plan to have a negative impact on 4 European sites identified within close proximity to Blaenau Gwent namely, Cwm Clydach Woodlands, Usk Bat Site, Aberbargoed Grasslands and the Sugar Loaf Woodlands. A fifth European site – the River Usk, was included because of the precautionary principle applied in this HRA (see further details in Section 6.4 of the HRA Appropriate Assessment).

The following 11 strategic policies from the Deposit LDP are recommended for Appropriate Assessment:

- SP1 Northern Strategy Area – Sustainable Growth and Regeneration
- SP2 Southern Strategy Area – Regeneration
- SP3 The Retail Hierarchy and Vitality and Viability of the Town Centres
- SP4 Delivering Quality Housing
- SP5 Spatial Distribution of Housing Sites
- SP6 Ensuring Accessibility
- SP7 Climate Change
- SP8 Sustainable Economic Growth
- SP11 Protection and Enhancement of the Built Environment
- SP12 Securing an Adequate Supply of Minerals
- SP13 Delivering Sustainable Waste Management

The conservation authority, Countryside Council for Wales (CCW) was consulted under Regulation 48(3) during the HRA screening assessment and Capita Symonds has paid regard to their comments.

In summary, CCW accepted the proposal for BGCBC to follow, where necessary, the HRA methodology developed by the consultants – Enfusion Environmental Planning and Management for the screening assessment and appropriate assessment stages of the Deposit LDP.

CCW also commented on the screening criteria which BGCBC initially proposed to apply to the Deposit Local Development Plan's policies.

Based on the information gathered for the screening process and considering the Habitats Regulations requirements for a precautionary approach, it is determined that further Appropriate Assessment work is required for:

- Cwm Clydach Woodlands;
- Usk Bat Site;
- Aberbargoed Grasslands;
- Sugar Loaf Woodlands;
- The River Usk

The AA will require more detailed information-gathering to assess, and where possible quantify, the potential impacts identified and determine the most effective mechanism for avoiding or mitigating those effects.

2. Introduction

Blaenau Gwent County Borough Council is currently developing a deposit Local Development Plan and is undertaking Habitats Regulations Assessment in line with the requirements of the Conservation (Natural Habitats &c) (Amendment) Regulations 2007.

This HRA screening report addresses the likely significant effects on designated European Sites of implementing the policies and proposals of the deposit Local Development Plan (LDP).

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 the Screening Phase of the HRA; it outlines the screening tasks and the key findings emerging from the assessment.

2.1 Requirement for Habitats Regulations Assessment

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'].

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.[1] 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) are included within HRA/AA and that candidate SACs and proposed SPAs are treated as 'designated' sites in the context of HRA.

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[2] of that site. Where significant negative effects are identified, alternative options or mitigation measures should be examined

[1] 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.

[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).

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.

2.2 GUIDANCE FOR HABITATS REGULATIONS ASSESSMENT/APPROPRIATE ASSESSMENT

Draft guidance for HRA 'The Assessment of Development Plans in Wales under the Provisions of the Habitats Regulations', has been produced by WAG, (David Tyldesley and Associates, October 2006). A partnership of consultants[3] has also prepared guidance (Appropriate Assessment of Plans, August 2007) to assist planning bodies in complying with the Habitats Directive.

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

Table 1

Habitats Regulations Assessment: Key Stages

Stage 1	
Screening for likely significant effect	• 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 • Examine conservation objectives of the interest feature(s)(where available) • Review plan policies and proposals and consider potential effects on European sites (magnitude, duration, location, extent) • Examine other plans and programmes that could contribute to 'in combination' effects
	• *If no effects likely – report no significant effect (taking advice from CCW as necessary).* • *If effects are judged likely or uncertainty exists – the precautionary principle applies proceed to* ***stage 2***

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

Stage 2	
Appropriate Assessment	• Complete additional scoping work including the collation of further information on sites as necessary to evaluate impact in light of conservation objectives • Agree scope and method of AA with CCW • Consider how plan 'in combination' with other plans and programmes will interact when implemented (the Appropriate Assessment) • Consider how effect on integrity of site could be avoided by changes to plan and the consideration of alternatives • Develop mitigation measures (including timescale and mechanisms) • Report outcomes of AA including mitigation measures, consult with CCW and wider [public] stakeholders as necessary • If plan will not significantly effect European site proceed without further reference to Habitats Regs
	• *If effects or uncertainty remain following the consideration of alternatives and development of mitigations proceed to* ***stage 3***
Stage 3	
Procedures where significant effect on integrity of international site remains	• Consider alternative solutions, delete from plan or modify • Consider if priority species/ habitats affected • Identify 'imperative reasons of overriding public interest' (IROPI) economic, social, environmental, human health, public safety • Notify Assembly Government • Develop and secure compensatory measures

2.3 CONSULTATION

The Habitats Regulations require the plan making/competent authority to consult the appropriate nature conservation statutory body [Countryside Council for Wales (CCW)]. Consultation on the approach to this HRA screening, including advice on which European sites should be considered within the area of search, has been undertaken with CCW as required.

The Habitats Regulations leave consultation with other bodies and the public to the discretion of the plan making authority. The WAG guidance notes that it is good practice to make information on HRA available to the public at each formal development plan consultation stage.

2.4 PURPOSE AND STRUCTURE OF REPORT

This report documents the process and the findings from the screening stage of the HRA for Blaenau Gwent Deposit Local Development Plan.

Following this introductory section the document is organized into a further three sections:

- **Section 2** –outlines the method used for the Screening process and includes reference to the key information sources used.

- **Section 3** – outlines the process and summary findings of the Screening Process and the assessment

- **Section 4** – outlines the conclusions, including the consultation commentary and how the plan should proceed with reference to the Habitats Regulations.

3. Method

3.1 SCREENING

In accordance with the official Welsh guidance and current practice, conducting the screening stage of the HRA for Blaenau Gwent Deposit Local Development Plan (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.

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 mitigation measures developed 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 recognize that some decisions on avoidance and mitigation can only be made when site level detail becomes available.

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

Table 2

HRA Screening Stage 1: Key Tasks

Task 1 **Identification of Natura 2000 sites & characterisation**	• Identification of European sites both within the plan/proposal boundaries and in an area of search extending to 15km [as recommended by extant guidance] around the plan/proposal area. This includes considering hydrological connectivities and the catchment of watercourses relating to identified designations. • Information was obtained for each European site, based on publicly available information and consultation with Countryside Council for Wales where appropriate.[4] • This included information relating to the sites' qualifying features; conservation objectives; vulnerabilities/ sensitivities, current conditions, trends & geographical boundaries.

[4] Key Information Sources: Joint Nature Conservation Committee (JNCC) web resource 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/

Task 2 **Plan review and identification of likely impacts**	• Screening of the plan/proposal and the identification of likely impacts (including a review of the plan/proposal's aims, objectives, strategic policies, including spatial implications where identified to determine likely impacts).
Task 3 **Consideration of other plans and programmes**	• Consideration, where appropriate, of other plans and programmes that may have in-combination effects with the plan/proposal.
Task 4 **Screening Assessment**	• Assessment of the potential of identified impacts to affect the designated interest features of European sites • Summary of screening outcomes and recommendations.

4. Screening

4.1 Task 1: Identification of European Sites and Characterisation of Sensitivity of the Site Area

Blaenau Gwent is an area of contrasting landscapes dominated by rugged mountains looming peacefully over the three valleys and their respective communities. The steeply sloping valley sides with their high ridges and moorland vegetation define the character of the area.

There are two sites of Special Scientific Interest (SSSI) within the Planning Authority boundary:

- Cwm Merddog Woodlands / coed Ty'n y Gelli
- Brynmawr Sections (geological site)

There are no National Nature Reserves (NNR) within the Blaenau Gwent Planning Authority boundary.

Blaenau Gwent has one Local nature Reserve (LNR) – the Silent valley LNR, which includes Cwm Merddog / Coed Ty'n y and covers a total of 51.62 ha. The parts of the LNR that include the SSSI have been designated as such as a result of the presence of Ancient Semi-Natural Woodland.

A number of candidate LNRs have been proposed for the County borough area, these are: Parc Bryn Bach (Tredegar); Sirhowy Woodlands (Tredegar/EbbwVale); Garden City (Ebbw Vale); Beaufort Hills (Beaufort); Parc Nant y Waun (Brynmawr); Trevor Rowson Heritage site (Nantyglo); Rosheyworth Community Woodlands (Abertillery); Cwmcelyn Pond (Blaina); Cwmtillery Lakes (Abertillery); and Six Bells Colliery Site (Six Bells).

There are 14 Ancient Semi-Natural Woodland (ASNW) sites and three Plantations on Ancient Woodland Sites (PAWS).

Work on identifying Sites of Importance for Nature Conservation (SINCs) is well underway. The first tranche of designations will include 64 SINCs and are expected to gain approval in the near future. A further set of SINCs are planned subsequently, but it is unclear how many will be included at that stage.

There are no European sites within the Local Planning Authority boundary of Blaenau Gwent.

Plans and projects can have spatial implications that extend beyond the intended plan boundaries. In particular, it is **recognized 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 drainage paths, 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.

Taking into account the potential for trans-boundary impacts the screening has identified 9 European Sites that lie within a 15km search area around Blaenau Gwent County Borough Council's (BGCBC) Planning Authority boundary. These sites are outlined in **Table 3** below and detailed information for each designated site including its conservation objectives is provided in **Appendix A**; maps showing the location and spatial extent of these sites are in **Appendix E**.

Table 3

European Sites within Search Area Buffer Zone

European Sites within 15km search area of around Plan/Proposal Area	Designation	Distance from Plan/ Proposal Boundary (approx)
Cwm Clydach Woodlands	SAC	Adjacent
Usk Bat Site	SAC	Adjacent
River Usk	SAC	3.9 km
Aberbargoed Grassland	SAC	4.4 km
Sugar Loaf Woodlands	SAC	7.9 km
Brecon Beacons	SAC	10.1 km
Llangorse Lake/Llyn Syfaddan	SAC	10.1 km
Coed Y Cerrig	SAC	11.6 km
Cwm Cadlan	SAC	12.9 km

4.2 Task 2: Plan/Strategy Review, Policy Screening and Identification of Likely Impacts

4.2.1 Deposit Local Development Plan Summary Review

The Deposit Local Development Plan envisages that through collaborative working, by 2021, Blaenau Gwent will become a network of sustainable, vibrant valley communities, where people have the skills, knowledge and opportunities to achieve a better quality of life and residents will live in safe, healthy and thriving communities, with access to a range of good quality affordable homes and thriving town centres. Its unique environment, cultural and historic identity will be protected and enhanced to create a place where people want to live, work and visit.

This vision (see Deposit LDP) is further expressed by the 4 themes and 16 objectives developed to set the way forward. The Local Development Plan Strategy is based on building a network of district hubs around the principal hub of Ebbw Vale whilst recognising that there is a north south divide in terms of opportunities for growth. The creation of an integrated network of modern and revitalised hubs provides an opportunity to transform the area. It creates a mechanism to co-ordinate investment and ensures that benefits are shared widely.

4.2.2 *Deposit Local Development Plan: Screening Plan/Proposal*

The Deposit Local Development Plan 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.

The approach taken builds on and is in accordance with screening approaches used in the UK for Regional and Sub-Regional Strategies.[5] The Deposit Local Development Plan's policies were screened on the basis of the following criteria.

Reasons why a policy might be considered not to have an effect on a European Site

- The policy concentrates development in existing urban areas, steering development away from European sites and sensitive areas.
- The policy will steer development away from European sites and associated sensitive areas.
- The policy is intended to protect the natural environment, including biodiversity.
- The policy is intended to conserve or enhance the natural, built or historic environment, and such enhancements are unlikely to affect a European site.
- Where there is not a pathway between the plan/proposal or, a component of the plan/proposal – the impact source, and the European site's interest features – the receiver; the impact may be by means of a direct, indirect or induced pathway.

Reasons why a policy could be considered to have an effect on a European Site

- The plan/ policy steers a type of development towards or, encourages development in an area that includes a European site or an area where development may indirectly affect a European site.
- Where there is a pathway between the plan (the impact source) and the European site's interest features (the receiver).

[5] 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).

The full Policy Screening Tables, including the rationale for a policy screening decision based on the above criteria are provided in Appendix B. Of the 13 strategic policies screened, 11 policies were considered to be proposing development that may have significant effects at the European sites identified at Task 1. The 11 policies that remain in the assessment process are outlined in Table 4.

Table 4

Plan/ Proposal Policies Recommended for Appropriate Assessment

1. SP1 Northern Strategy Area – Sustainable Growth and Regeneration
2. SP2 Southern Strategy Area – Regeneration
3. SP3 The Retail Hierarchy and Vitality and Viability of Town Centres
4. SP4 Delivering Quality Housing
5. SP5 Spatial Distribution of Housing Sites
6. SP6 Ensuring Accessibility
7. SP7 Climate Change
8. SP8 Sustainable Economic Growth
11. SP11 Protection and Enhancement of the Built Environment
12. SP12 Securing an Adequate Supply of Minerals
13. SP13 Delivering Sustainable Waste Management

The potential impacts that could arise from these policies are:

- deterioration of air composition and quality;
- disturbance of features by factors such as noise, light etc;
- loss of habitat area, quality and connectivity;
- changes to the flow regime and sediment characteristics;
- changes in drainage characteristics;
- deterioration of water quality and changes in the nutrient loads of receiving waters;
- introduction of physical and hydrological barriers etc. in watercourses.

As part of the HRA requirement, it was noted in relation to regulation 85B(1) that the Blaenau Gwent Deposit Local Development Plan (LDP) and its individual components are not directly

connected to or necessary to the management of any European Site and therefore the Local Development Plan (LDP) could not be screened out of HRA on this basis.

4.3 Task 3: Consideration of Other Plans and Programmes

It is a requirement of Article 6(3) of the Habitats Directive that HRA examines the potential for the Blaenau Gwent Deposit Local Development Plan to have a significant effect either individually or 'in combination' with other plans & projects. Undertaking an assessment of the 'in combination' effect of other projects and plans required a pragmatic approach given the extensive range of projects and plans underway in the surrounding region. The approach taken was cognizant of the emphasis in the forthcoming WAG guidance, that considering the potential for in-combination effects is core to delivering robust/ precautionary HRA.[6]

In deciding on the relevant plans and projects for assessment, consideration was given to those whose impact areas coincide with the designated sites relevant to the Deposit LDP – either in terms of their likely pathways or effects.

Some of the other qualifying criteria used for considering plans for "in-combination impact" assessment are:

- Geographical proximity;
- Developments requiring land-take;
- Developments of a suitably large size and scale;
- Plans or projects that are characterised by or involve infrastructure-type development;
- Plans or projects that are characterised by or result in changes in land use;
- Plans or projects that involve or have the potential for producing emissions or disposal to land, water, air (atmospheric emission and discharge to watercourses);
- Plans or projects that involve development on lands near to watercourses (main rivers, critical ordinary watercourses and ordinary watercourses);
- Plan or projects that involve development of Greenfield lands or lands designated as greenbelts;
- Developments with natural resources requirements;
- Developments with excavation requirement;
- Plans or projects with suitably long duration of construction, operation and decommissioning.

[6] 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.

When considering other projects and plans, 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) 2008
- Local Development Plans in South East Wales neighbouring authorities
- 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

The potential effects of these plans are reviewed in detail at **Appendix C** and the potential for these effects to act 'in-combination' with effects identified from Blaenau Gwent Deposit Local Development Plan are considered in the screening assessment in **Appendix D**.

The range of in-combination impacts considered was focused on the key issues outlined below:

- Airborne pollution (air composition and quality) from proposed LDP activities;
- Loss of habitat area and connectivity and deterioration of quality;
- Changes to the flow regime and sediment characteristics of the water environment;
- Deterioration of water quality and baseline nutrient levels.

4.4 TASK 4: SCREENING ASSESSMENT

In line with the screening requirement of the Habitats Regulations, an assessment was undertaken to determine the potential significant effects of the Blaenau Gwent Deposit Local Development Plan on the integrity of the 9 European sites that lie within the 15 km search buffer area of the plan boundary. The screening decision was informed by:

- The information gathered on the European sites – **Appendix A**;
- The review of the Blaenau Gwent Deposit Local Development Plan policies and their likely impacts (**Appendix B**); which included an analysis of the potential environmental impacts likely to be generated from LDP activities and;
- The review of other relevant plans and programmes – **Appendix C**
- WAG guidance on HRA, particularly in reference to the assessment of typically broader, more strategic plans.

