CAPITA SYMONDS

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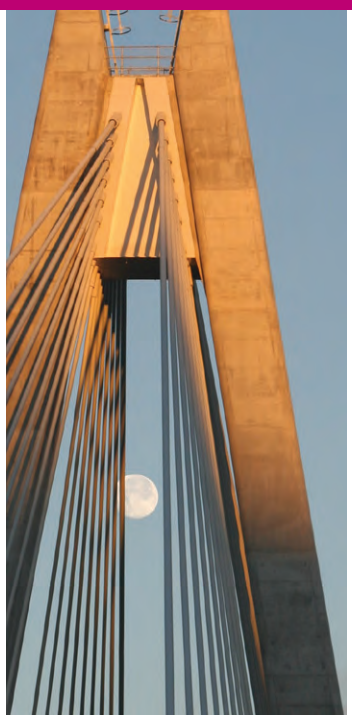
Blaenau Gwent County Borough Council Deposit Local Development Plan

Habitats Regulations Assessments (Appropriate Assessment) | April 2011



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Deposit Local Development Plan
Habitats Regulations Assessment (Appropriate Assessment)

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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

Contents

1. Executive Summary 1
2. Introduction 4
3. Method of Assessment 8
4. Appropriate Assessment 13
5. Plan Analysis 18
6. Stage 2C – Other Plans and Projects 30
7. Stage 2D - The Appropriate Assessment Process 32
8. Stage 2E – Mitigation Measures 72
9. Conclusions 78

References

Appendices

Appendix A – European Sites Characterisations
Appendix B – Details of Source/Pathway/Receptor Analysis
Appendix C – Record of Appropriate Assessment (Pro-Forma)
Appendix D – Information on Other Plans and Projects
Appendix E – Email from Dwr Cymru (Impact of LDP Allocations)
Appendix F – List of Sites (For Selected LDP Allocations)

1. Executive Summary

This is a record of the appropriate assessment, required by Regulation 48 of the Habitats Regulations 1994, which has been undertaken by Capita Symonds on behalf of Blaenau Gwent County Borough Council (BGCBC) – the competent authority. The appropriate assessment (AA) was done in respect of the Deposit Local Development Plan (LDP), in accordance with the Habitats Directive (Council Directive 92/43/EEC).

Having considered, by means of the Habitats Regulation Assessment (HRA) screening assessment, that the BGCBC LDP would likely have significant effects on "5 European Sites" within its area of influence (refer to the conclusion – Section 4.3 of the HRA screening report, April, 2011), and that the plan is not directly connected with or necessary to the management of these sites, an appropriate assessment has been undertaken of the implications of the proposal in view of the sites' conservation objectives.

The likely effects of the proposal (Deposit LDP), before the introduction of mitigation measures, on the international nature conservation interests for which the site was designated may be summarised as:

Possible deterioration of air composition and quality;

Possible disturbance of features by effects such as noise, light etc;

Possible loss of habitat area, quality and connectivity;

Possible changes to the flow regime and sediment characteristics;

Possible changes in drainage characteristics;

Possible deterioration of water quality and baseline nutrient loads;

Possible introduction of physical and hydrological barriers etc. in watercourses.

Some key findings from the HRA appropriate assessment are:

- The Appropriate Assessment (AA) has identified that 4 European sites (before the consideration of mitigation measures), could potentially be affected by the delivery of the Deposit LDP – when the LDP is considered on its own.

  A fifth European site – the River Usk, has been taken forward, on the advice of the Countryside Council for Wales (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) – the water resources management network.

- After the introduction of mitigation measures the AA did not identify any European sites which could potentially be affected by the delivery of the Deposit LDP.

- By applying the precautionary principle, the AA also identified that some of the European sites could potentially be affected by the delivery of the Deposit LDP in combination with other projects and plans in SE Wales. This was due more to the uncertainty surrounding the specific spatial and operational details of these other projects and plans, rather than any definitive proof of impact.

- From the source/pathway/receptor analysis carried out (see summary of results in Table 23), it became evident that there was the potential for some of these other projects and plans to have adverse impact on the designated features identified.

- However, for many of these plans/projects, mitigation measures/features were incorporated at the design and development stages. Most of these plans and plan components were also subject to the HRA process to comply with Habitats Directive (Council Directive 92/43/EEC).

- Therefore, it is concluded that there is unlikely to be any adverse contribution from the LDP when considered "in-combination" with other relevant plans and projects as defined under Article 6(3) of the Habitats Directive.

Having considered, by means of the HRA appropriate assessment, the potential impact of Blaenau Gwent County Borough Council (BGCBC) Deposit LDP on the international sites within its area of influence, and that the plan is not directly connected with or necessary to the management of these sites, the assessment has concluded that:

The LDP (as proposed), would adversely affect the integrity of 4 of the 5 European sites identified from the HRA screening report, when considered in isolation from the other plans and projects. The 5th European site – the River Usk, was included because of the precautionary principle applied in this HRA (see further details in Section 7.4).

However, the imposition of conditions or restrictions (mitigation) on the way the Plan is to be carried out has also been considered and it is ascertained that the following conditions and/or restrictions would avoid adverse effects on the integrity of the site

- Preventing loss of natural habitat by activities such as the clearing of land or removal of vegetation within the geographical limits of the protected sites.

  This could be achieved by application of some of the Development Management Policies identified e.g. DM13 (Refer to LDP), alongside other relevant National Policies.

- Preventing LDP activities which could cause direct or indirect disturbance to the features (such as light, noise etc.) from occurring by ensuring that such activities only take place at a "safe" distance from the European sites as determined by the conservation authority.

  This could be achieved through the planning determination process which has as its core consultation with the relevant regulatory bodies.

- Requiring measures in new developments to safeguard against increasing atmospheric pollutants (such as photochemical oxidants, particulate matter etc.) above existing levels – particularly those which contribute to acidification and eutrophication.

This could be achieved through the planning determination process and the consultation involved with the relevant regulatory bodies.

- Requiring new developments to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same.

  This could be achieved through the planning determination process by application of TAN15 and Planning Policy Wales, particularly in regards to land drainage and development in flood risk areas.

- Requiring measures in new developments to prevent site pollutants (including sediments) which are likely to adversely affect water quality from being transported by water to the designated European site.

  This could be achieved through the planning determination process and the consultation involved with the relevant regulatory bodies. The Environment Agency has developed non-statutory Pollution Prevention Guidelines (PPG) which specify best practice procedures for construction and building activities.

  This could also be achieved by application of some of the Development Management Policies identified (Refer to LDP), alongside other relevant National Policies.

- Requiring that approval be obtained from the appropriate regulatory body before consenting to developments which involve:

  - abstraction and/ or discharges from/to river

  - in-channel works or construction (including flow diversion or impoundment)

The conservation authority, Countryside Council for Wales (CCW) was consulted under Regulation 48(3) during the HRA screening and scoping and Capita Symonds has had regard for their representations (see Section 2.3 in HRA screening report, April 2011). Formal consultation for the AA has been undertaken.

The sites' conservation objectives have been taken into account; including consideration of the citation for the site and information supplied by CCW (see Appendix A).

2. Introduction

2.1 General Background

Blaenau Gwent County Borough Council is currently developing its Deposit Local Development Plan and is undertaking Habitats Regulations Assessment (HRA) in line with the requirements set by the Conservation (Natural Habitats &c) (Amendment) Regulations 2007.

This HRA report addresses the Appropriate Assessment stage of the HRA which considers how the likely significant effects on designated European Sites identified through the first Screening stage of the HRA (Habitats Regulations Assessment Screening Report, Blaenau Gwent County Borough Council Deposit Local Development Plan) may affect European site integrity.

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.

The Screening Report identified the potential for the Deposit Local Development Plan to have a negative impact on 4 European sites identified within a 15km search area around the Blaenau Gwent County Borough Council's (BGCBC) Planning Authority boundary. These 4 sites are Cwm Clydach Woodlands, Usk Bat Site, Aberbargoed Grasslands and Sugar Loaf Woodlands.

A fifth European site – the River Usk, has been taken forward, on the advice of the Countryside Council for Wales (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) – the water resources management network (see further details in Section 7.4).

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

This report addresses the Appropriate Assessment stage of the HRA; it outlines the key tasks undertaken and the key findings/ recommendations emerging from the assessment.

2.2 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. 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 of that site. Where significant negative effects are identified, alternative options or mitigation measures should be examined to avoid any potential damaging effects.

The scope of the HRA/AA is dependent on the location, size and significance of the proposed plan or project and the sensitivities and nature of the interest features of the European sites under consideration. If it is not possible to avoid or remove the identified effects assessed as arising from the plan implementation, then [if the plan makers wish to proceed with the policies/ proposals as set] it must be demonstrated that there are Imperative Reasons of Overriding Public Interest (IROPI) to continue with the plan [(Article 6(4) of the Habitats Directive).

2.3 Guidance for Habitats Regulations Assessment (Appropriate Assessment)

2.3.1 An Overview

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 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 Appropriate Assessment are based on the formal Welsh guidance currently available and emergent practice, which recommends that HRA is approached in three main stages – outlined in Table 1. This report outlines the method and findings for stage 2 of the HRA process – the Appropriate Assessment.

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***
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 affect 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

Table 1.0 Key Stages of the Habitats Regulation Assessment (HRA)

2.4 CONSULTATION

The Habitats Regulations require the plan making/competent authority – Blaenau Gwent County Borough Council (BGCBC) to consult the appropriate nature conservation statutory body [Countryside Council for Wales (CCW)]. CCW have agreed the proposed Enfusion methodology to be used for this Appropriate Assessment stage.

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. Therefore, in addition to the statutory consultation to be undertaken with CCW this report can be made available for wider public consultation.

2.5 PURPOSE AND STRUCTURE OF REPORT

This report documents the process and the findings from the Appropriate Assessment stage of the HRA for Blaenau Gwent County Borough Council Deposit Local Development Plan. Following this introductory section the document is organised into a further four sections:

Section 2 – outlines the method used for the Appropriate Assessment and includes reference to the key information sources used. It presents an overview of the stages and requirements for consultation.

Section 3 – outlines the process of the Appropriate Assessment. It provides detailed analysis of the Deposit Local Development Plan. This involves examining the proposed Plan, identifying key components and objectives. It also focuses on other plans and projects which could have an 'in-combination' negative effect on the European sites under Article 6(3).

Section 4 – is the core of the study and constitutes the appropriate assessment of the Plan. It establishes the assessment guidelines and develops (in detail) each of the individual assessment stages identified in the methodology. This section also summarizes all the impact avoidance and mitigation measures proposed for the Deposit LDP.

Section 5 – outlines the conclusions and how the plan should now proceed with reference to the Habitats Regulations.

3. Method of Assessment

3.1 Outline of Methodology

3.1.1 Overview of Stages

The first Screening Stage report of the HRA (Habitats Regulations Assessment Screening Report) for the Blaenau Gwent County Borough Council Deposit Local Development Plan, identified which European sites around the plan area should be considered in further detail as part of an Appropriate Assessment. The Screening combined a plan and a site focus.

- The plan focus first screened out those elements of the plan unlikely to affect European site integrity and then considered the impacts of the remaining elements on European sites, including the potential for 'in-combination' impacts.

- The site focus considered the environmental conditions of the sites and the factors required to maintain site integrity, and then looked at the potential impacts the plan may have [including in-combination impacts].

The results of the screening identified that the following European sites may be potentially affected by activities/ impacts arising from the plan.

- Cwm Clydach Woodlands;

- Usk Bat Site;

- Aberbargoed Grasslands;

- The River Usk;

- Sugar Loaf Woodlands

The River Usk was included purely on the basis of the precautionary principle (see Section 7.4 for further details).

The potential impacts that could arise from these policies were generally considered to be:

- 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

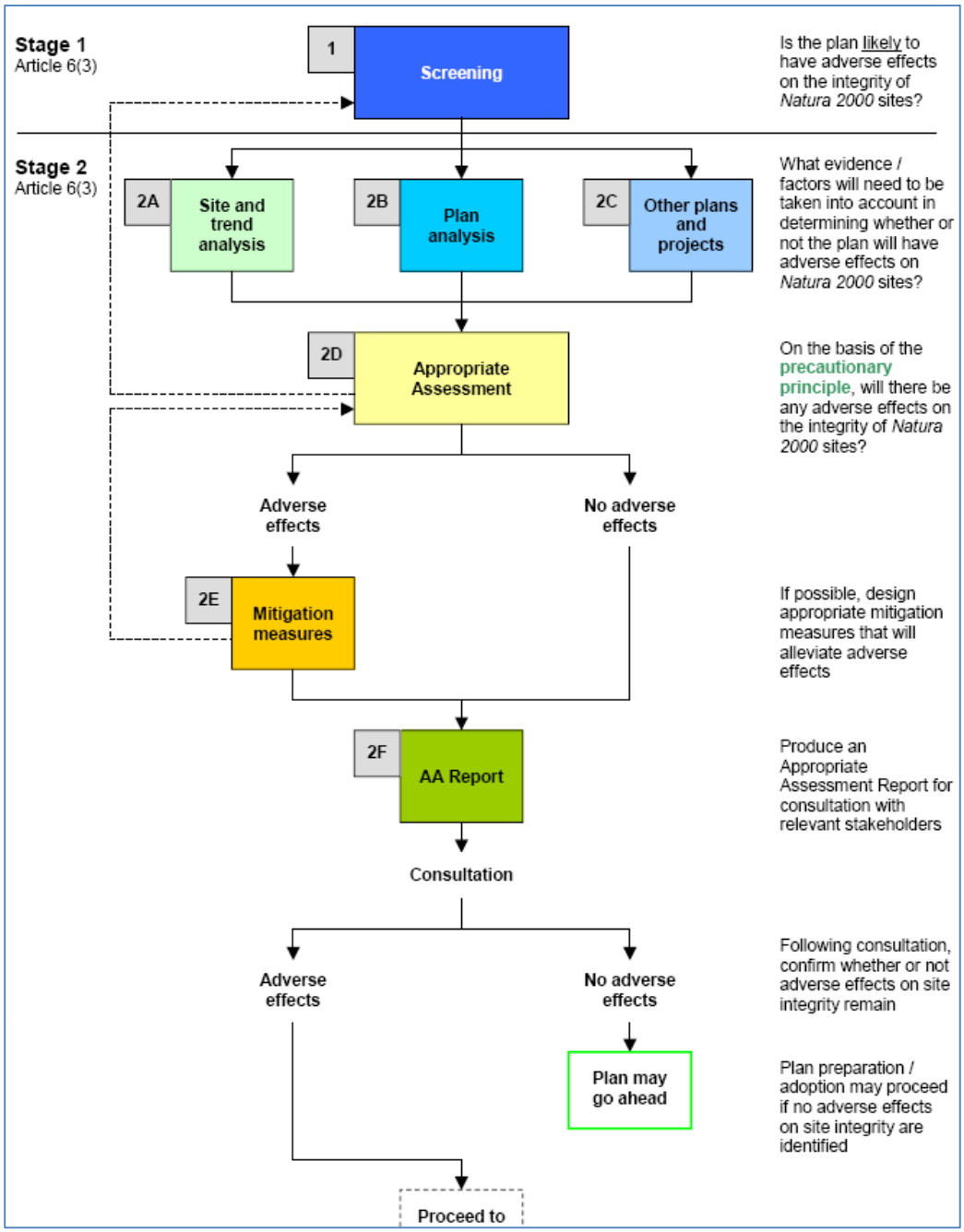


Figure 1.0 Shows a schematic diagram of further details of the HRA process

Table 2 Appropriate Assessment Stage 1: Key Tasks	
Task 1 **Scoping and Additional Information Gathering**	• Gathering additional information on European sites • Gathering additional data on background environmental conditions • Further analysis of plans/projects that have the potential to generate 'in-combination' effects
Task 2 **Assessing the Impacts (in-combination) Appropriate Assessment**	• Examination of the policies and proposals identified during the screening phase and their likely significant effects on European sites • Consideration of whether effects are direct/indirect/cumulative • Consideration of whether other plans and programmes are likely to generate effects that have the potential to act cumulatively with those arising from the plan
Task 3 **Developing Mitigation Measures (including initial avoidance)**	• If effects identified – either arising from the plan alone and/or 'in-combination' with other plans – consider initial opportunities to avoid (e.g delete/remove or amend policy from plan) • Develop mitigation measures – must be deliverable by the plan and have clear delivery/monitoring responsibilities
Task 4 **Findings and Recommendations**	• Conclude the asesssment, explain key findings and analysis informing conclusions
Task 5 **Consultation**	• Undertaken further consultation with CCW (assumes that consultation has also been an iterative process throughout the HRA/AA)

Table 2.0 Key Tasks involved in the Habitats Regulation Assessment (HRA)

3.2 Overview of Stages

Under Article 6 of the Habitats Directive, the AA stage of the Habitat Regulation Process (HRA) considers the impact of the Deposit LDP on the integrity of the 5 European sites identified from the HRA screening, alone or in combination with other projects or plans, with respect to the sites' structure, integrity and function and their conservation objectives.

As can be seen in figure 1.0, the AA stage – identified as Stage 2 can be further subdivided into six sub-stages or tasks. These are:

- Stage 2A – Analysis of the sites and the reasons for their designation, and the underlying trends affecting them.

- Stage 2B – Analysis of the plan, including its key components and how it would be implemented in practice.

- Stage 2C – Analysis of other plans and projects that could contribute to 'in combination' effects.
- Stage 2D – Analysis of how the plan, the "in-combination" effects of other plans and projects and the subject site will 'interact' come plan implementation.
- Stage 2E – Where applicable, to propose and assess mitigation measures for addressing adverse effects.
- Stage 2F – To prepare an Appropriate Assessment Report for consultation with key stakeholders including the conservation authority.

Overall then, the principal steps in carrying out the Appropriate Assessment are:

- To collate information on sites and evaluate impact in light of conservation objectives;
- To consider how the plan 'in combination' with other plans and programmes will interact when implemented;
- To consider how effect on integrity of site could be avoided by changes to plan and the consideration of alternatives;
- To develop mitigation measures (including timescale and mechanisms);
- To report the outcomes of AA and develop monitoring strategies

Consultation by means of email and telephone was carried out by Capita Symonds and Blaenau Gwent County Borough Council with the following:

- Countryside County for Wales local team staff;
- Environment Agency local team staff;
- Local planning authority officers;
- Local authority ecologists;

The objectives of these consultations were to gain agreement on:

- the spatial extent of likely impact from the LDP;
- the significance of impact – taking into account the 'in combination' factor.

These consultations were also to:

- Confirm key environmental conditions supporting site integrity;
- Identify other plans and projects with the potential to have an 'in combination' effect with the deposit LDP;

- Identify possible mitigation measures.

These consultations also helped to confirm 'cross-cutting' issues that could potentially affect more than one of the designated sites. These are:

- Water resources;
- Water quality;
- Air quality;
- Climate change

4. Appropriate Assessment

4.1 What is Required?

As noted in Section 3.1 of this report, the HRA Screening Report, Blaenau Gwent County Borough Council Deposit Local Development Plan, April 2011 set out details of the European Sites and the types of impact to be considered in the more detailed Appropriate Assessment work.

The degree to which a plan's effects on a European site can be demonstrated is related to whether the site's "integrity" is affected.

Article 6(3) of the Habitats Directive requires that: "the competent national authorities shall agree to the plan, only after having ascertained that it will not adversely affect the integrity of the site concerned."
'Integrity' is, in turn, defined by the European Commission (2000) as relating to the reasons for the site's designation.

According to guidelines on the assessment of plans, a key stage in the AA process is identifying why a European site was designated, by collating information on the following, where possible, for each relevant European site:

- Qualifying interest features: These are the reasons why the European site has been designated, for instance the endangered species that occupy the SAC; rare habitats that occur there; or threatened birds that breed or over-winter in the SPA. The AA focuses on the qualifying interest features that were the primary reasons for the site's designation.

- The site's conservation objectives: These help to focus the assessment. Conservation objectives are a statement of the overall nature conservation requirements for a site, expressed in terms of the favourable condition required for the habitats and / or species for which the site was selected.

- The Favourable Condition Table for the site: Although these tables are designed primarily for monitoring the state of a site, they give information on the trends and environmental conditions required to sustain or promote qualifying interest features and site integrity. However, they should be treated with caution, as favourable conditions as assessed for SSSIs may have little bearing on the conservation status of the features for which a site has been designated.

- The relevant conservation authorities are important sources for most of this information – in the case of this assessment Countryside Council for Wales (CCW).

- Vital information on European sites and their interest features was obtained from the Internet, particularly from sites including www.jncc.gov.uk, www.natureonthemap.org.uk, and the environment agency and CCW websites.

See table showing requirements for favourable condition and the conservation objectives in Appendix A.

The EC (2000) guidance defines the 'integrity of the site' as 'the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified'

When looking at the 'integrity of the site', it is therefore important to take into account a range of factors, including the possibility of effects manifesting themselves in the short, medium and long-term.

The integrity of the site involves its ecological functions. The decision as to whether it is adversely affected **should focus on and be limited to the site's conservation objectives**.

Some key ecological processes, resources, and environmental conditions identified as being important to the designated features and habitats at the immediate site and proximate areas are:

- Hydrological and hydro-geological regimes and characteristics (ph, water depth, flow rate, water quality parameters, wetland coverage);
- Food – distribution, availability, competition (obstacles: physical and non-physical – in accessing feeding areas);
- Ecosystems pattern and connectivity; Biological diversity and biological species requirement;
- Temperature profile, rainfall pattern and micro-climate;
- Nutrient turnover (nutrient availability);
- Air composition and quality.

See table showing the key ecological and physical processes & relevant resources and environmental conditions required by the designated features in Appendix A

4.1.1 What Trends Affect Them?

Trends – direct and indirect – that could affect a European site include, for instance, increasing nitrous oxide emissions from vehicles, declining water levels due to temperature changes and over-abstraction, increasing urbanisation of an area leading to increased green house gases emissions and water consumption.

They also include those factors that have led to the current state of the site and which may or may not be continuing e.g. scrub encroachment on a heathland site. Trends relating to climate change may be a particularly important consideration.

For this assessment, some of the relevant parameters whose trends (underlying patterns) require close examination are:

Acid deposition;

'Nitrogen oxide' deposition;

Green house gas;

Water levels;

pH;

Land cover;

Land-use;

Deforestation rate (square miles);

Dissolved oxygen levels;

Turbidity;

BOD;

River flow;

Species population;

Recreational pressure;

Population growth of non-native species. Invasive species threaten biodiversity, habitat quality and ecosystem function;

Biological diversity (agents which cause biological diversity loss are called "biological pollutants").

An assessment of the baseline environmental status of a site is important to establish the environmental characteristics of the area prior to the implementation of a proposal or plan, to provide an information-base against which to monitor and assess an activity's progress and effectiveness during implementation and after the activity is completed.

Such an assessment also serves to identify the factors which influence these characteristics and to determine the sensitivities of these individual factors to change.

In the absence of site-specific baseline studies for the European sites concerned, this study has taken into consideration the findings of the biodiversity action plans (BAPS) as well as regional environmental statements carried out in the area e.g. the 'SEA of Sewta's Regional Transport Plan: Baseline Study Report, October 2006'

4.2 Impact Types and Likely Significance

Impact Type	Significance Indicator
Disturbance	Intensity; time of occurrence (daytime/nigh time/breeding season); permanence
Distance from	Habitat/feature; presence of attenuation elements (to shield reception position e.g topography, barrier etc)
Water Resources (Quantity & Availability)	Likely to cause unfavourable changes in the indicative parameters (hydrograph shape, time of peak etc), velocity, water level, wetted perimeter – function of distance and attenuating influences; distance from habitat/feature; sensitivity to changes of indicative parameter
Water Quality	Likely to cause unfavourable changes in indicative (physical and chemical) parameters: suspended solids, turbidity, dissolved oxygen, pH, temperature, nitrates etc – function of dilution, volume and the degree to suspended solids settle; also how bioavailable these parameters are, likelihood of biodegration, and sensitivity to changes of indicative parameter.
Habitat Loss	Area of loss, time of occurrence, permanence, reversibility of loss, availability of nearby alternative, how critical is loss to features' integrity (breeding, food, shelter from predation), possibility and effectiveness of mitigation measures
Habitat Fragmentation	Time of occurrence, permanence, reversibility, impact on structural complexity and connectivity, impact on diversity
Habitat Severance	Similar to fragmentation – but of major relevance re: linear/transport schemes

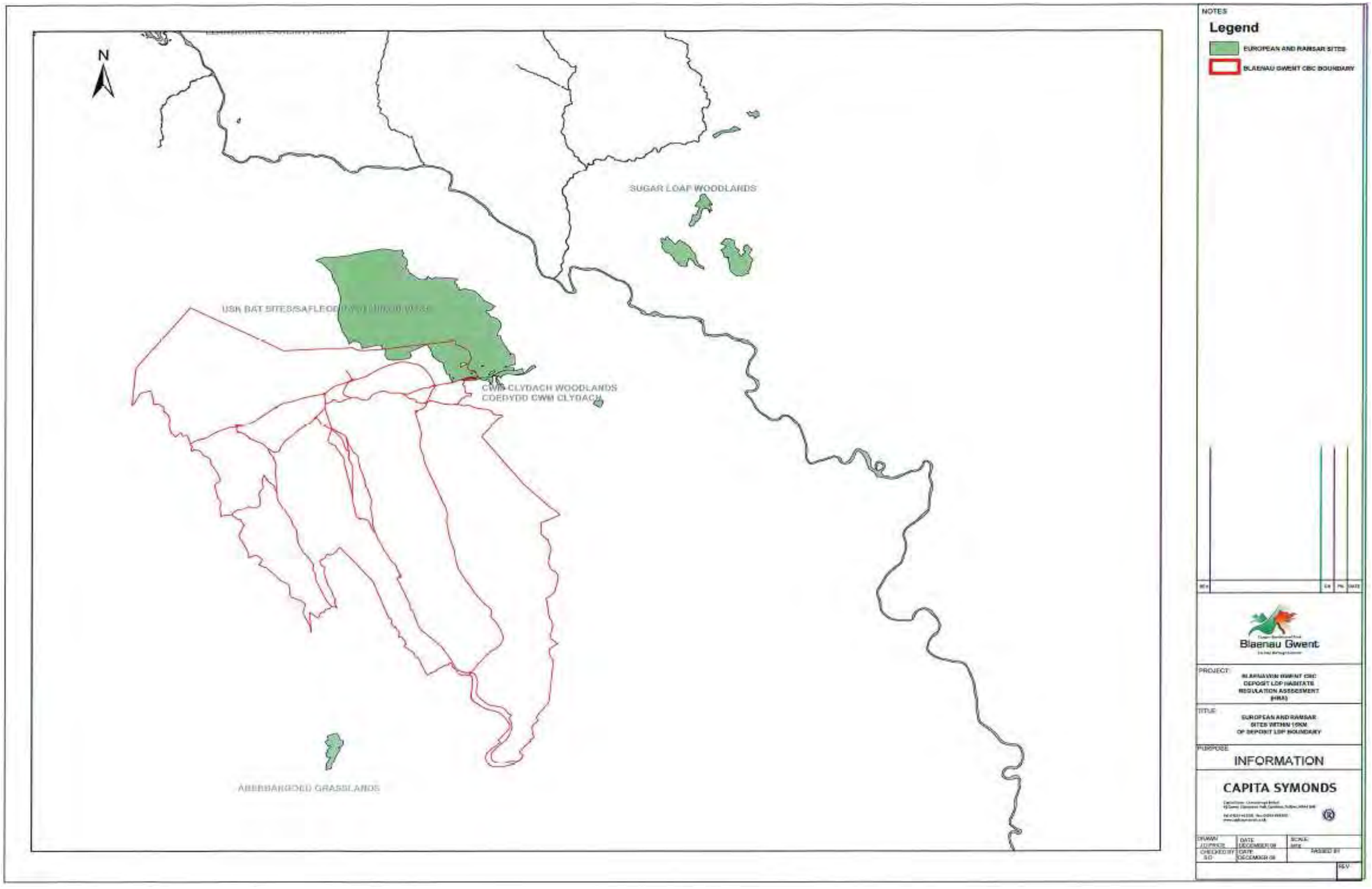
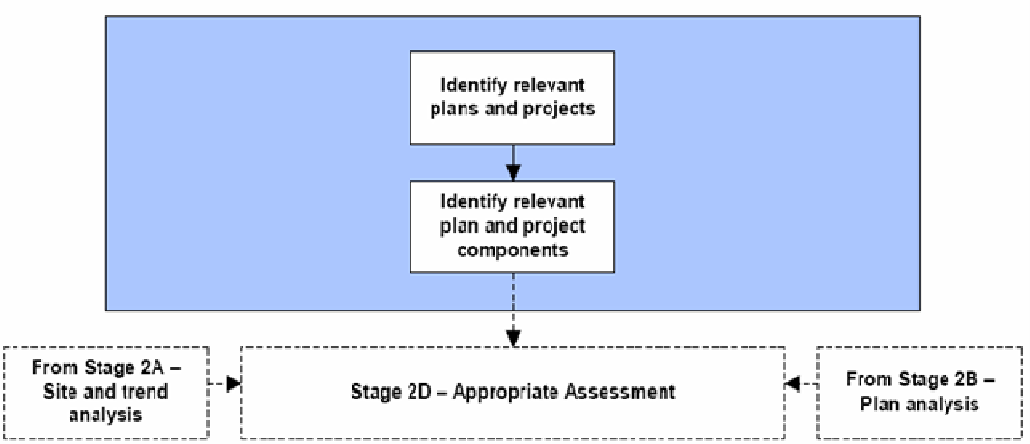


Figure 2.0 Showing the location of the 4 European sites and the LDP Boundary

5. Plan Analysis

5.1 Overview



(Source: Appropriate Assessment of plans, Levett-Therivel Consultants, September 2006)

Figure 3.0 Schematic diagram of Stage 2B (Plan Analysis)

An analysis of the deposit LDP as a whole should always take place. In this way, the plan's impacts can be considered in their totality. In addition, prior to the formulation of the plan, it may be useful to carry out an assessment of the plan's various components as they emerge. This can help to ensure that inappropriate components are not taken forward and included in the final plan."