4.5 SCREENING ASSESSMENT SUMMARY

The detail of the main screening exercise is set out at **Appendix D** and the result of the assessment is summarized in the paragraphs below and at **Table 5.**

In line with the screening requirement of the Habitats Regulations, an assessment was undertaken to determine the potential significant effects of the Deposit Local Development Plan on the integrity of the 9 European sites that lie outside the plan/proposal boundaries.

The detail of the main screening exercise is set out in Appendix D and the result of the assessment is summarized below in Table 5.

Table 5

HRA Screening Table Summary

European Sites outside of Plan/proposal boundaries	**Designation**	**AA required alone?** × No ✓ Yes **?** Uncertain	**AA required in combination?** × No ✓ Yes **?** Uncertain
Cwm Clydach Woodlands	SAC	?	✓
Usk Bat Site	SAC	?	✓
River Usk	SAC	?	?
Aberbargoed Grasslands	SAC	?	✓
Sugar Loaf Woodlands	SAC	?	✓
Brecon Beacons	SAC	×	×
Llangorse Lake	SAC	×	×
Coed y Cerrig	SAC	×	×
Cwm Cadlan	SAC	×	×

5. Conclusions, Future Work

This report outlines the methods used and the findings arising from the screening stage of the Habitats Regulations Assessment undertaken for the Blaenau Gwent Deposit Local Development Plan.

The HRA considered 9 European sites within a 15km search area around the plan boundaries.

The findings of the screening process suggested, based on the precautionary principle, the potential for significant effects at 4 of the European Sites outside of the plan area boundary. A fifth European site – the River Usk has been taken forward, on the advice of CCW, because there was a remote, theoretical possibility that any new development within the Plan area, which could potentially make additional demands on water resources could conceivably impact on the River Usk – since the Usk is a part of the South East Wales Conjunctive Use Scheme (SEWCUS).

By applying the precautionary principle, the HRA screening assessment also identified that these "five (5)" European sites could potentially be affected by the delivery of the Deposit LDP "in-combination" with other projects and plans in SE Wales.

Based on the information gathered for the screening process and considering the Habitats Regulations requirements for a precautionary approach, it is determined that further Appropriate Assessment work is required for:

- Cwm Clydach Woodlands;
- Usk Bat Site;
- Aberbargoed Grasslands;
- Sugar Loaf Woodlands
- River Usk

The AA will require more detailed information-gathering to assess, and where possible quantify, the potential impacts identified and determine the most effective mechanism for avoiding or mitigating those effects. This work will need to take place in consultation with the Statutory Body, CCW and other key stakeholders (if required).
A full AA report will be presented alongside the Blaenau Gwent Deposit Local Development Plan 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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Scott Wilson, Levett-Therivel, Treeweek, Land Use Consultants (2006) Appropriate Assessment of Plans.

WAG (2004) Strategic Environmental Assessment (SEA) of Unitary Development Plans – Interim Good Practice Guide

WAG (2006) Local Development Plans Wales.

NATURA 2000 SITE SPECIFIC INFORMATION

Joint Nature Conservation Committee (JNCC) - Protected Sites:
http://www.jncc.gov.uk/page-4

Browse SACs on map:
http://www.jncc.gov.uk/page-1515

Browse SPAs on map:
http://www.jncc.gov.uk/page-2598

Appendix A European Site Descriptions/Characterisations

Natura 2000 Site Information Proforma

To go to a specific Natura 2000 Site Information Proforma - Hold Ctrl and Left Click on site name.

Special Areas of Conservation

1. Aberbargoed Grasslands
2. Brecon Beacons
3. Coed Y Cerrig
4. Cwm Cadlan
5. Cym Clydach Woodlands
6. Llangorse Lake/ Lyn Syfaddan
7. River Usk
8. Sugar Loaf Woodlands
9. Usk Bat Sites

All core site specific information unless otherwise stated has been referenced from the Countryside Council for Wales website (Natura 2000 Management Plans) and the Joint Nature Conservation Committee website (Protected Sites).

Special Areas of Conservation

Site Name: Aberbargoed Grasslands **Location Grid Ref: ST163992** **JNCC Site Code: UK0030071** **Size: 39.78** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	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 (*Euphydryas aurinia*) is present on a series of damp pastures and heaths in Gwent, representing the species on the eastern edge of its range in Wales. 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 *Molinia caerulea* and meadow thistle *Cirsium dissectum* with devil's bit scabious *Succisa pratensis* and carnation sedge *Carex panicea*. Other species such as saw-wort *Serratula tinctoria* and lousewort *Pedicularis sylvatica* occur frequently in heavily flushed areas. Associated stands of *Molinia caerulea – Potentilla erecta* mire contain abundant purple moor grass with *tormentil Potentilla erecta*, mat grass *Nardus stricta*, common sedge *Carex nigra* and spotted orchid *Dactylorhiza maculata*. Small stands of rush pasture are scattered across the site, with soft rush *Juncus effuses*, greater bird's foot trefoil *Lotus uliginosus* and marsh bedstraw *Galium palustre*.
Qualifying Features	Annex I Habitats qualifying feature: ▪ Molinia meadows on calcareous, peaty or clayey-silt-laden soils *(Molinion caeruleae)* Annex II Species primary reason for selection: ▪ Marsh fritillary butterfly *Euphydryas (Eurodryas, Hypodryas) aurinia*
Conservation Objectives	**Conservation Objective for Feature 1:** **Marsh fritillary Butterfly *Euphydryas* (*Eurodryas, Hypodryas*) *aurinia***

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	The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: ▪ 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 ▪ The population will be viable in the long term, acknowledging the extreme population fluctuations of the species. ▪ Habitats on the site will be in optimal condition to support the metapopulation. ▪ At least 25ha of the total site area will be marshy grassland suitable for supporting marsh fritillary, with *Succisa pratensis* present and only a low cover of scrub. ▪ At least 6.25ha will be good marsh fritillary breeding habitat, dominated by purple moor-grass *Molinia caerulea*, with *S. pratensis* present throughout and a vegetation height of 10-20cm over the winter period. ▪ All factors affecting the achievement of the foregoing conditions are under control. **Conservation Objective for Feature 2:** **Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)** Vision for feature 2 The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: ▪ *eu-Molinion* marshy grassland will occupy at least 70% of the total site area. ▪ The remainder of the site will be other semi-natural habitat or areas of permanent pasture. ▪ The following plants will be common in the *eu-Molinion* marshy grassland: purple moor-grass *Molinia caerulea*; meadow thistle *Cirsium dissectum*; devil's bit scabious *Succisa pratensis*; carnation sedge *Carex panicea*; saw wort *Serratula tinctoria*; and lousewort *Pedicularis sylvestris*.

Site Name: Aberbargoed Grasslands Location Grid Ref: ST163992 JNCC Site Code: UK0030071 Size: 39.78 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ Cross-leaved heath *Erica tetralix* and common heather *Calluna vulgaris* will also be common in some areas. ▪ Rushes and species indicative of agricultural modification, such as perennial rye grass *Lolium perenne* and white clover *Trifolium repens* will be largely absent from the *eu-Molinion* marshy grassland. ▪ Scrub species such as willow Salix and birch *Betula* will also be largely absent from the *eu-Molinion* marshy grassland. ▪ All factors affecting the achievement of these conditions are under control. Performance indicators for Feature 1 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 Aberbargoed Grasslands Management Plan.
Component SSSIs	▪ Aberbargoed Grasslands SSSI 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 CCW website.
Key Environmental Conditions (factors that maintain site integrity	The Marsh fritillary butterfly is dependent on the Molinia meadows and wet heath. ▪ **Livestock grazing** - The *eu-Molinion* 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.
SAC Condition Assessment	**Conservation Status of Feature 1:** **Marsh fritillary butterfly *Euphydryas (Eurodryas, Hypodryas) aurinia***

Site Name: Aberbargoed Grasslands Location Grid Ref: ST163992 JNCC Site Code: UK0030071 Size: 39.78 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	The Marsh Fritillary feature at Aberbargoed Grasslands SAC is considered to be in **unfavourable** condition and conservation status (October 2003). 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. **Conservation Status of Feature 2:** **Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)** The SAC report dated October 2003 states that the site is considered to be **Unfavourable** 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 *Succisa*. There is only 2.3ha of good condition habitat and 9.7ha of suitable habitat within the site.
Vulnerabilities (includes existing pressures and trends)	**The marsh fritillary butterfly population is under threat from:** ▪ **Parasites** - Parasitic wasps. **The Molinia meadows is under threat from:** ▪ **Anti-social behaviours** - 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 *eu-Molinion* habitat from being damaged. CCW states that work has progressed well on the site in the past few years; the site is now stock-proof and a

Site Name: Aberbargoed Grasslands Location Grid Ref: ST163992 JNCC Site Code: UK0030071 Size: 39.78 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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.
Landowner/ Management Responsibility	▪ Caerphilly County Borough Council.
HRA/AA Studies undertaken that address this site	HRA Screening of the County Council of the City and County of Cardiff Local Development Plan Preferred Strategy Sept 2007. www.cardiff.gov.uk/ObjView.asp?Object_ID=9788 ▪ 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. HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008. http://www.torfaen.gov.uk/EnvironmJentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf ▪ 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

Site Name: Aberbargoed Grasslands Location Grid Ref: ST163992 JNCC Site Code: UK0030071 Size: 39.78 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	the Torfaen LDP should warrant further consideration in the next stage of the AA process.

Site Name: Brecon Beacons **Location Grid Ref: SO024211** **JNCC Site Code: UK0030096** **Size: 269.67** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	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. 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 Calluna vulgaris and bilberry Vaccinium myrtillus, although some stands have crowberry Empetrum nigrum. Heather and biberry also grow on the cliff ledges and are sometimes joined by cowberry (Vaccinium vitis-idaea). 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 (Sorbus), and shrubs are an important element of the crag vegetation.
Qualifying Features	Annex I Habitats primary reason for selection: ▪ Calcareous rocky slopes with chasmophytic vegetation ▪ Siliceous rocky slopes with chasmophytic vegetation Annex I Habitats qualifying feature: ▪ European dry heaths ▪ Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
Conservation Objectives	**Conservation Objective for Feature 1:** **Calcareous rocky slopes with chasmophytic vegetation** Vision for Feature 1

Site Name: Brecon Beacons Location Grid Ref: SO024211 JNCC Site Code: UK0030096 Size: 269.67 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ 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. ▪ 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. ▪ Populations of these species are sufficiently large and widespread to be sustained into the future (currently some populations may be critically low). ▪ All factors affecting the achievement of the above conditions are under control. Performance indicators for Feature 1 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 Brecon Beacons Management Plan. **Conservation Objective for Feature 2:** **Siliceous rocky slopes with chasmophytic vegetation** Vision for feature 2 ▪ The acidic sandstone rocks, including crevices and scree, remain free from disturbance to and support typical plants, including mosses, ferns and lichens. ▪ A variety of rare and scarce plants thrive in these areas, including fir clubmoss, dwarf willow, and greater streak-moss. ▪ Populations of these species are sufficiently large and widespread to be sustained into the future. ▪ All factors affecting the achievement of the above conditions are under control. Performance indicators for Feature 2

Site Name: Brecon Beacons Location Grid Ref: SO024211 JNCC Site Code: UK0030096 Size: 269.67 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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 Brecon Beacons Management Plan. **Conservation Objective for Feature 3:** **European dry heaths** Vision for Feature 3 ▪ The extent, quality and diversity of heath vegetation are maintained and, where possible, degraded heath is restored to good condition. ▪ 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. ▪ All factors affecting the achievement of these conditions are under control. Performance indicators for Feature 3 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 Brecon Beacons Management Plan. **Conservation Objective for Feature 4:** **Hydrophilous tall herb fringe communities of plains and montane to alpine levels** Vision for feature 4 ▪ The cliff ledges with less acidic soil remain largely free from grazing, such that the typical flowering plants can flourish and flower freely.

Site Name: Brecon Beacons Location Grid Ref: SO024211 JNCC Site Code: UK0030096 Size: 269.67 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ Several uncommon plants thrive in these areas, including serrated wintergreen and rare hawkweeds. ▪ The populations of these plants are sufficiently large and widespread to be sustained into the future. ▪ All factors affecting the achievement of the above conditions are under control. Performance indicators for Feature 4 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 Brecon Beacons Management Plan.
Component SSSIs	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 CCW website.
Key Environmental Conditions (factors that maintain site integrity	▪ **Grazing** - Some areas under-grazed while others are over-grazed. o 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). o Lower limit: Sufficient to prevent the development of scrub within heathland/grassland of conservation interest and/ or spread of bracken and ivy. ▪ **Air Quality** - Ensure that no critical loads for acidic and nitrogen deposition are exceeded. ▪ **Erosion** - 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. ▪ **Rock Climbing** - 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

Site Name: Brecon Beacons Location Grid Ref: SO024211 JNCC Site Code: UK0030096 Size: 269.67 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	a code of conduct.
SAC Condition Assessment	**Conservation Status of Feature 1:** Calcareous rocky slopes with chasmophytic vegetation The conservation status of the feature within the site is **Un-favourable** (2005). 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 & 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. **Conservation Status of Feature 2:** Siliceous rocky slopes with chasmophytic vegetation The conservation status of the feature within the site is **Un-favourable** (2005). 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. **Conservation Status of Feature 3:** European dry heaths The conservation status of the feature within the site is **Un-favourable** (2006).

Site Name: Brecon Beacons Location Grid Ref: SO024211 JNCC Site Code: UK0030096 Size: 269.67 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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 & 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 & 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. **Conservation Status of Feature 4:** Hydrophilous tall herb fringe communities of plains and montane to alpine levels The conservation status of the feature within the site is **Un-favourable** (2005). 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 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.
Vulnerabilities (includes existing pressures and trends)	▪ **Air pollution** – 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. ▪ **Grazing pressure** - 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

Site Name: Brecon Beacons Location Grid Ref: SO024211 JNCC Site Code: UK0030096 Size: 269.67 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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. ▪ **Recreational pressure** 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.
Landowner/ Management Responsibility	▪ Unit 1 - SAC area within the CCW-owned land ▪ Unit 4 - SAC area within Great Forest common land (CL50 Brecknock) ▪ Unit 8 - SAC area within National Trust common land (Brecon Beacons CL56 Brecknock) ▪ Unit 9 - SAC area within Buckland Manor common (CL62 Brecknock)
HRA/AA Studies undertaken that address this site	▪ N/A

Site Name: Coed Y Cerrig **Location Grid Ref: SO291210** **JNCC Site Code: UK0012766** **Size: 9.1ha** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Coed y Cerrig is situated approximately 4.8km to the North of Abergavenny and is a good example of alluvial forest in southern Wales. The valley-bottom woodland has a canopy dominated by alder *Alnus glutinosa* with ash *Fraxinus excelsior*, and a rich understorey that includes guelder-rose *Viburnum opulus* and bird cherry *Prunus padus*. The ground flora is characterised by abundant large sedges *Carex spp.*, and a wide diversity of wet woodland species. The woodland is continuous with diverse ash-elm *Fraxinus-Ulmus* and oak *Quercus spp.* woodland on the valley sides.
Qualifying Features	Annex I Habitats primary reason for selection: ▪ Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)* Priority feature
Conservation Objectives	**Conservation Objective for Feature 2: Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incarnae, Salicion albae*)** 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: ▪ Around a third of the site is covered by wet alder and willow woodland. ▪ This wet woodland grades into areas of permanent open swamp dominated by lesser pond-sedge or other typical wetland plants, where the hydrological conditions are suitable. Adjacent areas of marshy grassland and spring-fed mire are intimately linked to the wet woodland and swamp. ▪ The remainder of the site supports mainly dry semi-natural woodland. ▪ The wet woodland has a variable canopy structure, based on a small-scale patchwork, with alder of different ages and some standing as well as fallen dead wood. Ash does not make up more than 25% of the canopy.