- A plan's components may include:
- Objectives – the plan's aspirations;
- Options – the choices open to the plan authors for achieving the plan objectives;
- Preferred options – the chosen options which provide the plan's foundations;
- Detailed policies and proposals – the preferred options expressed in detail through plan policies and proposals.

5.2 Purpose of Deposit LDP

The main purpose of LDPs is to:

- Reflect longer-term local aspirations, based on a vision agreed by the community and stakeholders;
- Provide a plan-led strategy, specific to the area covered, to act as a basis for rational and consistent decisions about the use and development of land;

- Guide growth and change while protecting local diversity, character and sensitive environments;

5.3 THE LDP COMPONENTS: VISION, AIMS STRATEGY, POLICIES

5.3.1 THE VISION

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.

Having drawn up the Vision, 4 key themes were identified and 16 objectives developed setting out the way forward.

5.3.2 THEMES OF DEPOSIT LDP

Theme 1: Create a Network of Sustainable Vibrant Valley Communities.

- By 2021, Ebbw Vale will be the main service and retail hub for the County Borough supported by a network of vibrant district/local centres (secondary hubs) that provide a range of local services and facilities for their local communities. The district hubs will be well linked to the main hub of Ebbw Vale through sustainable modes of transport.

- By 2021, the population will have increased from 69,300 to 71,100 as a result of natural change and other people being attracted to the area. The overall population structure will be generally in line with that of Wales.

- By 2021, 3666 new houses will have been built, approximately 800 of which will be affordable. New housing sites alongside improvements to existing houses will have helped create sustainable communities.

- By 2021, the use of sustainable modes of transport, particularly public transport, walking and cycling, will have increased and the quality and frequency of the public transport system improved.

- All developments have been built in accordance with design guidance, are sustainable, safe by design, and appropriate to their context and have helped improve the quality of the physical and natural environment.

- New development has minimised further climate change contributions and, where appropriate, mitigated or adapted to its predicted effects. This has been achieved by:

  - Maximising the use of land;
  - Promoting the re-use and restoration of derelict land and buildings;
  - By focusing development away from areas vulnerable to flooding;

- By reducing energy consumption through improved design and locating development close to hubs and public transport routes; and
- By increasing the supply of renewable energy.

Theme 2: Create Opportunities for Sustainable Economic Growth and Promote Learning and Skills.

- By 2021, the regeneration plans for 'The Works', Ebbw Vale Northern Corridor and other key regeneration sites have been delivered benefiting the residents of the County Borough through the delivery of jobs, houses and community infrastructure

- By 2021, employment and economic activity rates will have increased and unemployment decreased with levels nearer the national averages. This has been achieved by diversifying the economic base into construction, business services, health and social care, tourism, and leisure and environmental industries whilst supporting the manufacturing sector.

- By 2021, 50 hectares of employment land and a range of premises have been delivered which meet the needs of local businesses and offers employment opportunities for local people.

By 2021, the delivery of the Learning Zone, new schools and integrated education services, including life-long learning have facilitated improvements and broadened opportunities for education levels and skills.

Theme 3: Create Safe, Healthy, and Vibrant Communities and Protect and Enhance the Unique Natural and Built Environment.

- By 2021, an accessible network of green open spaces and high quality leisure infrastructure has helped increase participation in sport and active recreation and, contributes to improvements in health and well-being.

- The unique landscape and natural heritage, has helped foster sustainable tourism and promoted community pride.

- By 2021, the biodiversity resource of Blaenau Gwent has been enhanced and the connectivity of ecological networks have been improved from 2006 levels.

- Blaenau Gwent's historical and cultural environment has been protected and enhanced and has contributed to the regeneration of the area.

Theme 4: Create opportunities to secure an Adequate Supply of Minerals and Reduce Waste.

- The 3 million tonnes of mineral resources required to be provided in Blaenau Gwent by the Regional Plan has been identified and resources of local, regional and national importance safeguarded.

- A sustainable, integrated approach to waste management has minimised the production of waste and its impact on the environment, and maximised the use of

unavoidable waste as a resource. By 2021, national recycling and composting targets outlined in the Wales Waste Strategy: 'Towards Zero Waste' have been met.

5.3.3 THE DEPOSIT LDP STRATEGY

The Strategy is based on regenerating the area through 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 the benefits of growth and regeneration are shared widely.

Vital to delivering this is ensuring good connectivity between the principal hub of Ebbw Vale and the district hubs of Tredegar, Brynmawr and Abertillery. In turn ensuring that each hub is accessible to the areas they serve. In the case of the Upper Ebbw Fach area the Brynmawr District Hub is also supported by the Local Town Centre of Blaina, which serves local needs. Each of the 4 hub areas is supported by **Holistic Area Regeneration Plans (HARPs)**, which provide more detailed projects and actions to ensure these areas are regenerated through partnership working'.

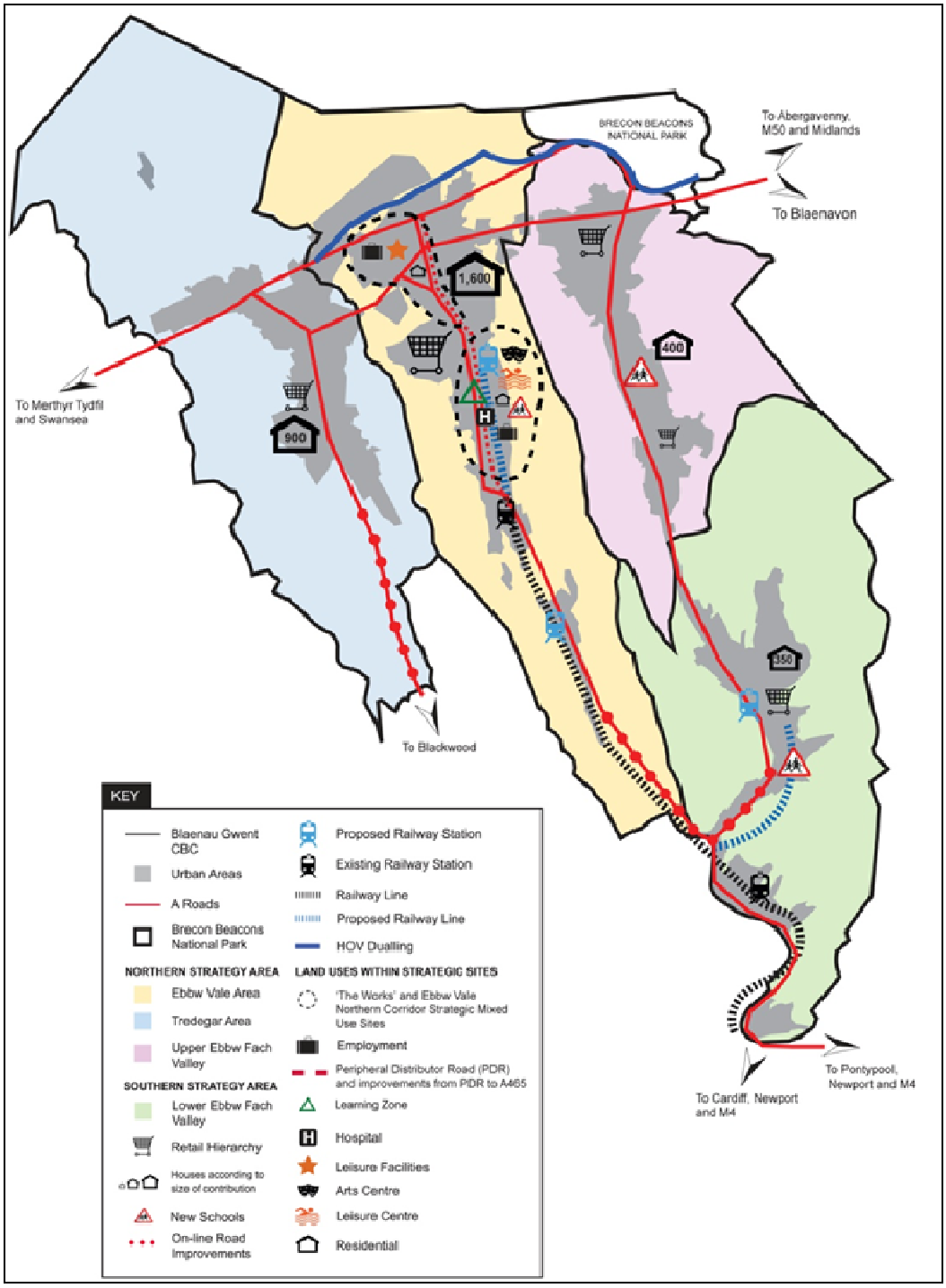


Figure 4.0 Showing LDP proposals for the BGCBC LDP area

Create a Network of Sustainable Vibrant Valley Communities

SP1 Northern Strategy Area – Sustainable Growth and Regeneration

In the Northern Strategy Area the focus will be on sustainable growth and regeneration that benefits the whole of Blaenau Gwent. This will be achieved by:

- Supporting the creation of a network of sustainable hubs around the principal hub of Ebbw Vale.

- Promoting Ebbw Vale as the principal hub for Blaenau Gwent, where the majority of social and economic growth will be accommodated. The Town Centre will be the main centre for service provision where major retail expansion, administrative and cultural developments will take place.

- Delivering strategic sustainable regeneration flagship schemes at 'The Works' and 'Ebbw Vale Northern Corridor'.

Supporting new roles for district and local centres:

  - Tredegar District Town Centre will expand its tourism offer through maximising the benefits of local heritage;
  - Brynmawr District Town Centre will explore opportunities to develop complementary roles around tourism; and
  - Blaina Local Town Centre will build on and exploit its local heritage

- Enabling diversification of the economic base through mixed-use development in the district hubs of Tredegar and Brynmawr where it supports and reinforces the roles of the town centres.

- Supporting a major destination attraction that would draw large numbers of people to the area and provide a significant number of jobs.

SP2 Southern Strategy Area – Regeneration

Proposals in the Southern Strategy Area will be required to regenerate the area by:

- Ensuring that the district hub of Abertillery is well connected to Ebbw Vale and the wider region through safe, frequent and reliable public transport links;

- Supporting Abertillery District Town Centre in developing complementary roles around culture, leisure and tourism;

- Delivering 'Activity Tourism' opportunities in the area;

- Ensuring the removal of dereliction by promoting the reuse of under used and derelict land and buildings;

- Delivering regeneration schemes which provide residential development and infrastructure; and

- Building on the unique identity of the area by protecting the built heritage and the natural environment.

SP3 The Retail Hierarchy and Vitality and Viability of the Town Centres

In order to deliver thriving town centres a new hierarchy of town centres is defined as follows:

Principal Town Centre

- Ebbw Vale will perform a sub regional retail role.

District Town Centres

- Abertillery, Tredegar and Brynmawr will act as district shopping centres principally to serve the needs of the district. Brynmawr District Town Centre will be well related to the new retail provision at Lakeside Retail Park.

Local Town Centres

- Blaina will act as a local shopping centre that will be protected and enhanced to provide facilities for the local communities.

In order to improve the vitality and viability of the town centres:

- Shops, offices and other commercial premises will be upgraded by means of refurbishment and redevelopment;
- Opportunities to improve the retail offer will be explored;
- The provision of better vehicular access and circulation arrangements, improved public transport facilities and provision of additional car parking spaces will be provided where necessary; and
- Disabled access and facilities will be improved.

SP4 Delivering Quality Housing

- To stem out migration and attract people to the area:
  - Provision will be made for the development of 3,666 new dwellings leading to an increase of population from 69,300 in 2006 to 71,100 in 2021;
  - Support will be given to proposals to regenerate social housing areas;
  - Private sector housing improvements will be supported; and
  - Proposals to bring empty properties back into use will be supported.

- To ensure that local housing need is met and sustainable linked communities are created:

  - A mix of dwelling types, sizes and tenure, including approximately 800 units of affordable and special needs housing will be delivered to meet the needs of Blaenau Gwent's current and future population (327 of which will be delivered through S106 Agreements); and

  - Provision will be made for 6 pitches for unmet gypsy and traveller accommodation.

SP5 Spatial Distribution of Housing Sites

In order to create a network of sustainable linked hubs provision for new housing will be located in the following hub areas:

Approx	
Ebbw Vale	1,600 dwellings
Tredegar	900 dwellings
Ebbw Fach Upper	400 dwellings
Ebbw Fach Lower	350 dwellings

An allowance for: completions to date, units under construction, windfall contributions, small sites, conversions and demolitions totalling 853 dwellings are made across the County Borough.

The Delivery of the houses will be increased in five-year periods recognising the step change required to reach the higher completion figures and in light of current market conditions.

2006-2011	820
2011-2016	1,320
2016-2021	1,526

SP6 Ensuring Accessibility

The Council will work with partner organisations, including the Welsh Assembly Government, South East Wales Transport Alliance, public transport operators, community transport providers, Network Rail and neighbouring Authorities to deliver a sustainable transport network which, whilst reducing the need to travel:

- Increases connectivity through improving rail, bus and road links:

  - With other key settlements in the South East Wales Region, Wales, the UK and Europe;

  - Between the principal hub of Ebbw Vale and other identified district hubs (Tredegar, Brynmawr and Abertillery);

- Facilitates and supports economic growth, regeneration and development priorities whilst minimising harm to the built and natural environment and local communities;

- Promotes Ebbw Vale as a regional public transport hub which integrates cycling, walking, bus, and rail, networks;

- Facilitates an integrated and safe system of cycle and pedestrian routes connecting settlements with employment areas and town centres;

- Facilitates the transportation of freight on the core network whilst encouraging the use of rail; and

- Secure appropriate provisions for people with special access and mobility requirements.

SP7 Climate Change

The Council will seek to address climate change and reduce energy demand to improve the sustainability of the valley communities in Blaenau Gwent by:

- Addressing the causes of climate change through:

  - Encouraging more of the County Borough's electricity and heat requirements to be generated by renewable and low/zero carbon technologies;

  - Supporting development proposals that incorporate decentralised heating, cooling and power networks powered by renewable energy sources, or that connect to existing communal/district heating networks;

  - Implementing the energy hierarchy as set out in national planning policy; and

  - Promoting efficient use of land through giving preference to brownfield land and development at higher densities on sites located close to transport corridors or town centres.

- Adapting to direct and indirect impacts of climate change through:

  - Ensuring that developments accord with objectives of sustainability and good design as set out in national planning policy;

  - Directing new development away from those areas which are at high risk of flooding in line with Technical Advice Note (TAN) 15; and

  - Managing flood risk through incorporating measures in design and construction to reduce the effects of flooding.

Deliver Opportunities for Sustainable Economic Growth and the Promotion of Learning and Skills

SP8 Sustainable Economic Growth

In order to improve life chances, increase economic activity, diversify the economy and ensure that residents of Blaenau Gwent maximise their economic potential:

- 50 ha of land for employment and business purposes will be allocated to meet economic development and employment needs;
- The employment roles of major industrial areas will be identified to assist in the diversification of employment and to support the sustainable development of manufacturing;
- Employment in Health and Social Care will be encouraged in town centres and in conjunction with the new hospital at 'The Works';
- Tourism, leisure and heritage initiatives will be encouraged in town centres;
- Activity tourism will be promoted in the countryside;
- A first class learning infrastructure will be put in place to ensure that residents gain the skills they require;
- Local labour agreements will be negotiated with developers to enable local people to secure employment and skills development.

Create Safe, Healthy, and Vibrant Communities and Protect and Enhance the Unique Natural and Built Environment

SP9 Active and Healthy Communities

To create active and healthy communities the Council will:

- Promote the Valleys Regional Park and leisure activities.
- Protect and improve existing open space, sport and leisure facilities; and
- Protect and enhance accessibility to natural green spaces for all members of the community;

SP10 Protection and Enhancement of the Natural Environment

Blaenau Gwent's unique natural environment and designated landscape will be protected, preserved and, where appropriate, enhanced. This will be achieved through:

- Protecting national and international nature conservation sites in line with national planning policy and guidance;

- Protecting those attributes and features which make a significant contribution to the character, quality and amenity of the landscape;

- Giving appropriate consideration to European and nationally designated protected sites and important species and habitats in line with national planning policy and guidance;

- Maintaining and enhancing the Green Infrastructure including creating a network of local wildlife sites and wildlife corridors, links and stepping stones;

- Ensuring that development retains, protects and enhances features of ecological or geological interest, and provides for the appropriate management of these features; and

- Ensuring development seeks to produce a net gain in biodiversity by designing in wildlife, and ensuring any unavoidable impacts are appropriately mitigated for.

SP11 Protection and Enhancement of the Built Environment

Blaenau Gwent's distinctive built environment will be protected, preserved and, where appropriate, enhanced. This will be achieved through:

- Safeguarding nationally designated sites from inappropriate development in line with national guidance and also protecting locally designated buildings of local importance;

- Enhancing sites of historic or archaeological value; and

- The promotion of heritage tourism.

Secure an Adequate Supply of Minerals and Reduce Waste

SP12 Securing an Adequate Supply of Minerals

Blaenau Gwent will contribute to the local, regional and national demand for aggregate supplies by:

- Maintaining a 10-year land bank of permitted aggregate reserves in line with national planning policy and guidance and addressing the 3Mt apportionment identified in the Regional Technical Statement;

- Safeguarding existing mineral reserves and potential resources from development that would preclude their future extraction or encouraging the pre-working of mineral resources, where appropriate;

- Ensuring that future mineral working accords with national planning policy and guidance in terms of protecting areas of importance of natural and built heritage and limiting the environmental impact of mineral extraction;

- Ensuring that high standards of restoration and aftercare measures are incorporated at sites;

- Ensuring that impacts upon residential areas from mineral and coal operations are limited to an acceptable proven safe limit through identification of buffer zones and areas where coal working will not be acceptable; and

- Promoting the efficient use of minerals and use of alternatives to naturally occurring minerals including the re-use of secondary aggregates.

SP13 Delivering Sustainable Waste Management

To help deliver sustainable waste management across Blaenau Gwent the Council will ensure that:

Sufficient land is identified to enable an integrated network of waste management facilities to be developed across the County Borough through:

- Allocating land to meet the South East Wales Regional Waste Plan requirement of 0.4-4 hectares (Policy W1); and

- Encouraging the provision of in-building treatment facilities on Primary and Secondary Employment Sites (Policy DM9).

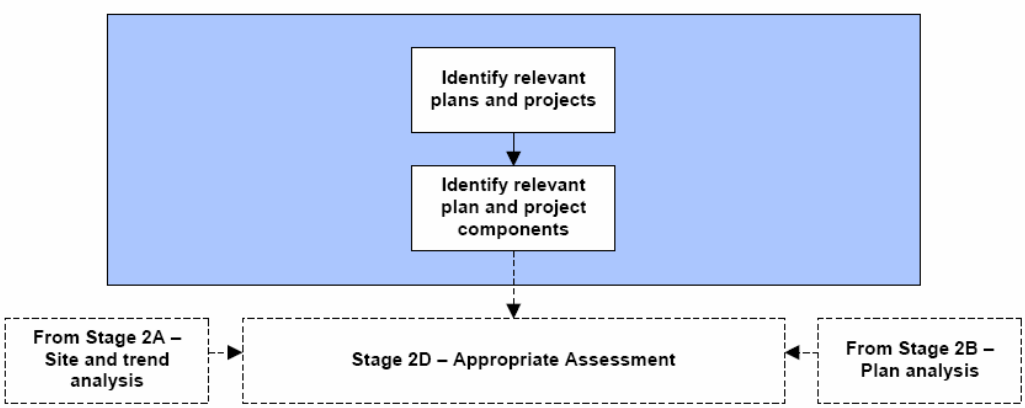
Support is provided for treatment facilities, measures and strategies that represent the best practicable environmental option, having regard to the waste hierarchy and the proximity principle (Policy DM19);

Provision is made for sustainable waste management storage and collection arrangements in all appropriate developments; and

Waste minimization is encouraged during construction.

6. Stage 2C – Other Plans and Projects

6.1 Identifying Other Plans



(Source: Appropriate Assessment of Plans, Levett-Therivel Consultants, September 2006)

Figure 5 Schematic of Stage 2C

6.1.1 Overview

For the purpose of this study the expression 'in combination' is taken to refer to the aggregated effects of all the projects and plans which can reasonably be expected to have some bearing on sites in the context of prevailing environmental conditions.

This process therefore takes account of reasonably foreseeable impacts arising from both plans and projects and from 'background' environmental changes or trends.

The review considered the most relevant plans. In deciding on the relevant plans and projects for assessment, consideration was given to those whose impact areas coincide with the designated sites within the area of influence of 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.

6.1.2 Inventory of 'Other Plans'

See Appendix D for list of the "other projects and plans" considered for this Appropriate Assessment. These plans fall broadly under the following categories:

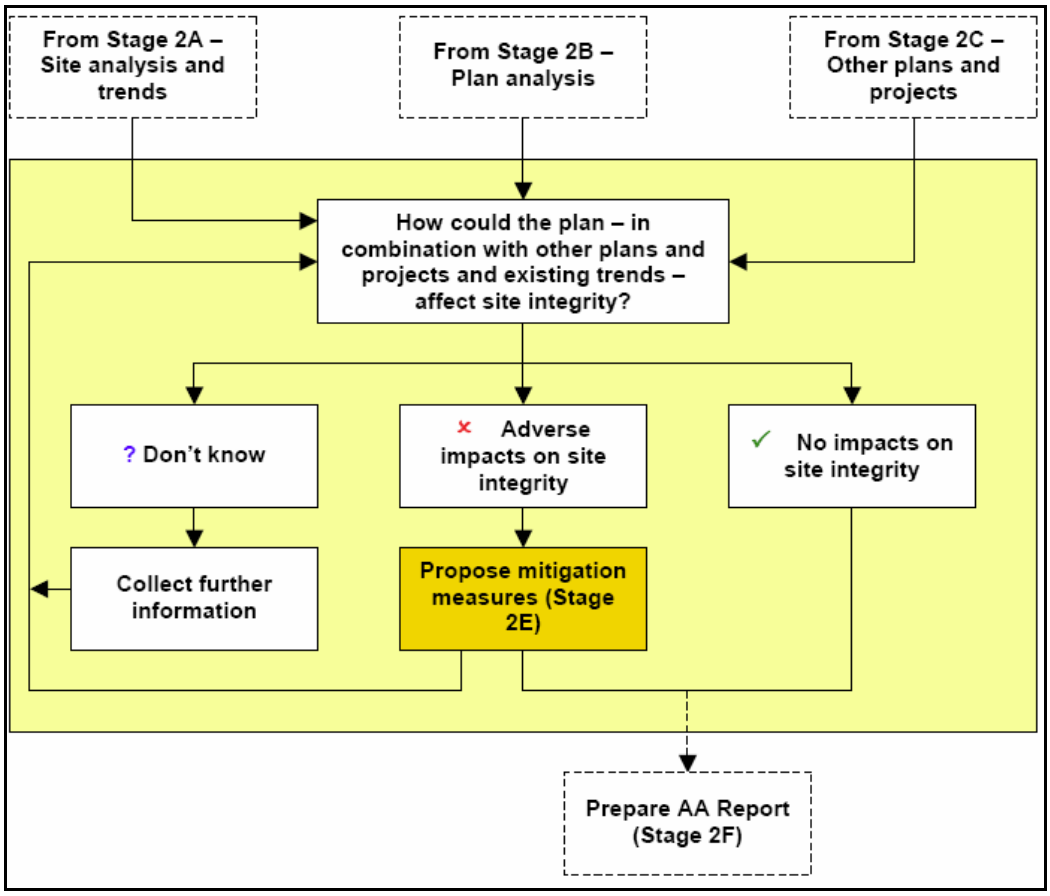
- UK and International Plans, Programmes and Strategies;
- Wales-wide Plans, Programmes and Strategies;
- Regional Plans, Programmes and Strategies
- Local Plans, Programmes and Strategies

6.2 Cumulative Assessment

6.2.1 Steps in the Assessment

- Identify all plans /programmes/ projects which might act in combination;
- Impact identification: identify the types of impacts (e.g. noise, water resource reduction, chemical emissions, etc) that are likely to affect aspects of the structure and functions of the site vulnerable to change;
- Define boundaries for assessment;
- Pathway identification: identify potential cumulative pathways (e.g. via water, air etc.; accumulation of the effects in time or space). Examine site conditions to identify where vulnerable aspects of the structure and function of the site are at risk;
- Prediction: prediction of the magnitude/extent of identified likely cumulative effects;
- Assessment: comment on whether or not the potential cumulative impacts are likely to be significant.

7. Stage 2D - The Appropriate Assessment Process



(Source: Appropriate Assessment of plans, Levett-Therivel Consultants, September 2006)

Figure 6.0 Schematic of Stage 2D

7.1 Introduction

7.1.1 Overview

The HRA Screening Report Deposit Local Development Plan, April 2011, described the aims, objectives and outlined the key policies of the plan. The Screening also considered and identified which policies had the potential (in implementation) to affect the integrity of the European sites within the plan's area of influence.

This section considers in more detail where the impacts identified are likely to have a significant effect on site integrity either alone or in-combination with other plans and projects.

7.2 Overview of Source/Pathway/Receiver analysis

According to the "Appropriate Assessment of plans" by Levett-Therivel Consultants, September 2006, much of the work for Stage 2D involves determining whether there is a pathway from the source (the plan) to the receiver (the European site). The pathway may be very simple, leading to a direct impact, or it may be more complex and lead to an indirect and / or induced impact. In the context of AA, it does not matter whether an impact is 'direct', 'indirect' or 'induced'; the emphasis should be in the identification of any effect of the plan that might affect site integrity, regardless of the complexity of the impact pathway.

Direct impacts represent a straight route between an action or event and a resultant effect on the ecological interest feature.

Indirect impacts do not arise directly from the plan but instead 'occur away from the original effect or as a result of a complex pathway' (ODPM, 2005).
Indirect impacts are also referred to as secondary impacts or included within the term cumulative effects. As there is not a straight-line route between cause and effect it is potentially more challenging to ensure that all the possible indirect impacts of the plan – in combination with other plans and projects have been established.

Induced impacts are secondary actions which may result from the actions set out in the plan, e.g. those impacts arising from development which promotes further development or change which, in turn, affects the integrity of European sites. These are non-ecological impacts in the first instance but will result in ecological impacts later in the pathway of effects.

Pathways can differ for different scales and types of plans: it may be possible to show a pathway for a local plan but not a regional one or vice-versa.

Methods for identifying and describing pathways between source and receiver include network analysis, GIS and modelling. IEEM (2006) provides further information. However, the use of such tools should never hide clear, logical analysis, nor prevent a transparent record of all decisions made.

For the AA of the Deposit LDP, the source/pathway/receptor analysis was carried out using GIS mapping and flow diagrams to track the pathway between source and receptor. Components of the LDP were assessed individually working from the higher-level components such as objectives and aims successively downwards to the lower-level, more detailed components individual policies and actions. The results of these assessments are summarised in Tables 3 to 11.