Site Name: Coed Y Cerrig Location Grid Ref: SO291210 JNCC Site Code: UK0012766 Size: 9.1ha Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ Young trees/saplings and/or vegetative re-growth of the above species are present. ▪ The understorey includes locally native shrubs typical of this habitat and the ground flora consists of a variety of typical wetland plants, such as lesser pond-sedge, common marsh-bedstraw, meadowsweet, yellow pimpernel, opposite-leaved golden-saxifrage, marsh-marigold, hemlock water-dropwort, water mint, lady fern and rushes. ▪ Plants associated with nutrient enrichment, such as stinging nettle and cleavers, are not dominant over large areas and invasive alien plants like Japanese knotweed and Indian balsam are absent. ▪ This wet woodland grades into areas of permanent open swamp dominated by lesser pond-sedge or other typical wetland plants, where the hydrological conditions are suitable. Adjacent areas of marshy grassland and spring-fed mire are intimately linked to the wet woodland and swamp. ▪ There is no significant input of nutrient-rich water from ditches and surrounding land. ▪ All factors affecting the achievement of these conditions are under control. Performance indicators for Feature 2 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 Coed Y Cerrig Management Plan.
Component SSSIs	▪ Coed Y Cerrig SSSI Coed Y Cerrig SSSI is divided into 10 management units of which numbers 2, 4, 5 and 9 comprise to form the Coed Y Cerrig SAC. The management units can be viewed on a map that is available on the CCW website.
Key Environmental Conditions (factors that maintain site integrity	▪ **Livestock grazing** - In units 2 & 4 there should be no deliberate grazing but light grazing, preferably by cattle or ponies, is desirable in unit 5 to maintain the fen-meadow vegetation. o Lower limits: Unit 5 should be subject to light summer grazing by cattle and/or ponies at least 4 in every 5 years. o Upper limits: No significant grazing in units 2 and 4;

Site Name: Coed Y Cerrig Location Grid Ref: SO291210 JNCC Site Code: UK0012766 Size: 9.1ha Designation: SAC	Habitats Regulations Assessment: Data Proforma
	o AND: No significant grazing outside the growing season in unit 5 or heavy grazing at any time during the summer. 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). ▪ **Woodland Management** - Small-scale coppicing over a long cycle is desirable to maintain the dominance of alder and create a varied canopy structure in the wet woodland. More frequent coppicing is required to maintain the open glades that are dominated by sedge swamp. Standing and fallen dead timber provides an important habitat for a variety of wildlife, including fungi, invertebrates and birds and is also essential for nutrient recycling and restoring soil nutrients. Therefore dead and decaying trees should normally be retained. Wherever possible, standing dead trees should be allowed to decay and fall naturally. Movement and cutting/tidying of fallen trees and dead wood should be avoided unless essential for legal obligations or public safety. ▪ **Drainage** - hydrology is important in maintaining wet woodland. The alder woodland and associated swamp, marshy grassland and spring-fed mire, as well as the marsh fern, are found in areas of impeded drainage in the valley bottom. There should be no drainage works that could interfere with the springs and the generally waterlogged ground. o No new drainage ditches to be installed within units 2, 4 & 5. ▪ **Public Access** - Maintain boardwalks and footpaths to minimise trampling damage within the wet woodland. In theory, public access to the Nature Reserve area could cause a lot trampling damage but in practice the ground is so wet that visitors tend to keep to the boardwalks provided. o Upper limits: No more that 30% bare ground with signs of trampling within 10m radius of a sample point; o AND: No net loss of habitat to provide additional boardwalks.

Site Name: Coed Y Cerrig Location Grid Ref: SO291210 JNCC Site Code: UK0012766 Size: 9.1ha Designation: SAC	Habitats Regulations Assessment: Data Proforma
SAC Condition Assessment	**Conservation Status of Feature 1: Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incarnae, Salicion albae*)** Conservation Status of Feature 1 The conservation status of this feature within the site is considered to be **Favourable** (2005). Monitoring carried out in June 2005 indicated that the condition of the feature was favourable, maintained [Draft Monitoring Report by L Barton-Allen, October 2005]. However, there is a threat to future conservation status if coppicing and glade maintenance is not kept up in units 2 & 4 or sufficient grazing maintained in unit 5.
Vulnerabilities (includes existing pressures and trends)	▪ **Grazing** - Past sporadic grazing in the wet woodland may have restricted the ash content and light grazing can have some positive benefits on overall species composition. However, the marsh fern and other grazing sensitive plants would be at risk from uncontrolled and anything more than light grazing. Heavy grazing in unit 5 is likely to eliminate sensitive species and could cause localised physical damage to the sward leading to invasion by "weedy" species. ▪ **Drainage** - There should be no drainage works that could interfere with the springs and the generally waterlogged ground. New drainage ditches could cause drying out of the site, leading to a loss of alluvial forest in favour of drier woodland types. Drainage maintenance along the roads (units 9 & 10) must be undertaken in a very sensitive manner. Maintenance of the road itself need to be carefully considered so as not to affect the drainage and adjoining habitat; CCW needs to be consulted before any materials are brought in to maintain the road so that there is no risk of invasive species such as Indian balsam being imported. ▪ **Nutrient Enrichment** - The wet woodland has developed relatively fertile valley soils because nutrients accumulate here as a result of down-slope water movement and leaf-fall. However, further enrichment

Site Name: Coed Y Cerrig Location Grid Ref: SO291210 JNCC Site Code: UK0012766 Size: 9.1ha Designation: SAC	Habitats Regulations Assessment: Data Proforma
	from agricultural run-off would promote dominance by weed species, such as nettles. No new agricultural drains should be routed into the site and existing drains may need to be diverted if they are causing an enrichment problem.
Landowner/ Management Responsibility	▪ Unit 2 - NNR alder woodland (SAC). ▪ Unit 4 - Private broadleaved woodland (SAC). ▪ Unit 5 - Marshy grassland included in SAC boundary, with small area of alder woodland by stream and on boundaries. ▪ Unit 9 - Road straddling SAC habitat. Road within SAC but with no SAC habitat. Road straddles an area of SAC habitat and included for management reasons such that any works on road does not affect the SAC.
HRA/AA Studies undertaken that address this site	HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008. http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf ▪ Given the distance of the site from Torfaen the Screening states that it is unlikely that proposals in the LDP Preferred Strategy would have a direct impact on Coed Y Cerrig SAC. The most likely mechanism for the Preferred Strategy to have a negative impact on the site is through airborne pollution. However the document states that the sites location within industrial south Wales means that it is already subject to high levels of pollution and it is therefore considered unlikely that development resulting from the LDP would result in a significant detrimental effect on the integrity of the primary features of the designated site.

Site Name: Cwm Cadlan **Location Grid Ref: SN961098** **JNCC Site Code: UK0013585** **Size: 83.93** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	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: 'Molinia meadows on calcareous, peaty or clayey silt-laden soils (*Molinion caeruleae*)' - Cwm Cadlan has the largest recorded example of 'Molinia meadows' (or fen-meadow) in Wales. The typical form of purple moor-grass–meadow thistle (*Molinia caerulea - Cirsium dissectum*) fen-meadow is extensively developed, and there are clearly displayed transitions to a range of associated habitats, including base-rich flush and neutral grassland. '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 (*Carex dioica-Pinguicula vulgaris*) mire occur widely, often in close association with flushed examples of M24 fen-meadow. Characteristic species include common butterwort *Pinguicula vulgaris*, bog pimpernel *Anagallis tenella*, marsh arrowgrass *Triglochin palustris* and the moss Campylium stellatum. Other sedge-rich swards are also present which display floristic affinities to both M10 and M24; basiphilous elements of this vegetation include tawny sedge *Carex hostiana*, flea sedge *Carex pulicaris* and quaking-grass *Briza media*. 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.
Qualifying Features	Annex I Habitats primary reason for selection: ▪ Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)

Site Name: Cwm Cadlan Location Grid Ref: SN961098 JNCC Site Code: UK0013585 Size: 83.93 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ Alkaline fens
Conservation Objectives	**Conservation Objective for Features 1 & 3:** **Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) - this also encompasses Feature 3: other non-SAC marshy grassland habitat** 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: ▪ Fen-meadow will occupy at least 26 ha of a total area of marshy grassland habitat which itself will cover at least 42 ha. ▪ The remainder of the site will mainly consist of other semi-natural habitat, including alkaline fen. ▪ Typical fen-meadow plants will be common. ▪ Plants indicating agricultural modification or alteration to hydrology and drying of soils will be absent or present at only low cover. ▪ Although rushes are frequent, the more bulky species will not exceed 33% cover. ▪ Bare ground will generally not exceed 5% cover and vegetation litter 25%. ▪ 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. ▪ All factors affecting the achievement of these conditions are under control. 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. Performance indicators for Feature 1 (& 3)

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	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 Cwm Cadlan Management Plan. **Conservation Objective for Feature 2:** **Alkaline Fen** Vision for feature 2 The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: ▪ Alkaline Fen will occupy about 11 ha or more. ▪ The remainder of the site will mainly consist of other semi-natural habitat including fen-meadow. ▪ Typical alkaline fen plants will be common. ▪ Plants indicating agricultural modification or alteration of hydrology and drying of soils will be absent or present only at low cover. ▪ Although rushes are frequent, the more bulky species will not exceed 33% cover. ▪ Bare ground will generally not exceed 5% cover and vegetation litter 10 %. ▪ Scrub species will be largely absent from the alkaline fen. ▪ At selected springheads, water should flow in all but the most severe drought conditions. ▪ All factors affecting the achievement of these conditions are under control. Performance indicators for Feature 2 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 Cwm Cadlan Management Plan.

Site Name: Cwm Cadlan Location Grid Ref: SN961098 JNCC Site Code: UK0013585 Size: 83.93 Designation: SAC	Habitats Regulations Assessment: Data Proforma
Component SSSIs	▪ 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 CCW website.
Key Environmental Conditions (factors that maintain site integrity	▪ **Grazing** - 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 maintaining the marshy grassland and fen-meadow communities. o 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). o Upper limits: No significant grazing outside the growing season or heavy grazing at any time during the summer. ▪ **Scrub control** - 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: o Lower limits: Scattered scrub present in defined locations. o Upper limits: No scrub covering area greater than 5m x 5m within stands mapped as marshy grassland. ▪ **Hydrological regime** - 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

Site Name: Cwm Cadlan Location Grid Ref: SN961098 JNCC Site Code: UK0013585 Size: 83.93 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	likely to lead to re-wetting of some marshy grassland. o Upper limit: No new drainage ditches to be installed within the open meadow areas of the site. ▪ **Air Quality** - 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 fen is towards the lower end of this range. o Lower limits: None set – very low dust and N deposition regimes may be beneficial. o Upper limits: Suggest 15 kg N / ha / year for N. None yet defined for dust.
SAC Condition Assessment	**Conservation Status of Feature 1** **Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) - this also encompasses Feature 3: other non-SAC marshy grassland habitat** The conservation status of these features within the site is considered to be **Unfavourable** (2007). 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 & 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.

Site Name: Cwm Cadlan Location Grid Ref: SN961098 JNCC Site Code: UK0013585 Size: 83.93 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	Conservation Status of Feature 2 **Alkaline Fen** The conservation status of this feature within the site is considered to be **Unfavourable** (2007). 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 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 & 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.
Vulnerabilities (includes existing pressures and trends)	▪ **Inappropriate grazing regime** - 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. ▪ **Scrub encroachment** - 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). ▪ **Changes to hydrological regime** - 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.

Site Name: Cwm Cadlan Location Grid Ref: SN961098 JNCC Site Code: UK0013585 Size: 83.93 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ **Eutrophication** - there has been concern about fertilizer run-off from some adjacent improved fields causing localised nutrient enrichment. ▪ **Atmospheric Pollution*** - 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 fen is towards the lower end of this range.
Landowner/ Management Responsibility	▪ Unit 1 is owned by CCW.
HRA/AA Studies undertaken that address this site	AA Screening of the Rhondda Cynon Taff County Borough Council's Local Development Plan (2006-2021): Preferred Strategy January 2007 (http://www.rhondda-cynon-taff.gov.uk/stellent/groups/Public/documents/RelatedDocuments/012830.pdf) ▪ 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. ▪ 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.

* 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

Site Name: Cym Clydach Woodlands **Location Grid Ref: SO207123** **JNCC Site Code: UK0030127** **Size: 28.81** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	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 Llammarch. 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 *Sorbus spp*. and soft-leaved sedge *Carex montana*. There are important woodland and grassland fungi assemblages with rare species such as *Squamanita paradoxa*.
Qualifying Features	Annex I Habitats primary reason for selection: ▪ *Asperulo-Fagetum* beech forests Annex I Habitats qualifying feature: ▪ Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (*Quercion robori-petraeae or Ilici-Fagenion*)
Conservation Objectives	**Conservation Objective for Feature 1:** *Asperulo – Fagetum* beech forests 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: ▪ At least 50% of the canopy-forming trees are beech.

Site Name: Cym Clydach Woodlands Location Grid Ref: SO207123 JNCC Site Code: UK0030127 Size: 28.81 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ The canopy cover is at least 80% (excluding areas of crag) and composed of locally native trees. ▪ The woodland has trees of all age classes with a scattering of standing and fallen dead wood. ▪ Regeneration of trees is sufficient to maintain the woodland cover in the long term. ▪ 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 robert, wood avens, and tufted hair-grass. ▪ 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. ▪ All factors affecting the achievement of the above conditions are under control. Performance indicators for Feature 1 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 Cym Clydach Management Plan. **Conservation Objective for Feature 2:** Atlantic *acidophilous* beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion* Vision for feature 2 The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: At least 75% of the woodland vegetation meets the criteria for intact acid beech wood, where:

Site Name: Cym Clydach Woodlands Location Grid Ref: SO207123 JNCC Site Code: UK0030127 Size: 28.81 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ At least 10% of the canopy forming trees are beech. ▪ The canopy cover is at least 80% and composed of locally native species. ▪ The woodland has trees of all age classes with a scattering of standing and fallen dead wood. ▪ Regeneration of trees is sufficient to maintain the woodland cover in the long term. ▪ The shrub layer and ground flora can be quite sparse, but where present consist of locally native plants. ▪ All factors affecting the achievement of the above conditions are under control. Performance indicators for Feature 2 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 Cym Clydach Management Plan.
Component SSSIs	▪ Cym Clydach SSSI is composed of 5 management units of which numbers 1and 5 comprise to form the Cym Clydach Woodlands SAC. A map of the management units can be viewed on the CCW website.
Key Environmental Conditions (factors that maintain site integrity	▪ **Grazing** - Sufficiently low to allow regeneration in the long term. ▪ **Non-native and invasive species** - No increase in the area of woodland floor that is dominated by invasive species.
SAC Condition Assessment	**Conservation Status of Feature 1** *Asperulo – Fagetum* beech forests The conservation status of this feature within the site is considered to be **Favourable** (2006).

Site Name: Cym Clydach Woodlands Location Grid Ref: SO207123 JNCC Site Code: UK0030127 Size: 28.81 Designation: SAC	**Habitats Regulations Assessment: Data Proforma**
	Conservation Status of Feature 2 Atlantic *acidophilous* beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion* The conservation status of this feature within the site is considered to be **Favourable** (2006).
Vulnerabilities (includes existing pressures and trends)	▪ **Woodland management** - 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. ▪ **Grazing** - 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 and suppress the woodland ground flora. ▪ **Dumping** - 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. ▪ **Invasive alien plants** - 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. Airborne acid and nutrient deposition are not a significant threat here as most of the woodland soils are well-buffered and nutrient-rich.
Landowner/ Management Responsibility	▪ Unit 1 is owned by CCW and comprises the bulk of the SAC beech woodland. Most of the acidiophilous beech woodland is found towards the western part of Unit 1.

Site Name: Cym Clydach Woodlands Location Grid Ref: SO207123 JNCC Site Code: UK0030127 Size: 28.81 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ Unit 5 is other land within the SAC not owned by CCW.
HRA/AA Studies undertaken that address this site	HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008. http://www.torfaen.gov.uk/EnvironmentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf ▪ 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.