More detailed representation of these assessments can be seen in Appendix B.

7.3 Significant Impact – How is it Assessed?

According to the European Commission methodological guidance report on assessment of plans and projects significantly affecting Natura 2000 sites, this is the process of evaluating the importance or significance of project/plan impacts (whether adverse or beneficial).

In most cases, this is essentially a judgment, built up from a number of factors, but it may also be made more objective with the use of criteria and standards. The assessment of significance will be based upon factors such as the following:

- the character and perceived value of the affected environment;

- the magnitude, spatial extent and duration of anticipated change;
- the resilience of the environment to cope with change;
- confidence in the accuracy of predictions of change;
- the existence of policies, programmes, plans, etc. which can be used as criteria;
- the existence of environmental standards against which a proposal can be assessed (e.g. air quality standards, water quality standards);
- the degree of public interest and concern in the environmental resources concerned and the issues associated with a proposed project;
- scope for mitigation, sustainability and reversibility.

A common means of determining the significance of effects is through the use of key indicators as outlined in section 4.2 in collaboration with baseline information on the environmental status.

Assessment of Plan Components				
Site	Qualifying features	Key relevant environmental conditions to support site integrity	Possible impacts arising from the Deposit LDP Strategy Policies	Significance of Impact (see characterisation of significance of impact in section 7.3)
Aberbargoed Grasslands SAC	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) Marsh fritillary butterfly Euphydryas (Eurodryas, Hypodryas) aurinia	Maintenance of habitat in good status (habitat area, quality and connectivity)	Possible loss of habitat area , quality and connectivity could negatively affect the features	Possible significant impact
Sugar Loaf Woodlands SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles	Minimal atmospheric pollution – may increase acidification and cause damage to features.	Possible deterioration of air composition and quality which could negatively affect the feature	Possible significant impact
Usk Bat Sites SAC	European dry heaths Degraded raised bogs still capable of natural regeneration Blanket bogs Calcareous rocky slopes with chasmophytic vegetation Caves not open to the public Tilio-Acerion forests of slopes, screes and ravines	Management of the hydrology of the area, ensuring that flow regime is preserved Maintenance of good water quality and management of sediment load and sediment-causing processes Lesser horseshoe bats require protected roosts and foraging routes Minimal atmospheric pollution – may increase	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (e.g. maturity roosts, foraging areas, hibernation sites, severance of flightlines between bat roosting and foraging sites); changes in drainage which could negatively affect the feature	Possible significant impact

	Lesser horseshoe bat Rhinolophus hipposideros	acidification and cause damage to features.		
Cwm Clydach Woodlands SAC	Asperulo-Fagetum beech forests Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	Maintenance of habitat in good status (habitat area , quality and connectivity)	Possible loss of habitat area, quality and connectivity could negatively affect the features.	Possible significant impact
River Usk[1] SAC	Watercourses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation Otter (*Lutra lutra*); Atlantic salmon (*Salmo salar*); Bullhead (*Cottus gobio*); sea lamprey (*Petromyzon marinus*); brook lamprey (*Lampetra planeri*); river lamprey (*Lampetra fluviatilis*); twaite shad (*Alosa fallax*); and allis shad (*Alosa alosa*).	Management of the hydrology of the area, ensuring that flow regime is preserved Maintenance of good water quality and management of sediment load and sediment-causing processes Flows, water quality, substrate quality and quantity at fish spawning sites and nursery areas will not be depleted by abstraction, discharges, engineering or gravel extraction activities or other impacts to the extent that these sites are damaged or destroyed.	Possible deterioration of water quality and alteration of flow regime and flow characteristics of the River from possible abstraction of water to meet increased water demand	No impact (see section 7.4)

Table 3.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components (at sites)

[1] Further details regarding the inclusion of River Usk SAC in the Appropriate Assessment as well as the likely impacts considered are provided in Section 7.4

Definition of significant impact is given in Section 7.4

See mitigation measures in Table 24 (Chapter 8.0)

Initial Assessment of Deposit LDP Themes				
Theme 1: Create a Network of Sustainable Vibrant Valley Communities.				
Impact on Sites	By 2021, Ebbw Vale will be the main service and retail hub for the County Borough supported by a network of vibrant district/local centres (secondary hubs).	By 2021, the population will have increased from 69,300 to 71,100 as a result of people remaining in the area and other being attracted to the area.	By 2021, 3,666 new houses will have been built, approximately 800 of which will be affordable. New housing sites alongside improvements to existing houses.	By 2021, the use of sustainable modes of transport, particularly public transport, walking and cycling, will have increased and the quality and frequency of the public transport system improved.
Aberbargoed Grasslands	No impact	No impact	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact	No impact	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 4.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Themes				
Theme 1: Create a Network of Sustainable Vibrant Valley Communities.			**Theme 2: Create Opportunities for Sustainable Economic Growth and Promote Learning and Skills.**	
Impact on Sites	All developments have been built to a high standard, are sustainable, safe, and appropriate to their context and have helped improve the quality of the physical and natural environment.	New development has minimised further climate change contributions and, where appropriate, mitigated or adapted to its predicted effects.	By 2021, the regeneration plans for 'The Works', Ebbw Vale North and other key regeneration sites have been delivered.	By 2021, employment and economic activity rates will have increased and unemployment decreased. This has been achieved by diversifying the economic base into tourism, leisure, health and renewable technologies whilst supporting the manufacturing sector.
Aberbargoed Grasslands	No impact	No impact	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact	No impact	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact	No impact (see section 7.4)	No impact (see section 7.4)

Table 5.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Themes				
Theme 2: Create Opportunities for Sustainable Economic Growth and Promote Learning and Skills.			Theme 3: Create Safe, Healthy, and Vibrant Communities and Protect and Enhance the Unique Natural and Built Environment.	
Impact on Sites	By 2021, 50 hectares of employment land and a range of premises will have been delivered to meet the needs of local businesses and local people.	By 2021, the deliveries of the Learning Zone, new schools and integrated education services, including life-long learning have helped improve education levels and skills.	By 2021, an accessible network of green open spaces and high quality leisure infrastructure has helped increase participation in sport and active recreation and, contributes to improvements in health and well-being.	The unique landscape and natural heritage, has helped foster sustainable tourism and promoted community pride.
Aberbargoed Grasslands	No impact	No impact	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact	No impact	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	No impact	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	No impact	No impact	No impact
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact	No impact

Table 6.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Themes				
Theme 3: Create Safe, Healthy, and Vibrant Communities and Protect and Enhance the Unique Natural and Built Environment.			**Theme 4: Create opportunities to secure an Adequate Supply of Minerals and Reduce Waste.**	
Impact on Sites	By 2021, the biodiversity resource of Blaenau Gwent has been protected and enhanced and the connectivity of ecological networks has been improved from 2006 levels.	Blaenau Gwent's historical and cultural environment has been protected and enhanced and has played a key role in regenerating the area.	The 3 million tonnes of mineral resources required to be provided in Blaenau Gwent by the Regional Plan has been identified and resources of local, regional and national importance safeguarded.	A sustainable, integrated approach to waste management has minimised the production of waste and its impact on the environment, and maximised the use of unavoidable waste as a resource.
Aberbargoed Grasslands	No impact	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Cwm Clydach Woodlands	No impact	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Sugar Loaf Woodlands	No impact	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	No impact	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact	No impact	No impact (see section 7.4)	No impact (see section 7.4)

Table 7.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Strategic Policies (SP)				
Strategy: Create a Network of Sustainable Vibrant Valley Communities				
Impact on Sites	SP1 Northern Strategy Area – Sustainable Growth and Regeneration (see details of policy in 5.3.3)	SP2 Southern Strategy Area – Regeneration (see details of policy in 5.3.3)	SP3 The Retail Hierarchy and Vitality and Viability of the Town Centres (see details of policy in 5.3.3)	SP4 Delivering Quality Housing (see details of policy in 5.3.3)
Aberbargoed Grasslands	No impact	No impact	No impact	Possible significant impact; impact could be mitigated
Cwm Clydach Woodlands	No impact	No impact	No impact	Possible significant impact; impact could be mitigated
Sugar Loaf Woodlands	No impact	No impact	No impact	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 8.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Strategic Policies (SP)			
Strategy: Create a Network of Sustainable Vibrant Valley Communities			
Impact on Site	SP5 Spatial Distribution of Housing Sites (see details of policy in 5.3.3)	SP6 Ensuring Accessibility (see details of policy in 5.3.3)	SP7 Climate Change (see details of policy in 5.3.3)
Aberbargoed Grasslands	No impact	Possible significant impact; impact could be mitigated	No impact
Cwm Clydach Woodlands	No impact	Possible significant impact; impact could be mitigated	No impact
Sugar Loaf Woodlands	No impact	Possible significant impact; impact could be mitigated	No impact
Usk Bat Sites	No impact	Possible significant impact; impact could be mitigated	No impact
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact

Table 9.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Strategic Policies (SP)				
Strategy: Deliver Opportunities for Sustainable Economic Growth and the Promotion of Learning and Skills		**Strategy: Create Safe, Healthy, and Vibrant Communities and Protect and Enhance the Unique Natural and Built Environment**		
Impact on Sites	SP8 Sustainable Economic Growth (see details of policy in 5.3.3)	SP9 Active and Healthy Communities (see details of policy in 5.3.3)	SP10 Protection and Enhancement of the Natural Environment (see details of policy in 5.3.3)	SP11 Protection and Enhancement of the Built Environment (see details of policy in 5.3.3)
Aberbargoed Grasslands	No impact	No impact	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact	No impact	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	No impact	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	No impact	No impact	No impact
River Usk SAC	No impact (see section 7.4)	No impact	No impact	No impact

Table 10 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Strategic Policies (SP)		
Strategy: Secure an Adequate Supply of Minerals and Reduce Waste		
Impact on Sites	SP12 Securing an Adequate Supply of Minerals (see details of policy in 5.3.3)	SP13 Delivering Sustainable Waste Management (see details of policy in 5.3.3)
Aberbargoed Grasslands	No impact	Possible significant impact; impact could be mitigated
Cwm Clydach Woodlands	No impact	Possible significant impact; impact could be mitigated
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)

Table 11 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Assessment of Deposit LDP Allocations				
Allocation: Settlement boundaries – areas within which development will normally be permitted, subject to policies within the LDP and material planning considerations.		**Allocations: Mixed use sites**		
Impact of proposed activities (at allocated locations) on protected Sites	SB1: Settlement Boundaries Promote the full and effective use of urban land Prevent inappropriate development in the countryside. (reference proposal maps in LDP and Chapter 8 in LDP)	MU1: land is allocated north of Ebbw Vale Town Centre for the construction of 700 dwellings, a commercial leisure hub, road side services, employment and a strategic mixed use employment site. (reference proposal maps in LDP – Mixed use and Chapter 8 in LDP)	MU2: land is allocated at the former steelworks site for mixed use including: the construction of a new hospital, learning zone, leisure centre, playing pitches, arts centre, approximately 520 houses, business hub, family history & genealogy visitor centre, environmental resource centre and wetland park. (reference proposal maps in LDP – Mixed use and Chapter 8 in LDP)	MU3: land is allocated at the NMC Factory and Bus Depot for mixed use including; 60 houses and commercial/leisure/ community facility opportunity (reference proposal maps in LDP – Mixed use and Chapter 8 in LDP)
Aberbargoed Grasslands	No impact	No impact	No impact	No impact
Cwm Clydach Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 12 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations		
Allocation: Retail		
Impact of proposed activities (at allocated locations) on protected Sites	AA1 Action Area: Southern Gateway, Ebbw Vale; Market Square, Ebbw Vale (reference proposal maps in LDP – retail action area and Chapter 8 in LDP)	R1 Retail Allocations (reference proposal maps in LDP – retail action area and Chapter 8 in LDP)
Aberbargoed Grasslands	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)

Table 13 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations			
Allocation: Housing (see further details in Appendix F)			
Impact of proposed activities (at allocated locations) on protected Sites	H1 Housing Allocation: Total 1,625 which comprises: Ebbw Vale 722 Tredegar 358 Upper Ebbw Fach 248 Lower Ebbw Fach 297 (Full list of sites are in Chapter 8 of LDP) Land identified for 100% affordable housing (reference proposal maps in LDP – Housing)	HC1 Housing Commitments: Total 1,707 which comprises: Ebbw Vale 892 Tredegar 564 Upper Ebbw Fach 190 Lower Ebbw Fach 61 (Full list of sites are in Chapter 8 of LDP) Land identified for 100% affordable housing (reference proposal maps in LDP – Housing)	GT1 Gypsy and Traveller Accommodation Land is allocated south of the Cwmcrachen Gypsy and Traveller Site to accommodate 6 pitches. (reference proposal maps in LDP – Gypsy Traveller Site)
Aberbargoed Grasslands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact
Cwm Clydach Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 14 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations			
Allocation: Transport (see further details in Appendix F)			
Impact of proposed activities (at allocated locations) on protected Sites	T1 Cycle Routes The existing network of cycle paths and community routes will be extended, improved and enhanced by the completion of the following schemes: HoV Route linking Nine Arches Tredegar to Brynmawr; Link from HoV to Rassau Industrial Estate; HoV to Ebbw Vale and Cwm; Cwm to Aberbeeg; Link from HoV to Trefil; Links from HoV to Tafarnaubach Industrial Estate; Bedwellty Pits, Tredegar to County Boundary; Hilltop to Ebbw Vale to Manmoel; Brynmawr to Blaenavon; Extension of Ebbw Fach Trail from Abertillery to Aberbeeg and completion of missing section through Blaina; Link to Cwmtillery Lakes; Aberbeeg to Royal Oak; Royal Oak to Swfrydd (reference proposal maps in LDP – Existing and Proposed Cycle Network)	T2 Rail Networks and Station Improvements Land will be safeguarded for: Extension of rail link from Ebbw Vale Parkway to Ebbw Vale Town; Provision of new station and bus interchange at Ebbw Vale; Provision of new station at Cwm; Extension of rail link to Abertillery; Provision of new station and Park and Ride at Abertillery; and Rail freight provision at Marine Colliery. (reference proposal maps in LDP – Rail Network and Station Improvement)	T3 Safeguarding of disused Railway Infrastructure Disused railway infrastructure will be protected from development that would compromise its future transport use where reuse is a realistic prospect in the future. (reference proposal maps in LDP – Rail Network and Station Improvement)
Aberbargoed Grasslands	No impact	No impact	No impact
Cwm Clydach Woodlands	No impact	Possible significant impact; impact could be mitigated	No impact