Site Name: Llangorse Lake Location Grid Ref: SO131262 JNCC Site Code: UK0012985 Size: 215.64 Designation: SAC	**Habitats Regulations Assessment: Data Proforma**
Site Description	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. 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.
Qualifying Features	Annex I Habitats primary reason for selection: ▪ Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation
Conservation Objectives	**Conservation Objective for Feature 1:** Natural Eutrophic Lakes with Magnopotamion or Hydrochariton – type vegetation 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: ▪ There is no loss of lake area, as defined in 2006 aerial photographs for summer levels. ▪ 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

Site Name: Llangorse Lake Location Grid Ref: SO131262 JNCC Site Code: UK0012985 Size: 215.64 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	pondweed. ▪ Plants indicating very high nutrient levels and excessive silt loads are not dominant and invasive non-native water plants do not threaten to out-compete the native flora. ▪ 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. ▪ There is a natural hydrological regime. ▪ The natural shoreline is maintained. ▪ The natural and characteristic substrate is maintained. ▪ The natural sediment load maintained. ▪ All factors affecting the achievement of these conditions are under control. Performance indicators for Feature 1 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 Llangorse Lake Management Plan.
Component SSSIs	Llyn Syfaddan (Llangorse Lake) SSSI – is composed of 13 management units, the SAC covers the same area. A map of the site can be viewed on the CCW website.
Key Environmental Conditions (factors that maintain site integrity	▪ **Water Quality** - there should be no eutrophication: o Upper limit: Annual mean total phosphorus (TP) of 35 µgl-1 or less. o Lower limit: At least 5 mgl-1 dissolved oxygen (O2) throughout the water column. ▪ **Hydrology** - No new structures that will reduce inflow or deepening or enlargement of outflow points. ▪ **Sediment loads and lake substrate** - No extensive poaching of the lake margins by stock.

Site Name: Llangorse Lake Location Grid Ref: SO131262 JNCC Site Code: UK0012985 Size: 215.64 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ **Recreational Disturbance** - No use outside agreed zones and periods of year as described in printed guidance. ▪ **Development** - No new permanent jetties, slipways or hard bank structures. ▪ **Non-native species** (Fish) - Any introduction of species that are not native to Llangorse would be highly undesirable. o Upper limit: Introduced species should be removed or populations controlled as necessary. This will be guided by regular EA fish sampling. o 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. ▪ **Non-native & Invasive Species** - Canadian and/or Nuttall's waterweed (Elodea 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.
SAC Condition Assessment	**Conservation Status of Feature 1:** Natural Eutrophic Lakes with Magnopotamion or Hydrochariton – type vegetation The conservation status of this feature within the site is considered to be **Un-favourable** (2006). 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.

Site Name: Llangorse Lake Location Grid Ref: SO131262 JNCC Site Code: UK0012985 Size: 215.64 Designation: SAC	Habitats Regulations Assessment: Data Proforma
Vulnerabilities (includes existing pressures and trends)	▪ **Eutrophication** - 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 agriculturally productive, with much used as arable or grass ley. ▪ **Sediment run-off** - 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 is 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. ▪ **Recreation** - 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

Site Name: Llangorse Lake Location Grid Ref: SO131262 JNCC Site Code: UK0012985 Size: 215.64 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	and it is essential than 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. ▪ **Non-native invasive species** - 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 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. ▪ **Management of surrounding habitats** - 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

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	the continuation of this fragile habitat.
Landowner/ Management Responsibility	▪ Unit 1 is owned or leased by the Brecon Beacons National Park Authority. ▪ 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. ▪ 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. ▪ 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 accompanying map shows the boundary of Unit 13, and represents mean summer level. ▪ In Units 1-8 & 10-12, which are mainly small fields, the SAC habitat is largely confined to the innundation 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.
HRA/AA Studies undertaken that address this site	▪ N/A

Site Name: River Usk **Location Grid Ref: SO301113** **JNCC Site Code: UK0013007** **Size: 1007.71** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	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. 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 *Petromyzon marinus*. The site also supports a healthy population of brook lamprey *Lampetra planeri* and river lamprey *Lampetra fluviatilis* 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 *Alosa falla*, salmon *Salmo sala* and bullhead *Cottus gobi*. The River Usk is an important site for otters Lutra lutra in Wales.
Qualifying Features	Annex I Habitats qualifying feature: ▪ Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation Annex II Species primary reason for selection: ▪ Sea lamprey *Petromyzon marinus*

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	▪ Brook lamprey *Lampetra planeri* ▪ River lamprey *Lampetra fluviatilis* ▪ Twaite shad *Alosa fallax* ▪ Atlantic salmon *Salmo salar* ▪ Bullhead *Cottus gobio* ▪ Otter *Lutra lutra* Annex II Species qualifying feature: ▪ Allis shad *Alosa alosa*
Conservation Objectives	**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.** **Conservation Objective for the water course** ▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ Flows, water quality, substrate quality and quantity at fish spawning sites and nursery areas will not be

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	depleted by abstraction, discharges, engineering or gravel extraction activities or other impacts to the extent that these sites are damaged or destroyed. ▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ Potential sources of pollution not addressed in the Review of Consents, such as contaminated land, will be considered in assessing plans and projects.

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	▪ 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. **Conservation Objective for Features 1-5:** - **Sea lamprey** *Petromyzon marinus*; - **Brook lamprey** *Lampetra planeri*; - **River lamprey** *Lampetra fluviatilis*; - **Twaite shad** *Alosa fallax*; - **Allis shad** *Alosa alosa*; - **Atlantic salmon** *Salmo salar*; - **Bullhead** *Cottus gobio*. Vision for features 1-5 The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied: ▪ The conservation objective for the water course as defined in 4.1 above must be met. ▪ The population of the feature in the SAC is stable or increasing over the long term. ▪ The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. 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

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	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. ▪ 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. Performance indicators for features 1-5 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 River Usk Management Plan. **Conservation Objective for Feature 6:** **- European otter** *Lutra lutra* 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: ▪ The population of otters in the SAC is stable or increasing over the long term and reflects the natural carrying capacity of the habitat within the SAC, as determined by natural levels of prey abundance and associated territorial behaviour. ▪ The natural range of otters in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. The 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.

- 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.

Performance indicators for feature 6

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 River Usk Management Plan.

Conservation Objective for Feature 7:
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation

Vision for feature 7

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 conservation objectives for the water course as defined above must be met.
- The natural range of the plant communities represented within this feature should be stable or increasing in the SAC. The 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

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	extent. ▪ The area covered by the feature within its natural range in the SAC should be stable or increasing. ▪ The conservation status of the feature's typical species should be favourable. The typical species are defined with reference to the species composition of the appropriate JNCC river vegetation type for the particular river reach, unless differing from this type due to natural variability when other typical species may be defined as appropriate. Performance indicators for feature 7 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 River Usk Management Plan.
Component SSSIs	▪ River Usk (Upper Usk) SSSI ▪ River Usk (Lower Usk) SSSI ▪ River Usk (Tributaries) SSSI ▪ Penllwyn-yr-hendy SSSI ▪ Coed Dyrysiog SSSI ▪ Coed Nant Menascin SSSI ▪ Coed Ynysfaen SSSI The SAC has been divided into 10 management units: ▪ Units 1 to 3 - River Usk (Lower Usk) SSSI. ▪ Units 4 to 6 - River Usk (Upper Usk) SSSI. ▪ Units 7 to 10 - River Usk (Tributaries) SSSI. A map showing the various management units can be seen within the River Usk Management Plan.

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Key Environmental Conditions (factors that maintain site integrity	▪ **Hydrological processes**: o **River flow** (level and variability) and **water chemistry**, 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. ▪ **Geomorphological processes** - 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 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. ▪ **Riparian habitats** - 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-steam 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.

- **Habitat connectivity** - 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 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.

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SAC Condition Assessment	**Conservation status of Feature 1: Sea lamprey *Petromyzon marinus*** Status: **Unfavourable**: 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. 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. **Conservation status of Feature 2: Brook lamprey *Lampetra planeri* and River lamprey *Lampetra fluviatilis*** Status: **Favourable**. Brook/river lamprey monitoring showed that overall catchment mean ammocoete density considerably exceeded the JNCC target threshold and also complied with targets for ammocoete distribution1. 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.

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	Conservation status of Feature 3: Twaite shad *Alosa fallax* and Allis shad *Alosa alosa* Status: **Unfavourable**: 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. 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. 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. 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 migration. **Conservation status of Feature 4: Atlantic salmon *Salmo salar*** Status: **Unfavourable**: Unclassified. Monitoring of Atlantic salmon in the Usk relies on two methods,

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	1. Estimation of adult run size from angling catch returns, 2. Electro-fishing for juveniles in nursery areas. 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 model6. These targets are calculated and monitored by the Environment Agency as part of the Salmon Action Plan for the Usk. 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. **Conservation status of Feature 5: Bullhead *Cottus gobio*** Status: **Unfavourable**: 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. **Conservation status of Feature 6: European otter *Lutra lutra*** Status: **Favourable**. 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

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	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. **Conservation status of Feature 7: Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation** Status: **Unfavourable**: 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 Ranunculus, are dominant. Habitat suitability studies4 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. 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.
Vulnerabilities (includes existing pressures and trends)	▪ **Abstraction levels -** Entrainment in water abstractions directly impacts on lamprey 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. ▪ **Eutrophication** - 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

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	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. ▪ **Diffuse Pollution** - 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. ▪ **Barriers to migration** - 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 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

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	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. ▪ **Development pressure** - 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). ▪ **Invasive non-native plants** - are a detrimental impact on the water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation. Giant hogweed, Himalayan balsam and Japanese knotweed should be actively managed to control their spread and hopefully reduce their extent in the SAC. ▪ **Artificially enhanced densities of other fish** - may introduce unacceptable competition or predation pressure and the aim should be to minimise these risks in considering any proposals for stocking. ▪ **External factors** - 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.

Site Name: River Usk **Location Grid Ref: SO301113** **JNCC Site Code: UK0013007** **Size: 1007.71** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Landowner/ Management Responsibility	▪ N/A
HRA/AA Studies undertaken that address this site	HRA Screening of the County Council of the City and County of Cardiff Local Development Plan Preferred Strategy Sept 2007. www.cardiff.gov.uk/ObjView.asp?Object_ID=9788 ▪ The Screening states that the most likely mechanism for the Preferred Strategy to have a significant effect on this site is through airborne pollution. HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008. http://www.torfaen.gov.uk/EnvironmJentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf ▪ 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.

Site Name: Sugar Loaf Woodlands **Location Grid Ref: SO295166** **JNCC Site Code: UK0030072** **Size: 173.84** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Sugar Loaf Woodlands are the largest example of old sessile oak woods near the south-eastern fringe of the habitat's range in the UK and Europe. The relatively dry situation restricts the development of the Atlantic flora associated with the habitat, but the main floristic components of sessile oak *Quercus petraea* canopy, acidic ground flora (typically of bilberry *Vaccinium myrtillus* and wavy hair-grass *Deschampsia flexuosa*) and extensive fern and bryophyte cover are in place. The woodland is grazed, but regenerates within gaps and at the fringes, where transitions to upland grassland and heath communities occur. The woodland also supports a smaller area of beech woodland and a large colony of red wood ants, which are more commonly found in southern and eastern Britain.
Qualifying Features	Annex I Habitats qualifying feature: ▪ Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
Conservation Objectives	**Conservation Objective for Feature:** **Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles** Vision for feature: The vision for this feature is for it to be in favourable conservation status within the site, as a functioning and regenerating* oak wood, where all of the following conditions are satisfied: ▪ The wooded area is no less than 122 ha; ▪ The remainder of the site is semi-natural acid grassland, heathland, bracken and scrub, often forming a transition zone at the woodland edge; ▪ Saplings of birch betula spp, oak Quercus petraea, alder Alnus glutinosa or holly Ilex aquifolium dominate the tree regeneration; ▪ Young beech Fagus sylvatica and sycamore Acer pseudoplatanus trees are rare;

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	▪ The woodland ground flora is composed of a range of typical native plants including bilberry Vaccinium myrtillus, wavy-hair grass Deschampsia flexuosa and the mosses Plagiothecium undulatum, Rhytidiadelphus loreus, Dicranum majus. ▪ The liverwort Bazzania trilobata to continue to be present in its core area of Unit 1. ▪ All factors affecting the achievement of these conditions will under control. *A "functioning and regenerating oak woodland" would include all the positive attributes described in the performance indicators. Performance indicators for Feature 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 Sugar Loaf Woodlands Management Plan.
Component SSSIs	▪ Sugar Loaf Woodlands SSSI The site has been divided into 4 management units. A map of these units can be viewed on the CCW website.
Key Environmental Conditions (factors that maintain site integrity	Canopy regeneration is a key attribute for signifying the functioning, habitat quality and sustainability of most woodland types, including sessile oak woods. ▪ **Grazing regime** - The grazing within all 4 units has suppressed the regeneration of native woody species and in combination with past coppicing has resulted in a uniform age structure. The areas of Sugarloaf woodlands not subjected to continuous grazing appear to become densely populated with saplings of all species. This may demonstrate that the main factor restricting natural regeneration of woody species in

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	Sugar Loaf Woodlands is grazing and that current grazing levels are incompatible with sustainable semi-natural woodland at this site. Liaison between owners/commoners is needed to discuss possible means of managing grazing to encourage natural regeneration in the woodland areas, including possible agreements to fence all new and some existing canopy gaps. Most of Unit 4 is already fenced and stock free and regeneration is now taking place, though some periodic grazing may be required to control bramble. ▪ **Manage non-native species** (Tree/shrub) - if necessary control the spread of non-native species (principally beech) through a programme of selective removal of saplings to ensure no further trees get into the canopy. Non-native beech trees can be accepted as part of the canopy in the short to medium term. Consequently, the limits need only be met in 75% of existing woodland. The upper limits are 5% cover of non-native trees in the canopy and no beech (or other invasive non-native shrubs) in the understorey or shrub layer. The conservation objectives state that the canopy should be composed of locally native trees and, apart from a beech woodland area within Unit 1, the canopy of Sugar Loaf Woodlands is currently dominated by oak throughout. Where beech is present its seedlings tend to dominate the regeneration and without management to control these locally non-native seedlings further parts of the SAC feature will become unfavourable. ▪ **Manage woodland by thinning/small group felling** - Much of the woodland lacks structure due to past woodland management to remove timber. It is likely to be decades before a more natural woodland structure can develop. Trees could be thinned to create a more uneven age structure or open gaps in the canopy when an appropriate means of controlling grazing levels have been identified and all dead/felled timber to be left in situ. This is already taking place in Unit 4 but elsewhere the grazing regime may be unsuitable. ▪ **Increase amounts of deadwood** - Deadwood is present on the site, but much has been removed in the past. In future, the owners should be encouraged to leave as much dead wood as possible.

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	▪ **Veteran trees** - Retain all veteran trees. ▪ **Manage bracken** - Bracken may require management where it is thought to be hindering successful regeneration, largely in the open areas and gaps. However, this needs to be balanced against the protection bracken offers for young saplings against browsing and its place as a key natural component of acidic woodlands. Together bracken and bramble should cover less than 75% of the woodland floor.
SAC Condition Assessment	**Conservation Status of Feature 1:** **Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles** Unfavourable (2007), due to: ▪ Grazing having a strong role in preventing some of the canopy regeneration and in creating a sparser ground flora; ▪ Some areas within the SAC/SSSI remain as open areas, especially on the fringe of the site. Whilst having some open areas is beneficial for a range of species, not all these open areas are of benefit to either the SAC or SSSI features; ▪ The even-aged and dense canopy in much of the wooded area. This is creating very densely shaded ground, field and shrub layers and is one of the barriers to regeneration of saplings and ground flora. However, more canopy gaps would be expected in the long term as the canopy trees die, or through storm damage in the more exposed parts of the site;
Vulnerabilities (includes existing pressures and trends)	▪ **Innapropriate grazing regime** - The grazing within all 4 units has suppressed the regeneration of native woody species and in combination with past coppicing has resulted in a uniform age structure. The areas of Sugarloaf woodlands not subjected to continuous grazing appear to become densely populated with

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	saplings of all species. This may demonstrate that the main factor restricting natural regeneration of woody species in Sugar Loaf Woodlands is grazing and that current grazing levels are incompatible with sustainable semi-natural woodland at this site. ▪ **Non-native species** - Where beech is present its seedlings tend to dominate the regeneration and without management to control these locally non-native seedlings further parts of the SAC feature will become unfavourable. ▪ **Bracken encroachment** - can hinder successful regeneration in the open areas and gaps. However the bracken also offers protection for young saplings against browsing and its place as a key natural component of acidic woodlands. The accumulation of bracken litter on the common poses a fire risk in dry weather. Restrictions on public access could be considered, but it would be very difficult to control most incidents as they appear to be the result of children deliberately setting fires. Control of bracken in a buffer strip at the wood edges may be a more sensible consideration. ▪ **Air pollution*** - Airborne acid and nutrient deposition could be a particular problem for epiphytic lichens on the oak trees. o Acidification. o Eutrophication. o Photochemical oxidants. o Particulate matter.
Landowner/ Management Responsibility	▪ Unit 1 - National Trust (common) ▪ Unit 3 - National Trust (common)

* Air Pollution Information System (APIS). Oak Woodland. Available from: http://www.apis.ac.uk/cgi_bin/habitat_result.pl?habResult=Oak+woodland&choice=allHabs&haborspec=habitat&submit.x=23&submit.y=8

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	▪ Unit 4 - National Trust (tenanted) The management units have been largely based on the three woodland blocks that make up the SAC and SSSI. The SAC feature is the same for each block of woodland and units 1& 3 are on the same common and so are under broadly the same management, but their geographical isolation from each other gives them the status of separate units. Unit 2 is a small privately owned and enclosed area within Unit 1. Unit 4 is on a farm in the Tir Gofal agri-environment scheme and so is easily separated from the other two units. Unit 3 includes one isolated area of woodland joined to the enclosed Unit 4, but on the common and so potentially under the same management regime as the rest of Unit 3.
HRA/AA Studies undertaken that address this site	HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008. http://www.torfaen.gov.uk/EnvironmJentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf ▪ The screening states that the LDP will not have a direct impact on the site; however, it is identified that airborne acid and nutrient deposition may be a problem for this site. It concludes that given the distance of the site from the Torfaen boundary the effect that the LDP could have on the site is negligible.

Site Name: Usk Bat Sites **Location Grid Ref: SO190145** **JNCC Site Code: UK0014784** **Size: 1686.4** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	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. 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 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. 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 (*Sorbus minima*) which is unique to this area of Brecknock), limestone fern, endemic hawkweeds and alpine enchanter's-nightshade. 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 *Tortella tortuosa*, and liverworts like *Scapania aspera*. 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 Collema cristatum and examples of lichen communities like the *Leproplacetum chrysodetae* and *Aspicilion calcarea*. 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 (*Sorbus* spp.).

Site Name: Usk Bat Sites **Location Grid Ref: SO190145** **JNCC Site Code: UK0014784** **Size: 1686.4** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Qualifying Features	Annex I Habitats qualifying feature: ▪ European dry heaths ▪ Degraded raised bogs still capable of natural regeneration ▪ Blanket bogs* Priority feature ▪ Calcareous rocky slopes with chasmophytic vegetation ▪ Caves not open to the public ▪ Tilio-Acerion forests of slopes, screes and ravines* Priority feature Annex II Species primary reason for selection: ▪ Lesser horseshoe bat *Rhinolophus hipposideros*
Conservation Objectives	**Conservation Objective for Feature 1:** **Lesser Horseshoe Bat *Rhinolophus hipposideros*** 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: ▪ The site will support a sustainable population of lesser horseshoe bats in the River Usk area. ▪ The population will viable in the long term, acknowledging the population fluctuations of the species. ▪ Buildings, structures and habitats on the site will be in optimal condition to support the populations. ▪ 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 ▪ 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. ▪ 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
- All factors affecting the achievement of the above conditions are under control.

Performance indicators for Feature 1

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 Usk Bat Sites Management Plan.

Conservation Objective for Feature 2:
Blanket bog

Vision for Feature 2
- 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.
- The bog vegetation is largely a mixture of dwarf shrubs, hare's-tail cottongrass and mosses, including bog-mosses.
- Extensive areas of purple moor-grass or hare's-tail cottongrass show signs of recovery towards a more mixed dwarf shrub sward.
- The natural hydrological regime is maintained and there is continued peat formation and thus carbon storage.
- Areas of bare peat are not extensive and most areas show signs of recovery.
- Peat profiles containing important pollen records are maintained.
- All factors affecting the achievement of the above conditions are under control.

Performance indicators for Feature 2

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	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 Usk Bat Sites Management Plan. **Conservation Objective for Feature 3:** **Tilio-Acerion forests of slopes, screes and ravines** Vision for Feature 3 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: ▪ There are extensive patches of semi-natural woodland on the cliffs of the Llangatwg escarpment and hillsides in the Clydach gorge. ▪ The woodland canopy is dominated by locally native species, including lime ash Fraxinus excelsior, Tilia spp., pedunculate oak Quercus robur, hazel Corylus avellana, birch Betula spp., whitebeams Sorbus spp. and, in the Clydach gorge, beech Fagus sylvatica. Rare whitebeams are a significant component of the canopy. ▪ Saplings of locally native species dominate the tree regeneration and there is evidence of sufficient regeneration to maintain the canopy in the long term. ▪ There is an accumulation of standing and fallen deadwood as the woodland develops. ▪ The woodland ground flora is composed of a range of typical native plants including enchanters-nightshade Circaea lutetiana, dog's-mercury Mercurialis perennis, wood-sorrel Oxalis acetosella, hart's-tongue Phyllitis scolopendrium and wood sage Teucrium scorodonia. ▪ The populations of rare whitebeams are stable or increasing. ▪ Young sycamore Acer pseudoplatanus trees are rare, as are beech Fagus sylvatica in areas away from the Clydach gorge. ▪ Plants indicating disturbance and nutrient enrichment, such as nettles, cleavers and weeds, are not

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	dominant in the ground flora of the woodland. ▪ All factors affecting the achievement of the above conditions are under control. Performance indicators for Feature 3 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 Usk Bat Sites Management Plan. **Conservation Objective for Feature 4:** **Calcareous rocky slopes with chasmophytic vegetation** Vision for Feature 4 ▪ Sufficient vegetation within crevices remains free from disturbance to support typical plants, including mosses, ferns and rare hawkweeds (Hieracium spp.) and allow them to sustain their populations into the future. ▪ Areas accessible to grazing animals should free from being smothered by ivy or heavily shaded by trees. ▪ All factors affecting the achievement of the above conditions are under control. Performance indicators for Feature 4 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 Usk Bat Sites Management Plan. **Conservation Objective for Feature 5:** **Caves not open to the public**

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	Vision for Feature 5 ▪ 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. ▪ Numbers of roosting bats are stable or increasing in the system as a whole. ▪ All factors affecting the achievement of the above conditions are under control. Also see the vision for lesser horseshoe bats. 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 (www.jncc.gov.uk). 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. Performance indicators for Feature 5 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 Usk Bat Sites Management Plan. **Conservation Objective for Feature 6:** **Degraded raised bogs still capable of natural regeneration**

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	Vision for Feature 6 ▪ 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. ▪ 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. ▪ All factors affecting the achievement of the above conditions are under control. Performance indicators for Feature 6 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 Usk Bat Sites Management Plan. **Conservation Objective for Feature 7:** **European dry heaths** Vision for Feature 7 ▪ The extent, quality and diversity of heath vegetation within the constituent sites is maintained and, where possible, degraded heath is restored to good condition. ▪ The main heathland areas have a varied age structure with a mosaic of young heath, mature heath and degenerate heath. ▪ All factors affecting the achievement of these conditions are under control. Performance indicators for Feature 7 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

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	performance indicators can be found within the Usk Bat Sites Management Plan.
Component SSSIs	▪ Mynydd Llangatwg/ Mynydd Llangattock SSSI (units 1 to 15) ▪ Siambre Ddu SSSI (unit 19) ▪ Buckland Coach House & Ice House SSSI (unit 20) ▪ Foxwood SSSI (unit 21) 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 CCW website.
Key Environmental Conditions (factors that maintain site integrity	**Key environmental conditions for the Lesser Horseshoe Bat:** **Buckland House Maternity Roost** ▪ Site security - Access to the site should be secured against unauthorized access ensuring doors, gates and security fences are in sound condition. ▪ External condition of building - Fabric of building sufficient to maintain roost conditions internally with: o Weatherproof roof. The roof covering materials (slates, tiles etc.) in weatherproof condition with no significant gaps, slippage or damage. o No holes large enough to allow soaking of roof timbers, excessive heat loss or high light levels in the roost area o Walls sound, rainwater goods in adequate condition. o The building is structurally stable. No significant deterioration in overall condition of the building. ▪ Roost entrance -buildings and underground sites: o Unobstructed roost entrance large enough for bats to fly through unimpeded. Normal minima: 300 x 200 mm. o No artificial lights shining on access or associated flight paths. ▪ External Disturbance - Disturbance levels acceptable to bats with: o No increase since previous visit.

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	○ Human access to roost controlled and limited. ▪ Internal condition of building/ underground site in roost area: ○ 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. ○ Low light levels with no through draught. ○ No toxic substances present, which would adversely affect the health of the bats (e.g. chemical timber treatment within inappropriate substances). ▪ Temperature of roost area: ○ Range of temperatures available to bats with mean temperature in July greater than 20°C ▪ Internal disturbance: ○ Human access to roost area controlled and limited. ○ Disturbance is kept to a minimum. **Hibernation Sites** ▪ Site entrance: ○ Existing entrances should be unobstructed. ○ No human-influenced new entrances causing a change to ventilation. ○ No change in size sufficient to affect airflow and internal temperature. ▪ External conditions of site: ○ Vegetation present close to entrance(s) but not obstructing it (them). ○ No artificial lights shinning on entrance(s). ▪ Internal conditions: ○ The temperature should remain constantly cool (8-12°C) and dark, once beyond the entrance zone. ○ No significant man-induced changes to ventilation or temperature regime. ○ No toxic substances present (dumping of oil or other substances).

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	▪ Internal disturbance: o 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. o Disturbance is kept to a minimum. **Foraging areas and links to roosts** ▪ Habitat Quality: o 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 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. ▪ Connectivity: o 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. 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

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	Habitat fragmentation **Key Environmental Conditions for the Blanket Bog:** ▪ **Drainage** - No new drainage ditches should be dug, and wherever possible old drainage ditches should be allowed to infill naturally. o There should be no evidence of new drains or major clearance of old drains or deepening of bog outlet streams. ▪ **Burning** - 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. o No evidence of significant burning (patches larger than 1ha) in any areas of blanket bog. ▪ **Peat Erosion** - There is a natural cycle of peat erosion and deposition but the balance can be upset by burning, heavy grazing, pollution and vehicle damage. o The total extent of active erosion over a 5-year period should not exceed the total extent of areas showing signs of peat accumulation and re-vegetation. ▪ **Air quality** - No exceedence of critical loads for: o Sulphur dioxide – 20µg/m³ o Nitrous Oxides – 30µg/m³ o Ozone – 3000 ppb o ammonia – 1µg/m³ o N – 5-10 kg/ha/yr o acid – 0.35keq/ha/yr

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	Monitoring stations located at grid location: 319097.79 214637.88 **Key Environmental Conditions for the Tilio-Acerion forests of slopes, screes and ravines:** ▪ **Grazing** - 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 & 2, the woodland has developed on common land and parts are subject to high grazing levels by sheep. The woodland in units 5, 12 & 13 is now largely un-grazed and the ground flora is noticeably more luxuriant in these areas. o Grazing levels should be sufficient to allow regeneration in the long term. o On the common (units 1 & 2), maintain grazing at or below the current (2007) levels. o Un-grazed areas (unit 5, 12, 13) should remain un-grazed. ▪ **Woodland Management** - 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 o There should be no evidence of tree felling or coppicing within the past five years. (Tree surgery for safety reasons excluded). o Dead wood should ideally be left where it falls and standing dead trees should be allowed to fall naturally. Movement and cutting/tidying of dead wood should be avoided and/or limited, unless essential for public safety. ▪ **Non-native species** - 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 & 2 may not be desirable, as it would replace the ash woodland. Limits should be met in 70% of the woodland.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	o 5% cover of non-native trees in the canopy. o No cotoneaster (or other invasive non-native shrubs) in the understorey or shrub layer. **Key Environmental Conditions for the Calcareous rocky slopes with chasmophytic vegetation:** ▪ **Grazing** - Low grazing levels on the more accessible rocky areas in units 1 & 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. o Sufficient grazing to prevent the development of scrub or spread of ivy and tall vegetation in units 1 & 2. ▪ **Rock Climbing** - 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. o No rock climbing in the key areas of units 1 & 2 without agreement. ▪ **Quarrying** - any quarrying in the key areas of units 1 & 2 would lead to habitat loss. **Key Environmental Conditions for the Degraded raised bogs still capable of natural regeneration:** ▪ **Drainage** - See blanket bog above. ▪ **Grazing** - 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. o Upper limits: Overall grazing pressure of 0.05 livestock units/ha/year on the bog area. AND:

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	o Minimal winter grazing. AND: o No stock feeding o Lower limit: Sufficient to prevent the establishment of trees and shrubs in the long term. ▪ **Burning** - 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. ▪ **Air quality** - See blanket bog above. **Key Environmental Conditions for the European dry heaths:** ▪ **Burning** - 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. o 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. ▪ **Erosion/Bare Ground** - Is generally caused by uncontrolled fires (see above) or heavy trampling. o Upper Limit - 10% bare ground ▪ **Air Quality** - 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: o Sulphur dioxide - 20µg/m³ o Nitrous Oxides - 30µg/m³

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	o Ozone - 3000 ppb o Ammonia - 1µg/m³ o N - 10-20 kg/ha/yr o Acid - 0.35keq/ha/yr Monitoring station located at grid location: 319097.79 214637.88
SAC Condition Assessment	**Conservation Status of Feature 1:** **Lesser horseshoe bat *Rhinolophus hipposideros*** The conservation status of this feature within the site is considered to be **Favourable** (2006). Based on annual counts made at all locations between 2000 and 2006, the lesser horseshoe bat feature is considered to be in favourable condition. **Conservation Status of Feature 2:** **Blanket bog** The conservation status of this feature within the site is considered to be **Unfavourable** (2006). 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. 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.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	Conservation Status of Feature 3: **Tilio-Acerion forests of slopes, screes and ravines** The conservation status of this feature within the site is considered to be **Favourable** (2006). Assessment carried out in August 2004 indicated that feature condition was: Favourable, maintained. All the factors affecting the features appear to be under control. **Conservation Status of Feature 4:** **Calcareous rocky slopes with chasmophytic vegetation** The conservation status of this feature within the site is considered to be **Favourable** (2006). Assessment carried out in August 2004 indicated that feature condition was: Favourable, maintained. All the factors affecting the features appear to be under control. **Conservation Status of Feature 5:** **Caves not open to the public** The conservation status of this feature within the site is considered to be **Favourable** (2006). 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. **Conservation Status of Feature 6:** **Degraded raised bogs still capable of natural regeneration**

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	The conservation status of this feature within the site is considered to be **Unfavourable** (2006). 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 identified for this feature. **Conservation Status of Feature 7:** **European dry heaths** The conservation status of this feature within the site is considered to be **Unfavourable** (2006). 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.
Vulnerabilities (includes existing pressures and trends)	**Lesser Horseshoe bat:** ▪ **Deterioration of buildings used to roost** - 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. ▪ **Disturbance** - 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.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ **Temperature change** - 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. ▪ **Habitat fragmentation** - 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 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. **Blanket bog**: ▪ **Air pollution** - 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*: o Acidification; o Photochemical oxidants; o Direct toxicity; and o Eutrophication. ▪ **Hydrological change** - the blanket bog has been subject to hydrological change as a result of past ditch

* 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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	construction to supply water to reservoirs. ▪ **Recreational activities** - 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. ▪ **Development** - 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 character and quality. **Tilio-Acerion forests of slopes, screes and ravines:** ▪ **Grazing** - 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. ▪ **Non-native species** - The ash woodland in units 1 & 2 is vulnerable to the introduction of beech. **Calcareous rocky slopes with chasmophytic vegetation:** ▪ **Invasive plants** - 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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	spreading into feature habitats. ▪ **Recreational activities** - 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. **Degraded raised bogs still capable of natural regeneration:** ▪ **Air Pollution** - See blanket bog above. ▪ **Hydrological Change** - No new drainage ditches should be dug within the bog and outlet and inflow channels must not be deepened or altered in any way. ▪ **Grazing** - 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. **European dry heaths:** ▪ **Grazing** - 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.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ **Bracken and scrub encroachment** - 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. ▪ **Burning in combination with intense grazing** - 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. ▪ **Dumping** - 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. ▪ **Development** - See blanket bog above.
Landowner/ Management Responsibility	▪ N/A
HRA/AA Studies undertaken that address this site	HRA Screening of the Torfaen Local Development Plan (2006-2021) January 2008. http://www.torfaen.gov.uk/EnvironmJentAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf ▪ 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 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.