Sugar Loaf Woodlands	No impact	Possible significant impact; impact could be mitigated	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact

Table 15 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations			
Allocation: Transport (see further details in Appendix F)			
Impact of proposed activities (at allocated locations) on protected Sites	T4 Improvements to Bus Services The following bus service improvements are identified: Bus Priority Scheme along the Brynmawr to Newport Bus Corridor Bus Interchange improvement at Brynmawr Bus Interchange improvement at Ebbw Vale (reference proposal maps in LDP)	T5 New Roads to Facilitate Development Construction of a Peripheral Distributor Road through 'The Works' Online improvements between the Peripheral Distributor Road and the A465. (reference proposal maps in LDP)	T6 Regeneration Led Highway Improvements Dualling of the A465 Heads of the Valleys Road (Tredegar to Brynmawr) Online improvements to the A4046 south of Cwm Online improvements to the A4048 south of Tredegar Online improvements to the A467 south of Abertillery (reference proposal maps in LDP – Regeneration Led Highway Improvement)
Aberbargoed Grasslands	No impact	Possible significant impact; impact could be mitigated	No impact
Cwm Clydach Woodlands	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Sugar Loaf Woodlands	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 16 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations		
Allocation: Employment (see further details in Appendix F)		
Impact of proposed activities (at allocated locations) on protected Sites	EMP1 (Total 50.0 ha indicative developable area) The following sites are allocated for employment uses, in line with their status in the employment hierarchy identified in Policy DM11: *Strategic Sites* 13.2 (ha) indicative developable area. (B1 and B2 Use Classes and an ancillary facility or service to the proposed employment use) *Business Parks* 7.9 (ha) indicative developable area. (B1 Use Class and an ancillary facility or service to the proposed employment use) *Primary Sites* 28.9 (ha) indicative developable area. (B1, B2, and B8 Use Classes, an appropriate Sui Generis use and an ancillary facility or service to the proposed employment use) (reference proposal maps in LDP – Employment allocations and Chapter 8 of LDP)	EMP2 The following sites are protected for employment use, in line with their status in the employment hierarchy identified in Policy DM11: *Business Parks:* 1 employment area (B1 use class and an ancillary facility or service to the proposed employment use) *Primary Sites:* 11 employment areas (B1, B2, and B8 use classes, an appropriate sui generis use and an ancillary facility or service to the proposed employment use) *Secondary Sites:* 9 employment areas (B1, B2, and B8 use classes, an appropriate sui generis use, an ancillary facility or service to the proposed employment use and an acceptable commercial service) (reference proposal maps in LDP – Employment areas and Chapter 8 of LDP)

Aberbargoed Grasslands	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)

Table 17 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations		
Allocation: Community Facilities		
Impact of proposed activities (at allocated locations) on protected Sites	ED.1 Education Provision The following sites are allocated for education: Ysgol Gymraeg, Brynmawr – New primary school Lower Plateau Six Bells Colliery Site – New primary school (reference proposal maps in LDP – Education Provision and Chapter 8 of LDP)	CF1 Community Centre The following site is allocated for a community centre: Former Sirhowy Infants School, Tredegar (reference proposal maps in LDP and Chapter 8 of LDP)
Aberbargoed Grasslands	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	No impact
River Usk SAC	No impact (see section 7.4)	No impact (see section 74)

Table 18 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations		
Allocation: Tourism and Leisure		**Allocation: Leisure**
Impact on Sites	TM1 Tourism and Leisure Sites are allocated for tourism related activities at the following sites: Eastern Valley Slopes, Garden Festival, Blue Lakes, Bedwellty House and Park, Parc Bryn Bach (including a hotel), Nantyglo Roundhouse and Towers, Land adjacent to Blaen y Cwm School, Cwmtillery Lakes, Brynmawr Roundabout (reference proposal maps in LDP – Tourism and Leisure and Chapter 8 of LDP)	L1 Formal Leisure Facilities Land is identified for leisure facilities at: Chartist Way, Tredegar (reference proposal maps in LDP – Tourism and Leisure and Chapter 8 of LDP)
Aberbargoed Grasslands	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	No impact
River Usk SAC	No impact (see section 7.4)	No impact

Table 19 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations			
Allocation: Environment			
Impact of proposed activities (at allocated locations) on protected Sites	ENV1 Green Wedges Green Wedges have been identified to prevent the coalescence between and within settlements at: Beaufort and Brynmawr; Tredegar and Ebbw Vale; reference proposal maps in LDP – Green Wedges and Chapter 8 of LDP)	ENV2 Special Landscape Areas Special Landscape Areas are identified and will be protected at the following locations: St Illtyd Plateau and Ebbw Eastern Sides Eastern Ridge and Mynydd James Cwm Tyleri and Cwm Celyn Mynydd Carn-y-Cefn and Cefn yr Arail Mynydd Bedwellty, Rhymney Hill and Sirhowy Sides Cefn Manmoel Trefil and Garnlydan Surrounds Beaufort Common reference proposal maps in LDP – Special landscape area and Chapter 8 of LDP)	ENV3 Sites of importance for nature Conservation All designated sites meeting the Criteria for the Selection of Sites of Importance for Nature Conservation in the County Boroughs of Blaenau Gwent, Caerphilly, Merthyr Tydfil and Rhondda Cynon Taff (the 'Mid-Valleys Area'), 2008, will be covered by this Policy. reference proposal maps in LDP and Chapter 8 of LDP)

Aberbargoed Grasslands	No impact	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact	No impact

Usk Bat Sites	No impact	No impact	No impact
River Usk SAC	No impact	No impact	No impact

Table 20 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations		
Allocation: Environment		
Impact of proposed activities (at allocated locations) on protected Sites	ENV4: Land Reclamation Schemes Land reclamation schemes are proposed at the following locations: Cwmcrachen, Brynmawr; Pennant Street phase 2, Ebbw Vale; Llanhilleth Pithead Baths, Llanhilleth; Parc Bryn Bach, Tredegar (reference proposal maps in LDP – Land Reclamation and Chapter 8 of LDP)	ENV5: Cemeteries Extensions to the existing cemeteries are identified at the following locations: Cefn Golau Cemetery, Tredegar; Dukestown Cemetery, Tredegar: Blaina Cemetery, Blaina (reference proposal maps in LDP – Cemetery Extensions and Chapter 8 of LDP)
Aberbargoed Grasslands	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact
Usk Bat Sites	No impact	No impact
River Usk SAC	No impact	No impact (see section 7.4)

Table 21 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations				
Allocation: Waste		**Allocations: Minerals**		
Impact of proposed activities (at allocated locations) on protected Sites	W1: Land for Waste Management The South East Regional Waste Plan indicates that between 0.4 and 4 hectares of land will be required for waste management facilities within Blaenau Gwent to serve more than one local authority. The following site is identified to accommodate regional waste management facilities: • Land south of Waun-y-Pound, Ebbw Vale The following site is identified to accommodate local waste management facilities: • Silent Valley, Cwm (reference proposal maps in LDP – Waste and Chapter 8 of LDP)	M1: Safeguarding of Minerals The following mineral resources are identified on the Proposals Maps: The Limestone resource; The Sandstone resource; The Primary and Secondary Coal resource , (reference proposal maps in LDP – Mineral Existing Sites and Chapter 8 of LDP)	M2: Mineral Buffer Zones Buffer zones are identified around permitted mineral sites to safeguard sites from new development that would prejudice future extraction of permitted reserves or the operation of the site. (reference proposal maps in LDP – Minerals: Aggregates, Coal & Buffer and Chapter 8 of LDP)	M3: Preferred areas A recent permission for the deepening of Trefil Quarry has resulted in an additional resource allocation of 2.24 million tonnes which means that Blaenau Gwent needs to identify a further 0.76million tonnes. (reference proposal maps in LDP – Minerals Preferred Area of Search and Chapter 8 of LDP)
Aberbargoed Grasslands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated

Cwm Clydach Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 22 Summary of results of Assessment of LDP Allocations

Tables 4 to 22 represent the HRA assessment of the total allocations (of sites) under consideration for the Deposit LDP. No additional sites are anticipated (at the time of writing this report), that will require further HRA assessment prior to the Deposit Plan being finalised.

7.4 Appropriate Assessment of the River Usk SAC

7.4.1 Overview of the River Usk SAC – A Special Case

The River Usk SAC is not a part of the natural drainage area defined by the physical boundary of the BGCBC Deposit LDP. Hence, it is not a natural receptor or sink for natural surface water runoff, overland outflow and discharge from drainage outfalls.

The catchment area for the LDP is the River Ebbw. The River Usk is of no relevance to the HRA assessment of the LDP as there are no direct natural hydrological linkages with the LDP area.

The Usk SAC was progressed from the screening phase of the HRA based only on the precautionary principle and not because there were likely direct impacts identified on the Usk SAC.

This European site was 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).

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.

Below is an extract from an email to BGCBC from Gail Davies, Head of Water Resources at Dŵr Cymru, in response to questions raised by CCW concerning the capacity of the local water resources to meet the water demand of the activities proposed in the Deposit LDP. Refer to the email in Appendix E.

"The Water Resources Management Plan, and our most recent demand forecast, is based upon the Welsh Assembly Government "2006 based Local Authority Property Projections". The WAG projections predict an increase in household properties in Blaenau Gwent between 2006 and 2021 of 4,082 (slightly higher than the latest data from the Local Authority of 3,600). However, in our demand forecasts Welsh Water suppressed the overall growth rate supplied by the WAG projections. This was because the total regional growth forecast in our operating area was significantly higher than anything we had seen in the past ten years (we would be forecasting a 50 % increase in New Connections compared with 2000-2008 when the construction sector was significantly more buoyant) and at the time of revising the demand forecasts we were certainly well within economic recession.

The resulting forecast in our latest demand forecast for Blaenau Gwent is an increase in household properties over the relevant fifteen years of 2,200. This is around 1,400 properties lower than the Blaenau Gwent Local Authority estimate. We are confident in our approach to suppress growth because we are able to frequently update these forecasts in line with the economic climate and we operate within five-year planning periods which would enable us to revise our investment programmes should patterns of growth modify significantly.

It should be noted that all our water demand forecasts are based on population growth and not property growth so unless the Local Authority are suggesting population growth above WAG and

ONS projections, the impact of new households will be minor. In Blaenau Gwent the latest WAG projections for population are an increase to 71,100 in 2021 (from a 2006 base of 69,300). This simply means that the household occupancy rate (people per property) would be slightly lower if all 3,600 households forecast by the Local Authority were actually built and this would result in a modest increase in demand of around 0.2 Ml/d (all in SEWCUS zone).

Specifically, with regard to your HRA and comments received from CCW then I have provided a map of the supply area for Blaenau Gwent. This clearly demonstrates the main sources of supply which we use to supply Blaenau Gwent Authority area. Additionally, as your area lies within our wider South-East Wales Conjunctive Use system (SEWCUS) we are also able to support supplies from our wider zone, predominantly Pontsticill reservoir.

Critically, therefore, your sources of supply are not designated sources under the Habitats Directive and are not subject to Review of Consents. Although the wider SEWCUS zone will be impacted by major reductions to licences under this process, the area of Blaenau Gwent will remain unaffected by this."

Refer to Figure 7 for map of water supply area for Blaenau Gwent area.

7.4.2 *Result of Assessment*

The proposed level of population growth envisaged under the Deposit LDP (which has been estimated to equate to a water demand of 0.2 ML/d) can be adequately accommodated within the local water resources identified by Dŵr Cymru for Blaenau Gwent from the following sources: Cwmtillery Reservoir, Lower Carno Reservoir, Shon Sheffrey Reservoir, Blaen-y-Cwm Reservoir and Ffynnon Gisfaen Spring. These water resources are part of the River Ebbw catchment area, which is entirely separate from the River Usk catchment area.

There would be additional supply capacity available, if required, from the water storage of the Pontsticill Reservoir located on the River Taff, so the area of Blaenau Gwent would remain unaffected. There are no plans to deploy water from the Usk to the area of Blaenau Gwent.

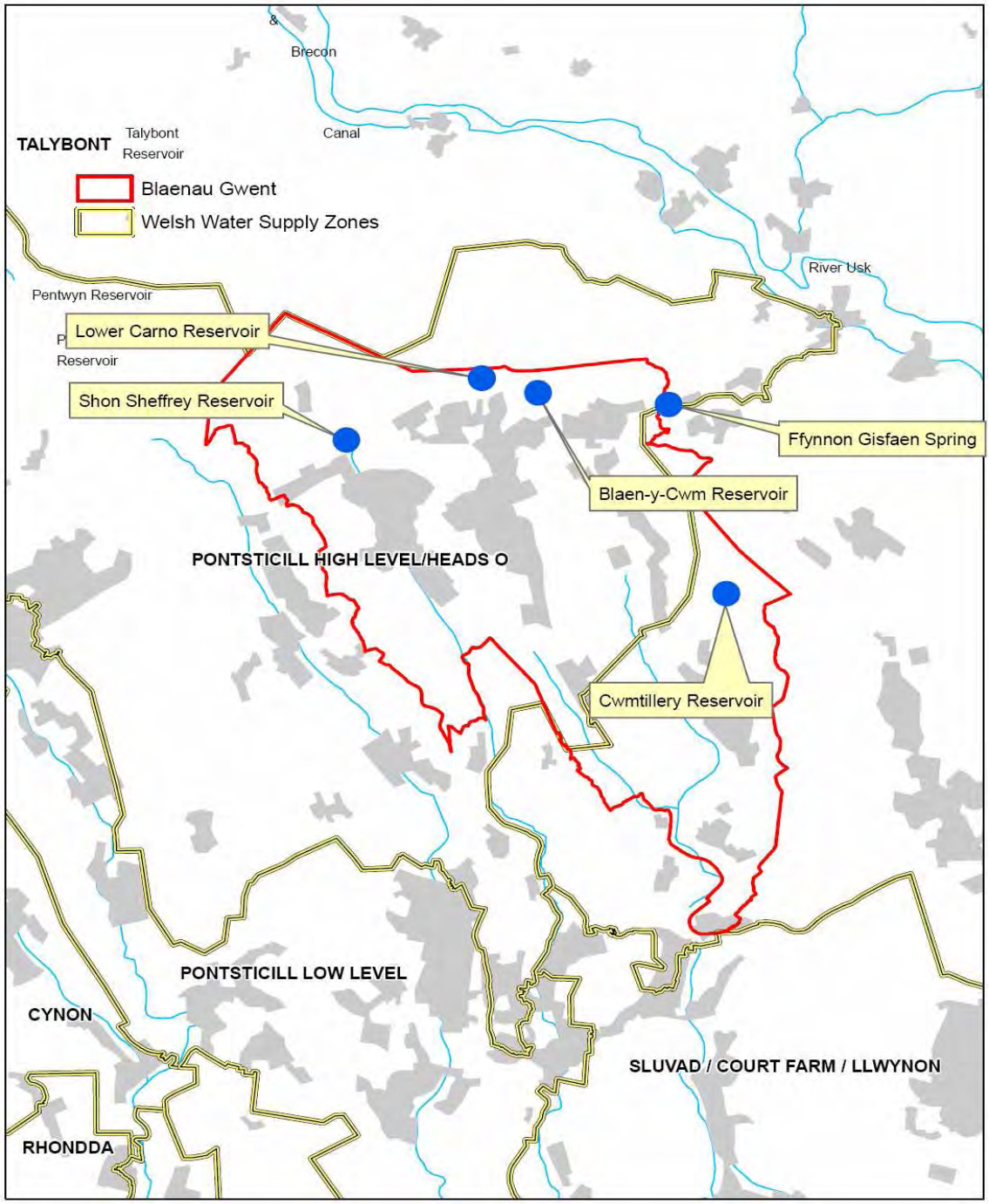


Figure 7.0 Map of Water Supply Blaenau Gwent Area (Dŵr Cymru)

7.5 Assessment of 'In-Combination' Impact with Other Projects/Plans

7.5.1 Source Pathway Receptor Analysis: Other Projects and Plans

Refer to Section 6.2 and Sections 7.2 and 7.3 for the procedure followed.