Appendix B Policy Screening

POLICY SCREENING

Policy References: Plan/ Proposal	Potential effects (Criteria 1-9, see key) Rationale/ Comments	Likely Significant Effect (LSE) No X Yes ✓ Uncertain ?
Strategy Policies		
Outline key policies in turn	***Brief description of potential effect, using Criteria 1-9 as relevant.***	***Identification of LSE***
SP1 Northern Strategy Area – Sustainable Growth and Regeneration	The plan or, a component of the plan is likely to steer a type of development towards or encourages development in, an area that includes a European site or an area where development may affect a European site indirectly or by induced pathways.	***?***
SP2 Southern Strategy Area – Regeneration	The plan or, a component of the plan is likely to steer a type of development towards or encourages development in, an area that includes a European site or an area where development may affect a European site directly, indirectly or by induced pathways.	***?***
SP3 The Retail Hierarchy & Vitality & Viability of the Town Centres	The plan or, a component of the plan is likely to steer a type of development towards or encourages development in, an	√

Policy References: Plan/ Proposal	Potential effects (Criteria 1-9, see key) Rationale/ Comments	Likely Significant Effect (LSE) No X Yes ✓ Uncertain ?
	area that includes a European site or an area where development may affect a European site directly, indirectly or by induced pathways.	
SP4 Delivering Quality Housing	The plan or, a component of the plan is likely to steer a type of development towards or encourages development in, an area that includes a European site or an area where development may affect a European site directly, indirectly or by induced pathways.	√
SP5 Spatial Distribution of Housing Sites	The plan or, a component of the plan is likely to steer a type of development towards or encourages development in, an area that includes a European site or an area where development may affect a European site directly, indirectly or by induced pathways.	√
SP6 Ensuring Accessibility	The plan or, a component of the plan is likely to steer a type of development towards or encourages development in, an area that includes a European site or an area where development may affect a European site directly, indirectly or by induced pathways.	**?**

Policy References: Plan/ Proposal	Potential effects (Criteria 1-9, see key) Rationale/ Comments	Likely Significant Effect (LSE) No X Yes ✓ Uncertain ?
SP7 Climate Change	The policy is intended to protect the natural environment, including biodiversity.	***?***
SP8 Sustainable Economic Growth	The plan or, a component of the plan is likely to steer a type of development towards or encourages development in, an area that includes a European site or an area where development may affect a European site indirectly or by induced pathways.	***?***
SP9 Green and Healthy Communities	The plan or, a component of the plan is likely to steer a type of development towards or encourages development in, an area that includes a European site or an area where development may affect a European site indirectly or by induced pathways.	***X***
SP10 Protection and Enhancement of the Natural Environment	The policy is intended to protect the natural environment, including biodiversity, and such enhancements are unlikely to affect a European site.	***X***
SP11 Protection and Enhancement of the Built Environment	The plan or, a component of the plan is likely to steer a type of development towards or encourages development in, an area that includes a European site or an area where development may affect a	***?***

Policy References: Plan/ Proposal	Potential effects (Criteria 1-9, see key) Rationale/ Comments	Likely Significant Effect (LSE) No X Yes ✓ Uncertain ?
	European site indirectly or by induced pathways.	
SP12 Securing an Adequate Supply of Minerals	The plan or, a component of the plan is likely to steer a type of development towards or encourages development in, an area that includes a European site or an area where development may affect a European site directly, indirectly or by induced pathways.	**?**
SP13 Delivering Sustainable Waste Management	The plan or, a component of the plan is likely to steer a type of development towards or encourages development in, an area that includes a European site or an area where development may affect a European site directly, indirectly or by induced pathways.	**?**

Policy Screening: Determining Potential Effects Criteria Key (Tyldesley, 2006)	
Criteria No	**Rationale**
Reasons why a policy will not have an effect on a European Site	
1.	The policy will steer development away from European sites and associated sensitive areas.
2.	The policy is intended to protect the natural environment, including biodiversity.
3.	The policy is intended to conserve or enhance the natural, built or historic environment, and such enhancements are unlikely to affect a European site.
4.	The policy concentrates development in existing urban areas, steering development away from European sites and sensitive areas.
5.	Where there is not a pathway between the plan (the impact source) and the European site's interest features (the receiver) – whether direct, indirect or by induced pathway.
Reasons why a policy could have an effect on a European Site	
6.	The plan steers a quantum or type of development towards or encourages development in, an area that includes a European site or an area where development may indirectly affect a European site
7.	Where there is a pathway between the plan (the impact source) and the European site's interest features (the receiver) – whether by direct, indirect or induced pathway.
Reasons why a policy would be likely to have a significant effect	
8.	The policy makes provision for a quantum or kind of development that in the location(s) proposed would be likely to have a significant effect on a European site. **This is evident whenever site conservation objectives are contravened.** Appropriate assessment required.

Appendix C Plans and Programmes Review

Plans and Projects Review

National

National	
People, Places, Futures: The Wales Spatial Plan (update) 2008: http://wales.gov.uk/consultations/currentconsultation/improveps/wspconsult/?lang=en	
Plan Type	**Regional Spatial Strategy**
Plan Owner/ Competent Authority	**Welsh Assembly**
Currency	**Adopted 2004**
Region/Geographic Coverage	**Wales**
Sector	**Planning**
Related work SA/SEA HRA/AA	**SEA of the Wales Spatial Plan Update 2008:** *http://wales.gov.uk/consultations/currentconsultation/improveps/wspconsult/?lang=en*
Document Details	**Potential impacts that could cause 'in-combination' effects**
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. 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	▪ 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. ▪ 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. ▪ New communities require increased infrastructure – potential for land take, pollution increase, disturbance/ severance of habitats and species. ▪ 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. ▪ Recreation pressures may result from housing developments near/ adjacent to Natura 2000 sites. ▪ Atmospheric pollution generated as a result of housing, employment

National	
People, Places, Futures: The Wales Spatial Plan (update) 2008: http://wales.gov.uk/consultations/currentconsultation/improveps/wspconsult/?lang=en	
housing. 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. 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.	and transport growth.

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

National	
Property Strategy for Employment in Wales 2004- 2008: http://new.wales.gov.uk/topics/businessandeconomy/property/Prop-strat/?lang=en	
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. **Premier Business Park** (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. **Business Parks** (6) - 2/3 on M4 Corridor. **Strategic Sites** (15/20) -concentrated on large centres of population with proximity to the primary road network. **Strategic Mixed Use Sites** (5-10) - to complement the business parks and strategic sites network. **Special Category Sites** (1) - but with other sites having 'key' sector roles	▪ Direct loss of habitat through development - There are 4 SACs in close proximity to the M4, these are: o River Usk SAC; o Cardiff Beech Woods SAC; o Cefn Cribwr Grasslands SAC; and o Kenfig SAC. ▪ Employment growth may lead to increased transport movements. ▪ New development requires increased infrastructure - potential for land take, pollution increase, disturbance/ severance of habitats and species. ▪ Growth in the requirement for waste management/ transport disposal from new businesses has the potential to increase pollution, and introduce land take issues. ▪ Recreation pressures may result from developments near/ adjacent to Natura 2000 sites. ▪ Atmospheric pollution generated as a result of employment and transport growth.

National	
Property Strategy for Employment in Wales 2004- 2008: http://new.wales.gov.uk/topics/businessandeconomy/property/Prop-strat/?lang=en	
City/Town Centre Office Sites Extensive network based on the main centres of population and existing critical mass, supplemented by smaller scale opportunities The following areas are recommended for early consideration: - major settlements ▪ Cardiff/Cardiff Bay ▪ Swansea ▪ Newport ▪ Wrexham - other settlements ▪ Caerphilly ▪ Cwmbran ▪ Merthyr Tydfil ▪ Carmarthen ▪ Newtown ▪ Bangor ▪ Colwyn Bay **Industrial Estates/Local Sites** 50-70 – to serve essentially sub-regional and local markets.	

National	
Wales Transport Strategy 2006: http://new.wales.gov.uk/consultations/closed/busandeconcloscons/951740/?lang=en	
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**
Document Details	**Potential impacts that could cause 'in-combination' effects**
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. 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'. The WTS seeks to maximise the contribution transport can make to delivering 15 social, economic and environmental outcomes: **Social** ▪ Improving access to healthcare ▪ Improving access to education and life-long learning ▪ Improving access to shopping and leisure facilities ▪ Encouraging healthy lifestyles	▪ 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.

National	
Wales Transport Strategy 2006: http://new.wales.gov.uk/consultations/closed/busandeconcloscons/951740/?lang=en	
▪ Improving the actual and perceived safety of travel **Economic** ▪ Improving connectivity (links) within Wales and internationally ▪ Improving the efficient, reliable and sustainable movement of people ▪ Improving the efficient, reliable and sustainable movement of freight ▪ Improving access to employment opportunities ▪ Improving access to key visitor attractions ▪ Increasing the use of more sustainable materials in the maintenance of Wales' transport assets and in the provision of new transport infrastructure **Environmental** ▪ 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 ▪ Reducing the negative impact of transport on the local environment - water pollution, land contamination, noise and vibration, light pollution and links between communities ▪ Reducing the negative impact of transport on our heritage - landscape, townscape, historical environment and Wales' distinctiveness ▪ Reducing the negative impacts of transport on biodiversity and increasing positive impacts	

National	
The Trunk Road Forward Programme 2002: http://wales.gov.uk/topics/transport/roads/1397701/?lang=en	
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**
Document Details	**Potential impacts that could cause 'in-combination' effects**
Phase 1 (Start March 2007) A465 Abergavenny to Gilwern ▪ 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. http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section1.pdf?lang=en M4 Castleton to Coryton Widening ▪ 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: o June 2008 - November 2008: J30 to J32 - Westbound	▪ 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. ▪ M4 Castleton to Coryton Widening - Junction 32 of the M4 lies approximately 1.2km away from Cardiff Beech Woods SAC. ▪ 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. ▪ 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. ▪ All the development proposed has the potential to increase levels of traffic and therefore contribute to an increase in diffuse air pollution.

National	
The Trunk Road Forward Programme 2002: http://wales.gov.uk/topics/transport/roads/1397701/?lang=en	
widening. o November 2008 - April 2009: J29 to J30 - Eastbound widening. o April 2009 - August 2009: J29 to J30 - Central Reserve works. o August 2009 - December 2009: J29 to J32 - Westbound widening. **Phase 2 (Could be ready to start by April 2010)** A465 Brynmawr to Tredegor ▪ 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 Nantybwch Junction (phase two). http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section3.pdf?lang=en A465 Gilwern to Brynmawr ▪ 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, Maesygwartha, Upper Clydach, Blackrock and Brynmawr. http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section2.pdf?lang=en	

National	
The Trunk Road Forward Programme 2002: http://wales.gov.uk/topics/transport/roads/1397701/?lang=en	
New M4 Magor to Castleton ▪ 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. http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase2/NewM4/New_M4_Preferred_Route.pdf?lang=en **Phase 3 (Unlikely to start before April 2010)** A4042 Llanellen ▪ A narrow bridge crossing with limited pedestrian facilities and narrow winding approach from the south. Cardiff International Airport Access ▪ 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	

National	
The Trunk Road Forward Programme 2002: http://wales.gov.uk/topics/transport/roads/1397701/?lang=en	
address the issues will be the subject of a public consultation planned to start in July 2008. The study is expected to be complete by the end of 2008. http://new.wales.gov.uk/topics/transport/roads/NewRoads3/ImprovingAccessToCardiffAirport/?lang=en A465:A470 to Hirwaun A465 Dowlais Top to A470 ▪ Includes the areas: Dowlais Top Junction (phase two), Penywern, Galon Uchaf, Gurnos, Cefn Coed, A470 Junction and West of A470. http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/Roads/newroadsphase1/40382112415/Section5.pdf?lang=en **On Hold** A4042 Penperlleni A40 Abergavenny	

National	
Minerals Planning Policy Wales 2001: http://new.wales.gov.uk/topics/planning/policy/minerals/mineralsplanning?lang=en	
Plan Type	**Minerals & Waste**
Plan Owner/ Competent Authority	**Welsh Assembly Government**
Currency	**2001 - ?**
Region/Geographic Coverage	**Wales**
Sector	**Minerals**

National	
Minerals Planning Policy Wales 2001: http://new.wales.gov.uk/topics/planning/policy/minerals/mineralsplanning?lang=en	
Related work SA/SEA HRA/AA	**N/A**
Document Details	**Potential impacts that could cause 'in-combination' effects**
Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar Sites 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 permission will not be granted unless there are: ▪ 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, ▪ imperative reasons of overriding public interest – including those of a social and economic nature. In determining this,	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: http://new.wales.gov.uk/topics/planning/policy/minerals/mineralsplanning?lang=en	
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. **Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)** 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 NNR24. Consideration must always include an assessment of: ▪ the need for the development in terms of UK considerations of mineral supply; ▪ the impact of permitting the development or refusing it on the local economy; ▪ whether alternative supplies can be made available at reasonable cost; and the scope for meeting the need in some other way; ▪ any detrimental effect of the proposals on the nature conservation interest of the site in terms of habitat,	

National	
Minerals Planning Policy Wales 2001: http://new.wales.gov.uk/topics/planning/policy/minerals/mineralsplanning?lang=en	
protected species, bio-diversity, environment and landscape, and the extent to which that should be moderated; and, ▪ 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. **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:** ▪ 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;	

Regional

Regional	
The South East Wales Consultation Draft Regional Waste Plan 1st Revision Oct 2007: http://www.sewaleswasteplan.org/	
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**
The **estimated total land area required** 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. **Biodiversity** - 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 **designated as absolute areas of constraint**, constituting areas that are unsuitable for	Natura 2000 sites have 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.

Regional	
The South East Wales Consultation Draft Regional Waste Plan 1st Revision Oct 2007: http://www.sewaleswasteplan.org/	
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.	

Regional	
South East Wales Transport Alliance: Outline of the Regional Transport Plan Jan 2007 http://www.sewta.gov.uk/PDF/OutlineRTP-Feb07.pdf	
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**
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** http://www.sewta.gov.uk/strategy.htm
Document Details	**Potential impacts that could cause 'in-combination' effects**
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". Our priorities build on our vision. They set the general direction of the Plan by answering the question "what really matters?" ▪ To improve access to services, facilities and employment, particularly by public transport, walking and cycling. ▪ To provide a transport system that increases the use of sustainable modes of travel. ▪ To reduce the demand for travel. ▪ 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. ▪ To provide a transport system that encourages healthy and active lifestyles, is safer and supports local communities.	▪ 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. ▪ 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. ▪ The in-combination effects of the Regional Transport Plan with Local Development Plans are likely to be positive in the long term. ▪ 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.

Regional	
South East Wales Transport Alliance: Outline of the Regional Transport Plan Jan 2007 **http://www.sewta.gov.uk/PDF/OutlineRTP-Feb07.pdf**	
▪ To reduce significantly the emission of greenhouse gases and air pollution from transport. ▪ To ensure that land use development in south east Wales is supported by sustainable transport measures. ▪ To make better use of the existing transport system. ▪ To play a full role in regenerating south east Wales. Our main problems are: ▪ Too many people are excluded from fully participating in society because their transport is poor. ▪ People see the transport system as being unsafe. They fear the impact of motor traffic on their local communities. ▪ We have become over-dependent on the motor car. That leads to high levels of traffic congestion and consequently an inefficient transport system. ▪ Carbon emissions hasten climate change and motor traffic degrades the environment. Our strategy has five practical cornerstones: ▪ Reducing the demand for travel through better land use planning and local service provision; ▪ Providing safer neighbourhoods for people to live in and to walk and cycle; ▪ Providing a much improved public transport system for medium and longer distance travel; ▪ Getting the best out of the existing highways, particularly the core highway network; ▪ Working with others to seek joint solutions to problems.	

Regional	
SEWTA Rail Strategy Study Jan 2006: http://www.sewta.gov.uk/PDF/RailStrategy.pdf	
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**
Document Details	**Potential impacts that could cause 'in-combination' effects**
In summary the strategy includes: ▪ Additional rolling stock to strengthen peak trains to provide for passenger growth and to avoid overcrowding and rolling stock renewal; ▪ Station improvements including improved station facilities, information, security and access - including additional parking; ▪ 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; ▪ 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	▪ Improvements to the rail network could lead to a reduction in car use and improvements to air quality in the region.

Regional	
South East Wales Transport Alliance: Outline of the Regional Transport Plan Jan 2007 http://www.sewta.gov.uk/PDF/OutlineRTP-Feb07.pdf	
Cardiff Central stations; ▪ 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; ▪ 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 & Beddau); and ▪ 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.	

Regional	
Turning Heads... A Strategy for the Heads of the Valleys 2020: http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/TransportPublications/565049/HoV_TurningHeads_eng.pdf?lang=en	
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** **http://new.wales.gov.uk/topics/businessandeconomy/property/HofV/hofv-about/?lang=en**
Document Details	**Potential impacts that could cause 'in-combination' effects**
Strategy set within context of Wales Spatial Plan - sets a shared vision for planning for the Heads of the Valleys. **Preferred Approach - Option A 'Developing Balanced Communities'** ▪ mix strong employment opportunities with distinctive communities. ▪ provide mix of housing, retail, leisure/ tourism. ▪ exploit internal and external employment opportunities including along M4 corridor. Public Sector Investment for 2006-09 includes: ▪ Environment c£300m, including improvements to Merthyr Tydfil, Ebbw Vale, Bargoed, Abertillery, Blaenavon and Mountain Ash Town Centres. ▪ Economy c£500m incuding the next phase of the A465(T) dualling. ▪ Tourism and leisure - c£50m, including local authority investment in community facilities.	▪ 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. ▪ 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. ▪ Atmospheric pollution generated as a result of housing, employment and transport growth. ▪ 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. ▪ Employment development along the M4 could have implications for Cardiff Beech Woods SAC, River Usk SAC, Kenfig SAC and Cefn Cribwr Grasslands SAC. There is the potential for direct land take, increased disturbance and increased levels of diffuse air pollution.

Regional	
Turning Heads... A Strategy for the Heads of the Valleys 2020: http://new.wales.gov.uk/docrepos/40382/4038231141/403821125/TransportPublications/565049/HoV_TurningHeads_eng.pdf?lang=en	
▪ Continued major public investment in the area, including the regeneration of the former Ebbw Vale Steelworks site. ▪ Housing renewal £0.6billion investment n social housing stock between now and 2012. **Key Strategic Goals include:** **SP2: A Perception Changing Landscape** 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. **SP5: Joined-Up Solutions for Business** 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.	

Catchment Abstraction Management Strategies	
The Ebbw and Lwyd Catchment Abstraction Management Strategy 2006: http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315612/?version=1&lang=_e	
Plan Type	**Catchment Abstraction Management Strategy**
Plan Owner/ Competent Authority	**Environment Agency Wales**
Currency	**2006-2010**
Region/Geographic Coverage	**Ebbw and Lwyd Catchment**
Sector	**Water**
Related work SA/SEA HRA/AA	**Details – hyperlink or reference to document**
Document Details	**Potential impacts that could cause 'in-combination' effects**
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. The Ebbw and Lwyd CAMS cover an area of approximately 330 km2 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 Blackwood. In this CAMS area water is abstracted from both surface water and groundwater for agriculture, industry, domestic use and public water supply.	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. 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. The River Usk SAC lies outside the boundary of the Ebbw and Lwyd CAMS. The River Lwyd (WRMU 10 & 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. 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.

Catchment Abstraction Management Strategies	
The Usk Catchment Abstraction Management Strategy 2006: http://www.environment-agency.gov.uk/regions/wales/858612/1317944/1325232/315618/?version=1&lang=_e	
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**
Document Details	**Potential impacts that could cause 'in-combination' effects**
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. The Usk CAMS covers an area of approximately 1169 km2 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. 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	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. 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. 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.

generation. 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. 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.	The River Usk SAC is sensitive to any changes in the hydrological regime, more specifically any changes to water flow and quality. 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. Coed y Cerrig SACs naturally high, largely spring-fed water table is essential to the Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*.

Local Development Plans

Local Development Plans	
Brecon Beacons National Park Authority Interim Unitary Development Plan 2007: http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/deposit-udp	
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**
Part 1 Policy 11: Ensuring Access to Employment Opportunities Proposals for appropriate commercial development will be permitted where they: i. enable the creation and expansion of businesses which support and diversify the rural economy; ▪ retain existing employment uses; ▪ utilise redundant buildings or brownfield sites; ▪ use local skills, products or resources including natural resources in a sustainable way; ▪ use existing transport routes and facilitate the use of alternative modes of transport; ▪ are reasonably accessible to adequate services and utilities; ▪ facilitate mixed-use development; or ▪ support Welsh culture. ii. Development proposals that cause unacceptable adverse impacts to the commercial vitality and viability of the area will not be permitted.	**Overarching Development Pressures** ▪ 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. ▪ 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. ▪ Water abstraction for new development - potential to impact surface and groundwater. ▪ Recreational pressures from housing/ development that is close to European sites. **Policy Q1: Sites of European Importance** Proposals for development which may have an unacceptable impact on a European Site or potential European Site will not be permitted unless:

Local Development Plans	
Brecon Beacons National Park Authority Interim Unitary Development Plan 2007: http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/deposit-udp	
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. **Part 1 Policy 12:** Supply of Housing Land The UDP will make provision for 1980 new dwellings. **Policy SS1: Housing Land in the First Tier Settlements** 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. The majority of development will be focused in the North and South East of the National Park.	i. the proposed development is directly connected with or necessary for the protection, enhancement and positive management of the site for conservation purposes; ii. the proposed development will not have an unacceptable impact on the conservation objectives associated with the site or the integrity of the site; iii. where the site supports priority habitats and/or species, there are reasons of public health or safety why the development should proceed; 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 v. there is no alternative solution.

Minerals and Waste Strategies

Minerals & Waste	
Blaenau Gwent County Borough Council Waste Strategy 2004: http://www.blaenau-gwent.gov.uk/documents/Documents_Education/waste_strategy.pdf	
Plan Type	**Municipal Waste Strategy**
Plan Owner/ Competent Authority	**Blaenau Gwent County Borough Council**
Currency	**2004**
Region/Geographic Coverage	**Blaenau Gwent County Borough Council administrative boundaries**
Sector	**Waste**
Related work SA/SEA HRA/AA	**N/A**
Document Details	**Potential impacts that could cause 'in-combination' effects**
Vision Statement 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". Objective 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. Future Options for Waste Management Diversion of wastes will play a key role in our future waste	**Overarching Development Pressures** **Recycling** Air Pollution/ Disturbance ▪ Transport and energy emissions generated by collection, sorting and processing ▪ Dust, noise and odour associated with industrial process **Composting** Air/ Water Pollution, Introduced/Invasive Species ▪ Odour, litter, possible vermin generation ▪ Release of spores [non-native], requirement for buffer zones (at least 250 metres between composting operations and sensitive receptors) ▪ Production of liquid pollutant ▪ Potential for combustion **Mechanical Biological Treatment (MBT)** Air Pollution, Land Take, Hydrology ▪ Emissions, traffic impacts, land take and wider environmental impacts analogous with industrial process ▪ Processes produce residue

Minerals & Waste	
Blaenau Gwent County Borough Council Waste Strategy 2004: http://www.blaenau-gwent.gov.uk/documents/Documents_Education/waste_strategy.pdf	
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. 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. 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.	**Refuse Derived Fuel (energy from waste)** Air Pollution ▪ Emission concerns, particulates and potentially dioxins **Anaerobic Digestion (energy from Waste)** Air/Water Pollution ▪ Emissions to air – odour (during collection, transport and pre-treatment) ▪ Wastewater – potential for high concentrations of metals, dissolved nitrogen and organic material **Incineration with Energy Recovery** Air/ Water Pollution ▪ Noise, dust, traffic, visual amenity, potential to impact fauna and flora ▪ Deposition of substances on surface water ▪ Solid, liquid emissions ▪ Gaseous emissions include odour, acid gas, heavy metals, particulates, organic compounds ▪ Ash residues comprising fine particles, [need to landfill ash/ scrap] dioxins, heavy metals salts, unreacted lime and carbon ▪ Contamination, accumulation of toxic substance (food chain)] **Landfill & Landraise** Air/ Water Pollution, Invasive Species, Land Take ▪ Methane and carbon monoxide emissions ▪ Leachate, salts, heavy metals, biodegradable and persistent organics ▪ Accumulation of hazardous substances in soil ▪ Topography alteration, visual intrusion ▪ Soil occupancy, prevention of other land uses ▪ Attraction of vermin ▪ Contamination, accumulation of toxic substances ▪ Potential exposure to hazardous substances ▪ Impact on surface water runoff, flood risk

Minerals & Waste	
Blaenau Gwent County Borough Council Waste Strategy 2004: http://www.blaenau-gwent.gov.uk/documents/Documents_Education/waste_strategy.pdf	
	SAC Specific Issues ▪ Specific potential in-combination impacts cannot be explored in absence of specific waste locations.

Other Plans and Programmes

Development Plan	
Brecon Beacons National Park Management Plan 2009-2014: http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/npmp/bbnpa-national-park-management-plan	
Plan Type	**National Park Management Plan**
Plan Owner/ Competent Authority	**Brecon Beacons National Park Authority**
Currency	**2009 - 2014**
Region/Geographic Coverage	**Brecon Beacons National Park Authority administrative boundary**
Sector	**Planning**
Related work SA/SEA HRA/AA	**N/A**
Document Details	**Potential impacts that could cause 'in-combination' effects**
The Plan sets a vision for the future of the Park and specifies actions and outcomes to pursue in the next five years to bring the Park closer to this shared vision. The Plan promotes coordinated implementation, monitoring, and evaluation of these activities collectively across a wide range of partners and stakeholders. In essence, it creates a framework for Park management, guiding decision-making and developing priorities. **Twenty-year Aims for Biodiversity** 4. **Ensure that sustainable management of designated sites maintains habitats and species populations in favourable condition.** As examples of the best habitats and species within the National Park, it is critical to ensure designated sites (e.g., SSSIs, SACs, NNRs, etc.) are brought into, or remain, in favourable condition. The designations provide the means to ensure that these sites are managed with special regard to biodiversity conservation. However, these	**Overarching Development Pressures** ▪ Housing and employment growth - direct land take and increased transport movements and associated air pollutants. ▪ Water abstraction for expanding communities - potential to impact surface and groundwater. ▪ Recreational pressures from housing/ development that is close to European sites. **SAC Specific Issues** ▪ Specific potential in-combination impacts cannot be explored in absence of specific development locations.

Development Plan	
Brecon Beacons National Park Management Plan 2009-2014: http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/npmp/bbnpa-national-park-management-plan	
sites still need to be managed in a wider context, to be considered as the focal sites of developing functional ecosystems at a landscape scale. Their sustainable management can be a catalyst to achieving better habitat condition in the surrounding land. **Twenty-year Aims for Planning and Development** 1. **Prepare an LDP which is responsive to drivers of change and enables development to meet identified needs.** The NPA will prepare an LDP which is resilient and responsive to drivers of change and which is proactive in mitigating the effects of climate change where possible. 2. **Provide a first class planning service.** In order to make its services first class, the NPA will strive to improve consistency of decision making, increase public engagement in, understanding of, and satisfaction with the NPA's planning service, and improve relationships with partner organisations. 3. **Ensure that there is sufficient land for market and affordable housing to meet the identified need.** The NPA is not a housing authority; this is the role of the unitary authorities. Nonetheless the NPA works closely with the relevant Housing Authorities in the preparation of the Local Housing Market Assessments and Local Housing Strategies. 4. **Allocate sufficient land for the provision of a variety and mix of employment opportunities to encourage a better link**	

Development Plan	
Brecon Beacons National Park Management Plan 2009-2014: http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/npmp/bbnpa-national-park-management-plan	
between the provision of employment and housing. The NPA and its partners will ensure the availability of land and investment in the Park is consistent with the special qualities of the area and avoids damage to important nature conservation sites and species. 5. **Maintain and encourage the vitality and viability of the Park's communities and town centres.** From the standpoint of local communities, this means that the NPA and its partners should encourage development which contributes to the creation of sustainable places, promotes integrated communities, with opportunities for living, working and socialising for all, and enables development that encourages a healthy and safe lifestyle and promotes well being. 6. **Improve the physical quality, energy efficiency, accessibility and sustainable design and construction of all development throughout the park.** In keeping with the National Park's commitments to sustainability and the climate change agenda, the NPA is producing up-to-date guidance on sustainable building design and materials in the National Park. This Sustainable Design Guide will become an exemplar in sustainable design. 7. **Minimise light and noise pollution.** Despite its proximity to urban centres such as Cardiff, Bristol, and Swansea, the Park boasts a dark night sky year round where, on clear nights, a plethora of stars can be seen. Similarly, its low population density and lack of major motorways limit light	

Development Plan	
Brecon Beacons National Park Management Plan 2009-2014: http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/npmp/bbnpa-national-park-management-plan	
and noise pollution. These factors contribute significantly to the sense of tranquillity and remoteness so often cited as a key special quality of the Brecon Beacons National Park. The NPA and its partners will seek to maintain and enhance these attributes. **Twenty-year Aims for Transport** 1. **Reduce the need for travel by controlling the location and design of development.** The NPA works closely with highway authorities in the production of integrated transport and land-use strategies and will be considering these factors as part of the development of the Park's forthcoming Local Plan. 2. **Provide an integrated transport system that encourages healthy and active lifestyles, and supports local communities.** The need to travel should be reduced, and the attractiveness of public transport increased, without adversely affecting the overall quality of people's lives. Better links between public transport, recreational travel, and access to the countryside would benefit tourists and residents alike. 3. **Maintain and develop Beacons Bus as key delivery mechanism for visitor transport.** The project should continue to grow in time and space with the aim of covering as much of the summer season as possible and increasing routes to meet demand.	

Development Plan	
Brecon Beacons National Park Management Plan 2009-2014: http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/npmp/bbnpa-national-park-management-plan	
4. **Encourage and support use of the weekday service network.** Achievable only by partnership working, this process needs to ensure that best use is made of existing services by ensuring that journeys are made easier for visitors with high quality marketing, information, and service provision including excellent customer care from transport operators. 5. **Encourage the development of new services aimed at the visitor market.** Partnership working to develop and market services with the needs of visitors in mind to provide transport to those attractions and outdoor activity locations that would especially benefit. 6. **Facilitate sustainable long distance transport to the National Park.** The key to this process is integration with a need for rail/coach/bus interchanges to work efficiently for visitors. 7. **Work with Transport Generators on Green Travel Plans.** Public and private sector attractions, festivals, tourism businesses, and other organisations can minimise their impacts through the adoption of Green Travel Plans. 8. **Support working practices and behaviour change initiatives that reduce the Park's greenhouse gas emissions and reduce people's dependency on fossil fuels for transport.** 9. **Develop Sustainable Travel Marketing.** Whatever mechanisms are adopted, it is essential that they are	

Development Plan	
Brecon Beacons National Park Management Plan 2009-2014: http://www.breconbeacons.org/content/the-authority/planning/strategy-and-policy/npmp/bbnpa-national-park-management-plan	
attractively and consistently marketed to the visiting public. **Twenty-year Aims for Waste Management** 1. Promote the waste hierarchy of reduce, reuse, and recycle across all sectors of the National Park. The NPA and its partners should seek to minimize the production of waste and seek to contribute to sustainable waste solutions.	