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

Based on the features and habitats for which the European sites in the vicinity of the LDP area have been designated, it is evident that the predominant pathways for the impacts described in this report are water and air.

The plans and projects in Chapter 6 and Appendix D were examined in order to establish whether any 'in-combination' impacts with the LDP on the European sites of interest are likely. These plans were assessed using the source/pathway/receptor analysis previously described.

Because of the large number of plans involved, the results of the analysis for representative plans and projects from the broad categories identified in Section 6.1 are summarised in Table 23 below.

AA question	Source	Pathway	Possible Impact on receiver	Risk of an adverse effect on site integrity?
Whether the *Environment Agency for Wales Review of Consents* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	This is a primarily desk-based R&D study. Field activities are limited to water activities such as sampling and monitoring of trends and environmental conditions.	Possibly indirect and induced pathways via water from sampling and environmental monitoring activities.	No adverse impact likely	No

Whether the *Environment Strategy for Wales (2006)* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	The Environment Strategy provides the framework for the Assembly Government and its partners to protect and enhance the environment in Wales.	Possibly direct, indirect and induced pathways via water and air from development policies, actions and activities.	No adverse impact likely	No
Whether the *Peoples, Places, Futures – The Wales Spatial Plan 2008 Update* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	This first Wales Spatial Plan is about reflecting honestly and clearly the way a whole range of activity and investment occurs across the geographic space It sets the context for local and community planning	Possibly direct, indirect and induced pathways via water and air from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of air and water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects
Whether the *Wales: A Vibrant Economy (Consultation Document)* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	The vision is of a vibrant Welsh economy delivering strong and sustainable economic growth by providing opportunities for all.	Possibly direct, indirect and induced pathways via water and air from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of air and water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the

				proposed LDP would not have any significant effects
Whether the *South East Wales Regional Waste Plan 2004* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	The Regional Waste Plan is a land use framework to facilitate planning and controlling the development of an integrated network of facilities to treat and dispose of waste in South East Wales	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of air and water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects
Whether the *Regional Technical Statement for Aggregates (2007)* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	The overarching objective seeks to ensure a sustainably managed supply of aggregates (which are essential for construction), striking the best balance between environmental, economic and social costs.	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects
Whether the *Strategy for the Heads of the Valley* is likely to	vision for the Heads of the Valleys within the context of the Wales	Possibly direct, indirect and induced pathways via water and air and land	Possible disturbance of features, deterioration of water quality and,	Potential for 'in-combination' effects, prior to the consideration

have an 'in combination' effect on features and habitats of interest in the relevant European sites	Spatial Plan. it sets out a shared vision for what the area will look and feel like by the year 2020	from development policies, actions and activities such as: upgrading of the A465 Heads of the Valleys road and rail links continued major public investment large scale renewal of public sector/social housing There is also the possible loss of habitat (area, quality and connectivity).	changes to the flow regime and sediment characteristics which could negatively affect the features	of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects
Whether the *Catchment Flood Management Plans* in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	This is a planning tool which provides a means of understanding the complex causes of flooding thus allowing co-ordinated action to be taken on every front in partnership with others to reduce flood risk	Possibly direct, indirect and induced pathways via water and air from flood defence and risk management policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects
Whether Local Authority *SPGs* in	These are non statutory supporting information	Possibly direct, indirect and induced pathways via	Possible disturbance of features, deterioration of	Potential for 'in-combination' effects,

SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	and advice which amplifies the policies and proposals of Local Plans in SE Wales and add adds detail to policies in the Plans	water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects
Whether Core Management Plans for SACs in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	These are the CCW's management plan for the protected sites in SE Wales. They set out what needs to be achieved on the sites, the results of monitoring and advice on the action required. They also provide CCW's statement of the Conservation Objectives for the relevant Natura 2000 sites.	Possibly indirect and induced pathways via water air and land from sampling and environmental monitoring activities.	No adverse impact likely	No

Whether *Biodiversity Action Plans* for protected sites in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	A Biodiversity Action Plan (BAP) is an internationally recognized program addressing threatened species and habitats and is designed to protect and restore biological systems.	Possibly indirect and induced pathways via water air and land from sampling and environmental monitoring activities. It may also involve habitat protection measures.	No adverse impact likely	No
Whether *Water Resources Management Plans* in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	These are documents which the water undertakers in SE Wales are statutorily required to produce for the EA. These plans set out the management vision of water resources in the region under the headings of demand management and resource development.	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects
Whether *Local Authority Municipal Waste Management Strategy* in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	This looks at all aspects of waste management including new and effective methods of disposal and recycling, the development of new facilities and a continuing process of obtaining value and quality while best serving the communities and residents	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not

				have any significant effects
Whether the SE Wales *Draft Regional Transport Plan* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	The RTP vision is for a modern, accessible, integrated and sustainable transport system for South East Wales	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects
Whether *Local Transport Plans* in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites.	These include examples of good practice, technical guidance, accessibility planning, major schemes, performance indicators and details of all annual capital settlements to date in the different local planning authorities in SE Wales.	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects
Whether *The Children and Young People Strategy* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	This fosters a climate in which service providers give priority to developing and delivering high quality, innovative and responsive provision for	Possibly indirect and induced pathways via water air and land from provision of service and support, infrastructure development and management activities.	No adverse impact likely	No

	children and young people.			

Table 23 Summary of results of in-combination assessment

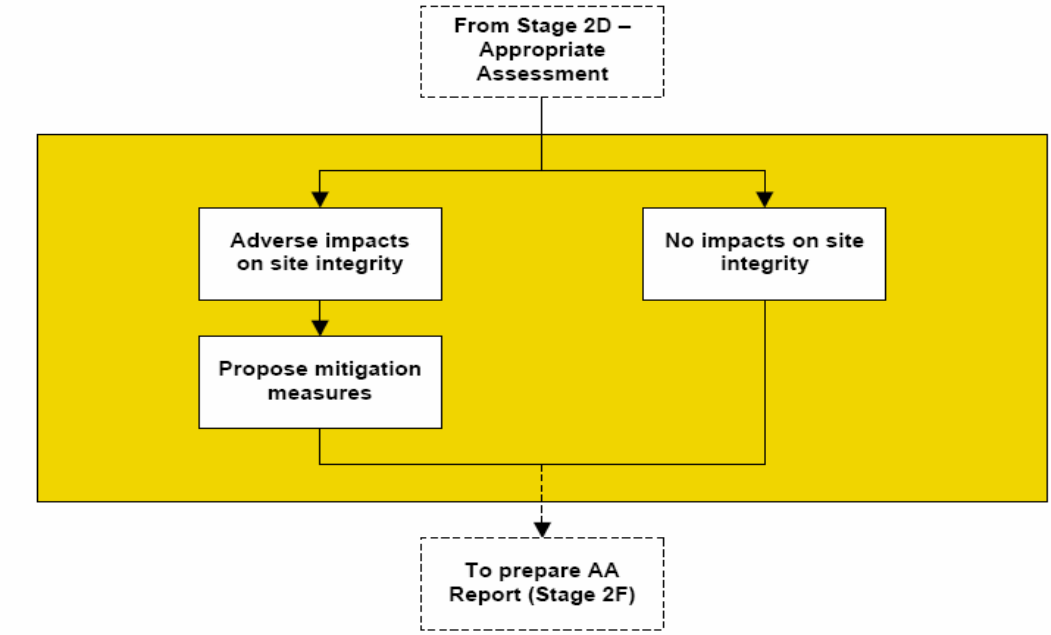
7.5.2 *FINDINGS*

From the source/pathway/analysis carried out (see summary of results in Table 23), it became evident that it is possible that some of these Plans/Projects, notably the larger scale ones, could potentially have adverse impact on the designated features – when considered without the effects of mitigation.

However, for many of these Plans/Projects, mitigation measures/features were incorporated at Plan design and development. Most of these Plans and Plan components were subject to the HRA process to comply with Habitats Directive (Council Directive 92/43/EEC).

Therefore, the conclusion was drawn that is unlikely that there will be any adverse contribution from the LDP when considered "in-combination" with other relevant plans and projects as defined under Article 6(3) of the Habitats Directive.

8. Stage 2E – Mitigation Measures



Source: Appropriate Assessment of Plans, Levett-Therivel Consultants, September 2006)

Figure 8.0 Schematic of Stage 2E

8.1 Overview

The core aim of the Habitats Directive is to support the maintenance and promotion of biodiversity. Habitats Regulations Assessment provides the tool through which planners can ensure that they are meeting the commitments and legal requirements of the European and National legislation.

Following the more detailed AA, 8 of the 13 strategic policies (namely: SP1, SP2, SP3, SP4, SP6, SP8, SP12 and SP13) of the Deposit LDP are identified as having **the potential,** prior to the consideration of mitigation measures**,** to significantly impact on the following European sites: Cwm Clydach Woodlands, Usk Bat Site, Aberbargoed Grasslands and Sugar Loaf Woodlands.
Similarly, twenty-two of the thirty proposed allocations were identified to have the potential for causing significant effects on these four European sites. The allocations provide details on how the Strategies of the Deposit LDP are to be delivered on the ground, that is, where new developments are to be located. None of Plan components of BGCBC Deposit LDP were found to have the potential for causing significant effects on the Usk SAC.

It has therefore been necessary to consider mitigation measures for these strategic policies and other Plan components, which when applied are capable of reducing the effects to a level where they are negligible and will not adversely affect the integrity of these four European sites.

It is worthwhile to note that many of the Development Management Policies have been identified within the Deposit LDP as tools which will be used alongside National Planning Policies and guidance as the basis for determining planning applications. These management and National policies that are part of the planning determination process will provide mitigation for some of the effects identified in Chapter 7.

The mitigation measures considered and the likelihood of residual effect following their application is detailed in the Appropriate Assessment Proforma (Appendix C).

Mitigation will take a range of forms, depending on the European interest feature affected. It could include, for example:

- prevent certain activities within a given distance of a site or interest feature;
- allow only certain activities within a given distance of a site or interest feature;
- require the preservation or management of environmental features within a given distance of a site or interest feature;
- require project-level mitigation measures.

This section also includes a table which contains a summary of the mitigation proposed for the plan as well as an indication of the risk of residual impacts.

This is important as European Commission guidance requires an analysis of the effectiveness of proposed avoidance/mitigation measures.

8.2 Avoidance and Mitigation Measures

A list of recommendations for the BGCBC LDP is included in the conclusions chapter of this AA report.

This section also includes a table which contains a summary of the mitigation proposed for the plan as well as an indication of the risk of residual impacts.

This is important as European Commission guidance requires an analysis of the effectiveness of proposed avoidance/mitigation measures.