Appendix D Screening Assessment

APPENDIX 4

HABITAT REGULATION ASSESSMENT SCREENING TABLE

Brecon Beacons SAC	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. 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 Calluna vulgaris and bilberry Vaccinium myrtillus, although some stands have crowberry Empetrum nigrum. Heather and biberry also grow on the cliff ledges and are sometimes joined by cowberry (Vaccinium vitis-idaea). 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 (Sorbus), and shrubs are an important element of the crag vegetation.
Pre-Screening Assessment	The Brecon Beacons SAC is approximately 10km from the BGCBC boundary and is vulnerable to the effects of grazing, air pollution and recreation. CCW Site information (Appendix 1) suggests that critical loads are being exceeded at this site and that much of the pollution arises from diffuse sources. Development in and around Blaenau Gwent County Borough has the potential to increase air pollution through a combination of emissions from development and a growth in road traffic. Population expansion may also lead to increased recreational pressures in the areas around population centres. Commitments to sustainable transport and renewables in the Preferred Strategy will act to mitigate growth in emissions from housing transport and commerce. Air quality in Blaenau Gwent currently complies with all government standards and is expected to improve, and levels of Nitrogen Dioxide across Wales are monitored as decreasing. 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 Blaenau Gwent. A recent Welsh Survey showed that 50% of people travel less than 3 miles for recreational purposes (An Outdoor Recreational Survey for Wales, Sep 2006). **It is assessed that the likely impacts arising in relation to site sensitivities will not be significant alone or in-combination on the Brecon Beacons SAC**

Llangorse Lake SAC	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 of 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. 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.
Pre-Screening Assessment	Llangorse Lake SAC is approximately 10km from the BGCBC boundary and is vulnerable to the effects of eutrophication, sediment run-off, recreation, non-native invasive species and management of surrounding habitats. The majority of Blaenau Gwent County Borough's water supply comes from the River Taff and the Llandegfedd reservoir. Therefore development proposed in the BGCBC LDP is unlikely to have a significant effect on the water level of the lake. 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 Blaenau Gwent County Borough has the potential to increase air pollution in the region, however, current data indicates that air quality in BGCBC complies with all government standards and is expected to improve. Levels of Nitrogen Dioxide across Wales is also monitored as decreasing. **Taking these factors into account and significant topographical separation it is assessed that the LDP is unlikely to impact significantly at this site.**

Coed y Cerrig SAC	Coed y Cerrig is situated approximately 4.8km to the North of Abergavenny and is a good example of alluvial forest in southern Wales. The valley-bottom woodland has a canopy dominated by alder Alnus glutinosa with ash Fraxinus excelsior, and a rich understorey that includes guelder-rose Viburnum opulus and bird cherry Prunus padus. The ground flora is characterised by abundant large sedges Carex spp., and a wide diversity of wet woodland species. The woodland is continuous with diverse ash-elm Fraxinus-Ulmus and oak Quercus spp. woodland on the valley sides.
Pre-Screening Assessment	The Coed y Cerrig SAC is approximately 12km from the BGCBC boundary. The site is in favourable condition. The main vulnerabilities are grazing, drainage and nutrient enrichment. Drainage issues are localised and development in BGCBC will have no impact on the drainage regime. Development in and around Blaenau Gwent County Borough has the potential to increase air pollution through a combination of emissions from development and a growth in road traffic. However, air pollution is not an identified current environmental trend of concern and air quality in Blaenau Gwent currently complies with all government standards and is expected to improve. Based on existing advice relating the effects of traffic-related pollution on designated habitats, it is assessed that air pollution impacts that may arise from traffic (related to the plan) runs within 200m of a European Site. Beyond this distance air pollution impacts that may arise from traffic fall to background levels. Coed y Cerrig SAC is not situated within 200m of any major roads and the policies proposed in the BGCBC 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. **Taking these factors into account and significant topographical separation it is assessed that the LDP is unlikely to impact significantly at this site.**

Cwm Cadlan SAC	Cwm Cadlan is situated approximately 1km north-east of the village of Penderyn and about 4km north of Hirwaun, near Aberdare. Cwm Cadlan has the largest recorded example of 'Molinia meadows' (or fen-meadow) in Wales. The typical form of purple moor-grass–meadow thistle (Molinia caerulea - Cirsium dissectum) 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 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.
Pre-Screening Assessment	Cwm Cadlan SAC is approximately 13km from the BGCBC boundary and its vulnerabilities relate to the effects of grazing, scrub encroachment, changes in the hydrological regime, eutrophication and atmospheric pollution. Development in Blaenau Gwent 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 nitrogen is one of a number of factors assessed as being relevant to this site. However, the key sources of air pollution for this SAC have been identified as local – specifically dust from a neighbouring quarry. Based on existing advice relating the effects of traffic-related pollution on designated habitats, it is assessed that air pollution impacts that may arise from traffic (related to the plan) runs within 200m 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 BGCBC 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. The site falls within the Taff and Ely Catchment and Blaenau Gwent is in 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 licenses 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. The pre-screening assessment has shown that the 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 Blaenau Gwent and neighbouring authorities. **On the factors considered it is assessed that the BGCBC LDP is unlikely to have a significant effect at this SAC either alone or in combination with other plans.**

River Usk SAC	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. 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 Petromyzon marinus. The site also supports a healthy population of brook lamprey Lampetra planeri and river lamprey Lampetra fluviatilis 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 Alosa falla, salmon Salmo sala and bullhead Cottus gobi. The River Usk is an important site for otters Lutra lutra in Wales.
Pre-Screening Assessment	The River Usk SAC is approximately 4km from the BGCBC boundary. The River Usk SAC is a large linear ecosystem, which acts as an important wildlife corridor, an essential migration route and key breeding area for many nationally and internationally important species. The River Usk has been designated as a riverine SAC for the presence of nine nationally and internationally important ecological features. These are bullhead, allis shad, twaite shad, otter, river lamprey, sea lamprey, brook lamprey, atlantic salmon, watercourses with floating vegetation often dominated by water crowfoot (Ranunculus species). The main vulnerabilities are water abstraction levels, eutrophication and nutrient enrichment, barriers to migration,

	development pressure. The natural drainage catchment for the BGCBC area is completely outside of the river Usk catchment. Drainage issues are localised and development in BGCBC will have no significant impact on the drainage and flow regime of the river Usk. The catchment area for the LDP is the River Ebbw. However, the Usk SAC will be progressed from the screening phase of the HRA under the precautionary principle, on the advice of CCW, because there is a remote, theoretical possibility that any new development within the Plan area, which could potentially make additional demands on water resources could conceivably impact on the River Usk – since the Usk is a part of the South East Wales Conjunctive Use Scheme (SEWCUS). SEWCUS is an integrated network of water resources from various surface water and groundwater sources set up to manage water demand in south east Wales. The River Usk and River Wye form part of this network of water resources that can be deployed to different water demand centres, depending on the particular resource management regime in effect. **Taking these factors into account it is assessed that there is a theoretical risk that the LDP is likely to impact significantly at this site.**

Habitat Regulations Assessment Screening Table: Strategic Policies					
Site	**Cwm Clydach Woodlands – SAC** **Brecon Beacons National Park**				
Plan policy/ proposal	**Potential Effects on SAC:**	**Risk of Likely Significant Effect (LSE)?**	**Potential Impacts – other Plans and Programmes:**	**Risk from 'In Combination' Effects?**	**AA Required?**
SP4 Delivering Quality Housing	Possible loss of habitat area, quality and connectivity	?	The **Trunk Road Programme 2002** – A465 Gilwern to Brynmawr. Potential for direct land take, and possible disturbance as a result of construction activities. **'Turning Heads' A Strategy** for the	?	Yes

			Heads of the Valleys The A465 runs in close proximity and across the River Usk SAC and runs directly through Cwm Clydach Woodlands SAC. There is the potential for direct land take and increased disturbance.		
SP12 Securing an Adequate Supply of Minerals	Possible loss of habitat area, quality and connectivity	?	**Minerals Planning Policy Wales 2001** Possible loss of habitat quality from noise, dust etc. from mining and processing works and mass surface storage of aggregates and minerals extracts.	?	Yes
SP13 Delivering Sustainable Waste Management	Possible loss of habitat area, quality and connectivity	?	**Blaenau Gwent County Borough Council Waste Strategy 2004** Possible loss of habitat quality from noise, dust etc. from waste processing works	?	Yes

Habitat Regulations Assessment Screening Table: Strategic Policies					
Site	**Usk Bat Site SAC**				
Plan policy/ proposal	**Potential Effects on SAC:**	**Risk of Likely Significant Effect (LSE)?**	**Potential Impacts – other Plans and Programmes:**	**Risk from 'In Combination' Effects?**	**AA Required?**
SP4 Delivering Quality Housing	Possible deterioration of air composition and quality; loss of	?	The **Trunk Road Programme 2002** – A465 Gilwern to Brynmawr. Potential for direct land take, and	?	Yes

	habitat area , quality and connectivity (by disturbance)		possible disturbance as a result of construction activities. **'Turning Heads' A Strategy** for the Heads of the Valleys The A465 runs in close proximity and across the River Usk SAC and runs directly through Cwm Clydach Woodlands SAC. There is the potential for direct land take and increased disturbance.		
SP6 Ensuring Accessibility	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	?	**South East Wales Transport Alliance: Outline of the Regional Transport Plan Jan 2007** Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	?	Yes
SP12 Securing an Adequate Supply of Minerals	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	?	**Minerals Planning Policy Wales 2001** Possible loss of habitat quality from noise, dust etc. from mining and processing works and mass surface storage of aggregates and minerals extracts.	?	Yes
SP13 Delivering Sustainable Waste Management	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	?	**Blaenau Gwent County Borough Council Waste Strategy 2004** Possible loss of habitat quality from noise, dust etc. from waste processing works	?	Yes

Habitat Regulations Assessment Screening Table: Strategic Policies					
Site	**Sugar Loaf Woodlands SAC**				
Plan policy/ proposal	**Potential Effects on SAC:**	**Risk of Likely Significant Effect (LSE)?**	**Potential Impacts – other Plans and Programmes:**	**Risk from 'In Combination' Effects?**	**AA Required?**
SP4 Delivering Quality Housing	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	?	The **Trunk Road Programme 2002** – A465 Gilwern to Brynmawr. Potential for direct land take, and possible disturbance as a result of construction activities. **'Turning Heads' A Strategy** for the Heads of the Valleys The A465 runs in close proximity and across the River Usk SAC and runs directly through Cwm Clydach Woodlands SAC. There is the potential for direct land take and increased disturbance.	?	Yes
SP6 Ensuring Accessibility	Possible deterioration of air composition and	?	**South East Wales Transport Alliance: Outline of the Regional Transport Plan Jan 2007**	?	Yes

	quality; loss of habitat area , quality and connectivity (by disturbance)		Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)		
SP12 Securing an Adequate Supply of Minerals	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	?	**Minerals Planning Policy Wales 2001** Possible loss of habitat quality from noise, dust etc. from mining and processing works and mass surface storage of aggregates and minerals extracts.	?	Yes
SP13 Delivering Sustainable Waste Management	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	?	**Blaenau Gwent County Borough Council Waste Strategy 2004** Possible loss of habitat quality from noise, dust etc. from waste processing works	?	Yes

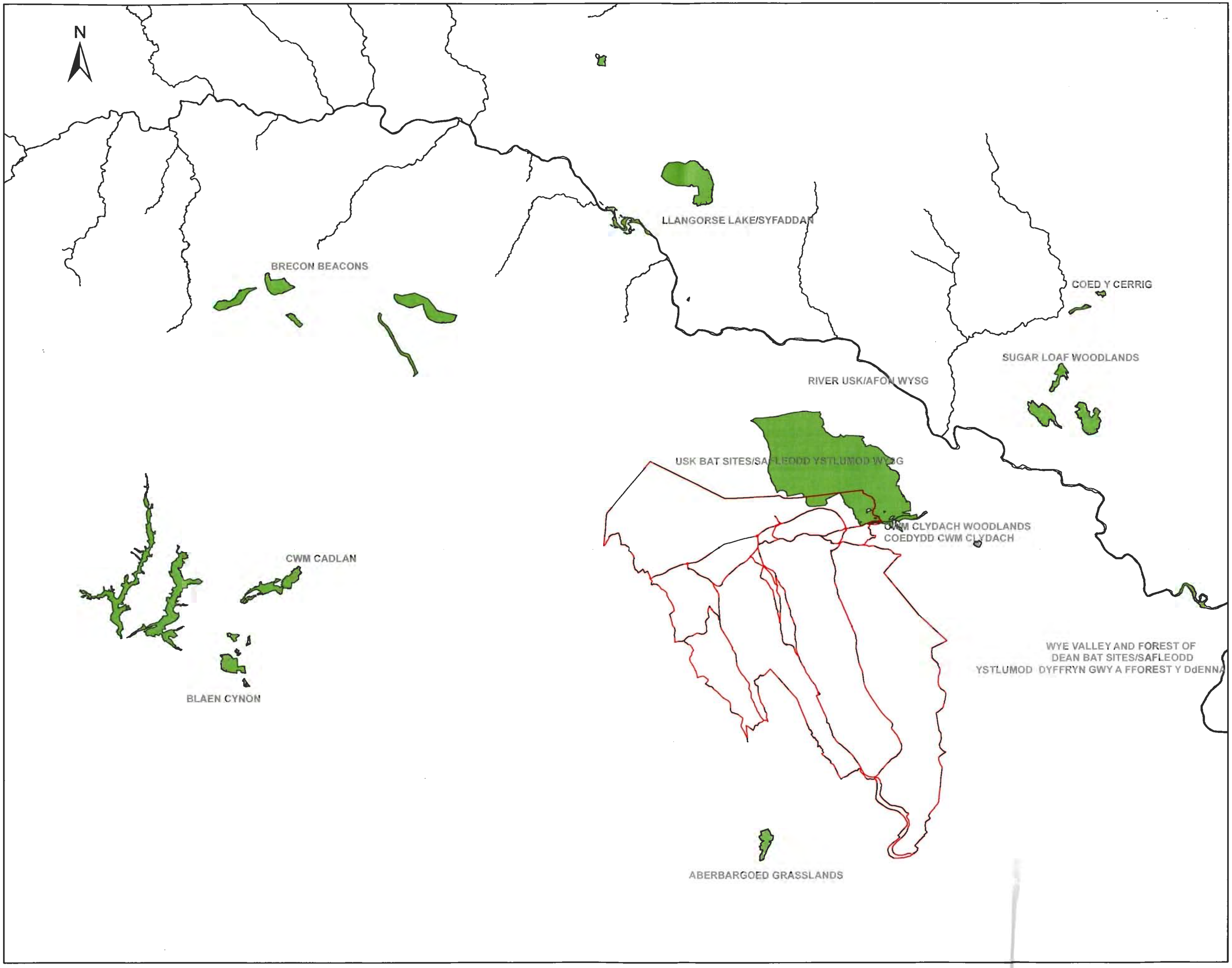
Habitat Regulations Assessment Screening Table: Strategic Policies					
Site	**Aberbargoed Grasslands SAC**				
Plan policy/ proposal	**Potential Effects on SAC:**	**Risk of Likely Significant Effect (LSE)?**	**Potential Impacts – other Plans and Programmes:**	**Risk from 'In Combination' Effects?**	**AA Required?**
SP4 Delivering Quality Housing	Possible loss of habitat area, quality and connectivity	?	The **Trunk Road Programme 2002** – A465 Gilwern to Brynmawr. Potential for direct land take, and	?	Yes

			possible disturbance as a result of construction activities. **'Turning Heads' A Strategy** for the Heads of the Valleys The A465 runs in close proximity and across the River Usk SAC and runs directly through Cwm Clydach Woodlands SAC. There is the potential for direct land take and increased disturbance.		
SP12 Securing an Adequate Supply of Minerals	Possible loss of habitat area, quality and connectivity	?	**Minerals Planning Policy Wales 2001** Possible loss of habitat quality from noise, dust etc. from mining and processing works and mass surface storage of aggregates and minerals extracts.	?	Yes
SP13 Delivering Sustainable Waste Management	Possible loss of habitat area, quality and connectivity	?	**Blaenau Gwent County Borough Council Waste Strategy 2004** Possible loss of habitat quality from noise, dust etc. from waste processing works	?	Yes

Habitat Regulations Assessment Screening Table: Strategic Policies					
Site	**River Usk SAC**				
Plan policy/ proposal	**Potential Effects on SAC:**	**Risk of Likely Significant Effect (LSE)?**	**Potential Impacts – other Plans and Programmes:**	**Risk from 'In Combination' Effects?**	**AA Required?**
SP3 The Retail Hierarchy and	Possible water resources demand	?	Possible water resources demand pressure on River Usk	?	Yes Under the

Vitality and Viability of the Town Centres	pressure on River Usk				precautionary principle
SP4 Delivering Quality Housing	Possible water resources demand pressure on River Usk	?	Possible water resources demand pressure on River Usk	?	Yes Under the precautionary principle
SP5 Spatial Distribution of Housing Sites	Possible water resources demand pressure on River Usk	?	Possible water resources demand pressure on River Usk	?	Yes Under the precautionary principle

Appendix E Map of Sites



NOTES

Legend

- EUROPEAN AND RAMSAR SITES
- BLAENAU GWENT CBC BOUNDARY

REV		CH	PA	DATE

Blaenau Gwent
County Borough Council

PROJECT: BLAENAVON GWENT CBC DEPOSIT LDP HABITATS REGULATION ASSSESMENT (HRA)

TITLE: EUROPEAN AND RAMSAR SITES WITHIN 15KM OF DEPOSIT LDP BOUNDARY

PURPOSE: INFORMATION

CAPITA SYMONDS

DRAWN J.D.PRICE	DATE DECEMBER 09	SCALE: NTS
CHECKED BY S.D	DATE DECEMBER 09	PASSED BY

REV