Assessment of Deposit LDP Strategic Policies (SP)					
Site	Qualifying features	Key relevant environmental conditions to support site integrity	Possible impacts arising from the Deposit LDP Strategy Policies	Proposed mitigation	Remaining risk of a significant effect
Aberbargoed Grasslands SAC	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) Marsh fritillary butterfly Euphydryas (Eurodryas, Hypodryas) aurinia	Maintenance of habitat in good status (habitat area, quality and connectivity)	Possible loss of habitat area , quality and connectivity could negatively affect the features	Preventing loss of natural habitat by activities such as the clearing of land or removal of vegetation within the geographical limits of Aberbargoed Grasslands SAC. Preventing activities which could cause disturbance to the features (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority	None
Sugar Loaf Woodlands SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles	Minimal atmospheric pollution – may increase acidification and cause damage to features.	Possible deterioration of air composition and quality which could negatively affect the feature	Requiring measures in new developments to safeguard against increasing atmospheric pollutants (such as photochemical oxidants, particulate matter etc.) above existing levels – particularly those which contribute to acidification and eutrophication.	None

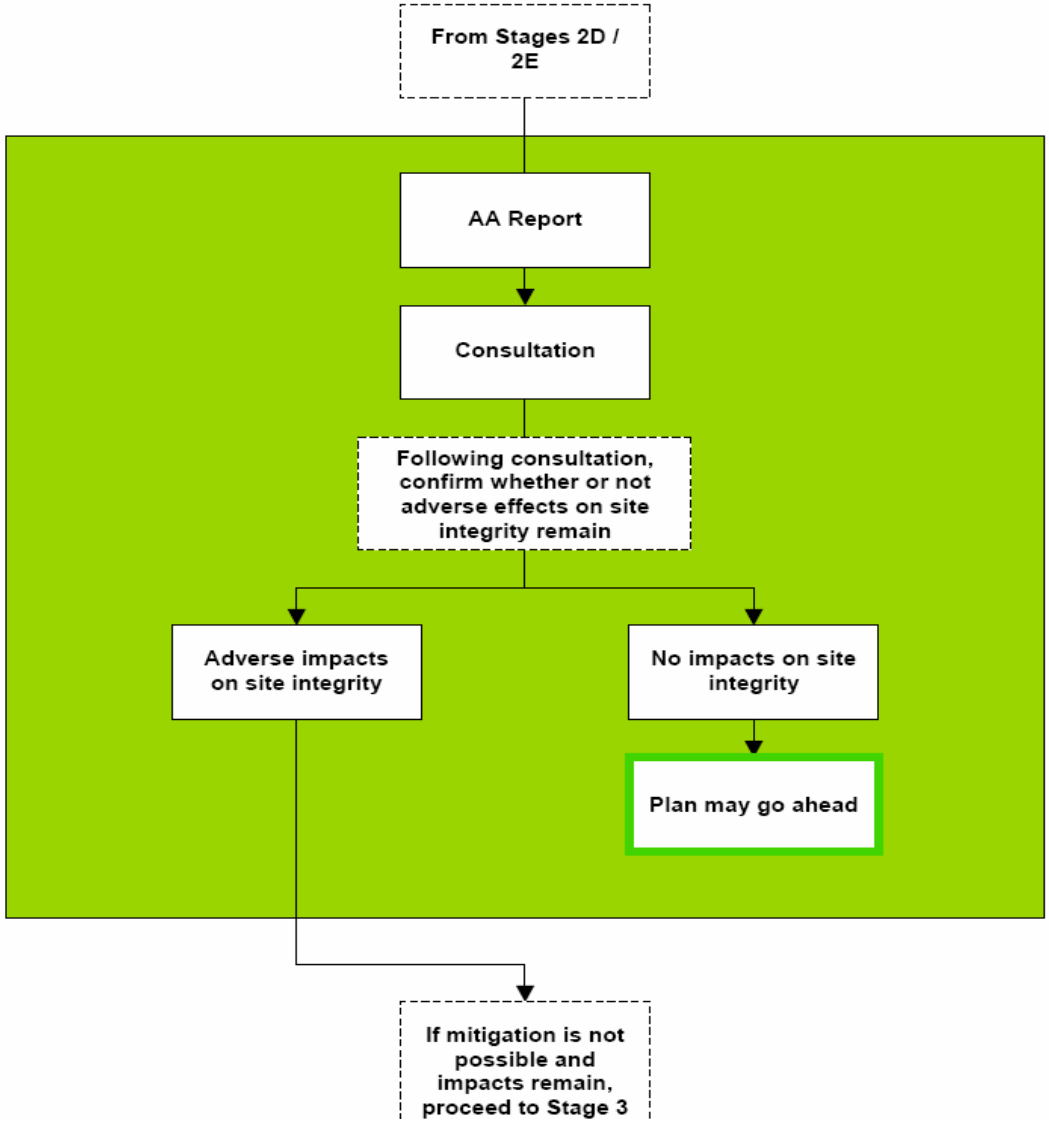
				Preventing activities likely to generate harmful air pollutants from affecting the features by ensuring that such activities only take place within a safe buffer distance of the SAC as determined by the conservation authority	
Usk Bat Sites SAC	European dry heaths Degraded raised bogs still capable of natural regeneration Blanket bogs Calcareous rocky slopes with chasmophytic vegetation Caves not open to the public Tilio-Acerion forests of slopes, screes and ravines Lesser horseshoe bat Rhinolophus hipposideros	Management of the hydrology of the area, ensuring that flow regime is preserved Maintenance of good water quality and management of sediment load and sediment-causing processes Lesser horseshoe bats require protected roosts and foraging routes Minimal atmospheric pollution – may increase acidification and cause damage to features.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (e.g. maturity roosts, foraging areas, hibernation sites, severance of flightlines between bat roosting and foraging sites); changes in drainage which could negatively affect the feature	Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Requiring measures in new developments to safeguard against increasing atmospheric pollutants (such as photochemical oxidants, particulate matter etc.) above existing levels – particularly those which contribute to acidification and eutrophication. Preventing activities likely to generate harmful air pollutants from affecting the features by ensuring that	None

				such activities only take place within a safe buffer distance of the SAC as determined by the conservation authority. Preventing loss of natural habitat by activities such as noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation authority as necessary for the favourable status of the SAC features should not be affected by development.	
Cwm Clydach Woodlands SAC	Asperulo-Fagetum beech forests Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion roboripetraeae or Ilici-Fagenion)	Management of the hydrology of the area, ensuring that flow regime is preserved. Minimal atmospheric pollution – may increase acidification and cause damage to features.	Coastal impacts are unlikely, but there is possible deterioration of air composition and quality, water quality and, changes to the flow regime which could negatively affect the feature	Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Requiring measures in new developments to safeguard against increasing	None

				atmospheric pollutants (such as photochemical oxidants, particulate matter etc.) above existing levels – particularly those which contribute to acidification and eutrophication. Preventing activities likely to generate harmful air pollutants from affecting the features by ensuring that such activities only take place within a safe buffer distance of the SAC as determined by the conservation authority	

Table 24 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components (post-mitigation)

9. Conclusions



(Source: Appropriate Assessment of plans, Levett-Therivel Consultants, September 2006)

Figure 9 Schematic of Stage 2D/E

According to the "Appropriate Assessment of Plans", Levett-Therivel Consultants, September 2006, the 'appropriate assessment' proper is a statement which says whether the plan does, or does not, affect the integrity of a European site(s). It forms part of an AA report which sets out the reasons why the plan is undergoing AA (Stage 1 – Screening); the evidence base used to undertake the AA (Stages 2A – 2C); the AA findings (Stage 2D); and any mitigation measures proposed (Stage 2E).

The appropriate assessment is a consideration of the impact on the integrity of the European site, either alone or in combination with other plans or projects, with respect to the site's

structure, function and its conservation objectives. Where adverse effects arise then avoidance or mitigation measures are to be proposed.

The key question to be answered by the AA is whether the Deposit LDP is likely to have a significant effect on the integrity of any of the relevant European sites.
This HRA has identified:

- the potential LDP components that might have a significant effect on European Sites (before and after mitigation measures);
- the potential European Sites whose integrity might be adversely affected (before and after mitigation measures);

9.1 Main findings of Assessment

9.1.1 Potential Objectives

The Appropriate Assessment has identified that, before the consideration of mitigation measures, there was a risk that delivery of 8 out of the 13 Deposit LDP strategic policies could potentially have adverse effects on the integrity of the sites concerned. However, after the introduction of mitigation measures these risks were removed.

Table 25 below is a summary of the risks of the various plan components in terms of the potential to adversely affect the integrity of the sites concerned – both before and after the consideration of mitigation.

Plan Component Assessed *(in isolation from other project and plans)*	**Impact likely** to be impossible to mitigate; eliminate from consideration	**Impact could be mitigated**; 'flag' now, and revisit later in the assessment	**No Impact**; bring forward to next stage
	Number of Plan Components Considered (Pre-Mitigation/Amendment)		
Plan Themes	0	3	1
Strategic Policies	0	8	5
	Number of Plan Components Considered (Post-Mitigation/Amendment)		
Plan Themes	0	0	0
Strategic Policies	0	0	0

Table 25 Result of the Source/Pathway/Receiver analysis of the LDP components

9.1.2 *Potentially Affected Sites*

The Appropriate Assessment has identified that, before the consideration of mitigation measures, **4 European sites could potentially be affected** by the delivery of the LDP when considered on its own. However, after the introduction of mitigation measures the AA **did not identify any** of the European sites which could potentially be affected by the delivery of the LDP.
From the source/pathway/analysis carried out (see summary of results in Table 23), it became evident that although it is possible that some of these other project and plans, can have adverse impact on the designated features, the combined effects of these with the LDP are no different than if they were considered individually – that is, on their own.

Therefore, it is unlikely that there will be any adverse contribution from the
LDP when considered "in-combination" with other relevant plans and projects as defined under Article 6(3) of the Habitats Directive.

9.2 Recommendations

Most of the impacts identified (pre-mitigation) related to the wording of particular plan components, which because of the high-level language used, did not always explicitly exclude the possibility of adverse effects on the integrity of the sites concerned.
Although there are two existing strategic policies – SP 9 and SP10 that focus on reducing the impact of LDP on the natural, built and historic environment, they do not specifically address the protection of European sites as required under the Habitats Directive (Council Directive 92/43/EEC).

It is therefore considered that the general recommendation below will remove these risks of impact:

- The inclusion, as an LDP strategic policy, or a clear statement that the proposed LDP and its components will meet the specific requirements of Habitats Directive (Council Directive 92/43/EEC) and will not adversely affect the integrity of the sites concerned.

Although the LDP has been demonstrated not to have significant effects on water resources, both locally and in a wider context (see section 7.4), it is recommended that a clear statement be included in the LDP specifying that no development activity proposed under the BGCBC Deposit LDP will be allowed if it can be demonstrated that there is likely to be adverse impact on the water resources, both locally and regionally.

It is also recommended that any development project that could have any impact on connectivity corridors or cause direct or indirect disturbance to the features (such as light, noise etc) must be subject to a project level HRA.

9.3 RESPONSIBILITIES

The competent authority as defined in Regulation 6(1) of the Habitats Regulations shall be responsible for the following actions:

- Demonstrating how the mitigations and recommendations proposed will be secured and implemented and by whom;
- Providing a timescale, relative to the project or plan, when they will be implemented;
- Demonstrating how the measures will be monitored and managed.

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Appendix A European Sites Characterisations

CAPITA SYMONDS

Information on European Sites

(Source of Appendix A: Enfusion Environmental Planning and Management for Sustainability)

European Sites Information Proforma

Special Areas of Conservation

1. Aberbargoed Grasslands
2. Cym Clydach Woodlands
3. Sugar Loaf Woodlands
4. 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***

Site Name: Aberbargoed Grasslands Location Grid Ref: ST163992 JNCC Site Code: UK0030071 Size: 39.78 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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: 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: 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

Site Name: Sugar Loaf Woodlands Location Grid Ref: SO295166 JNCC Site Code: UK0030072 Size: 173.84 Designation: SAC	Habitats Regulations Assessment: Data Proforma
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; ▪ 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

Site Name: Sugar Loaf Woodlands Location Grid Ref: SO295166 JNCC Site Code: UK0030072 Size: 173.84 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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 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

Site Name: Sugar Loaf Woodlands Location Grid Ref: SO295166 JNCC Site Code: UK0030072 Size: 173.84 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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. ▪ **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**

Site Name: Sugar Loaf Woodlands Location Grid Ref: SO295166 JNCC Site Code: UK0030072 Size: 173.84 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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 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

Site Name: Sugar Loaf Woodlands Location Grid Ref: SO295166 JNCC Site Code: UK0030072 Size: 173.84 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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) ▪ 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/Environm]entAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf

* 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

Site Name: Sugar Loaf Woodlands Location Grid Ref: SO295166 JNCC Site Code: UK0030072 Size: 173.84 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ 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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 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 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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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**

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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**

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	○ 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).

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ 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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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.

- 5% cover of non-native trees in the canopy.
- 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.
  - 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.
  - 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.
  - Upper limits: Overall grazing pressure of 0.05 livestock units/ha/year on the bog area.

  AND:

- Minimal winter grazing.

AND:

- No stock feeding
- 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.
  - 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.
  - 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:
  - Sulphur dioxide - 20µg/m³
  - 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/EnvironmentAndPlanning/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.

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*

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ 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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ 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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
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.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
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.

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: 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,

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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: Usk Bat Sites **Location Grid Ref: SO190145** **JNCC Site Code: UK0014784** **Size: 1686.4** **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.

Appendix B Details of Source/Pathway/Receptor Analysis

Aberbargoed Grasslands

AA assessment question	Source	Pathway	Possible impact on receiver	Evidence that could be collected to help determine the plan component's effects
Whether BGCBC's LDP Strategic Policy 1 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	The focus of SP1 will be on sustainable growth and regeneration that benefits the whole of Blaenau Gwent.	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	No significant impact likely as: The location of the proposed work is geographically separated from the Aberbargoed Grasslands. The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 2 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	The emphasis of SP2 will be on building strong, sustainable communities through regeneration	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	No significant impact likely as: The location of the proposed work is geographically separated from the Aberbargoed Grasslands. The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 3 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP3 is concerned with the delivery of thriving town centres and establishment of a new hierarchy of town centres	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	No significant impact likely as: The location of the proposed work is geographically separated from the Aberbargoed Grasslands. The scale of	

			physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 4 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP4 involves the delivery of quality housing to stem out migration and attract people to the area.	(direct/indirect/ induced pathway) Possible building works including construction activities. Construction of new or improvement of existing infrastructure to support housing.	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of Molinia Meadows and Marsh Fritillary butterfly at SAC to habitat loss and fragmentation
Whether BGCBC's LDP Strategic Policy 5 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP5 involves the spatial distribution of housing sites to create a network of sustainable linked hubs.	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 6 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP6 will deliver a sustainable transport network whilst reducing the need to travel	(direct/indirect/ induced pathway) Possible road improvement works, new transport infrastructure and traffic management	Significant impact likely due to : Possible loss of habitat area , quality and connectivity which could negatively affect the features	Sensitivity of Molinia Meadows and Marsh Fritillary butterfly at SAC to habitat loss and fragmentation
Whether BGCBC's LDP Strategic Policy 7 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP7 involves creating sustainable high quality development by allocating sites	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	

Whether BGCBC's LDP Strategic Policy 8 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP8 will promote activities to bring about sustainable economic growth	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 9 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP9 will create safe, healthy, and vibrant communities and protect and enhance the unique natural and built environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 10 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP10 will promote the protection and enhancement of the natural environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 11 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP11 will promote the protection and enhancement of the built environment	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 12 is likely to cause loss of vital habitats required for Molinia Meadows	SP12 focuses on securing an adequate supply of minerals	(direct/indirect/ induced pathway) Possible mining and processing works and mass surface storage of	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of Molinia Meadows and Marsh Fritillary butterfly at SAC to habitat loss and fragmentation

and Marsh Fritillary butterfly at Aberbargoed Grassland SAC		aggregates and minerals extracts. Construction of new or improvement of existing infrastructure to support mining processing and transportation.		
Whether BGCBC's LDP Strategic Policy 13 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP13 focuses on delivering sustainable waste management across Blaenau Gwent	(indirect/ induced pathway) Possible waste processing works. Construction of new or improvement of existing infrastructure to support waste processing and transportation.	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of Molinia Meadows and Marsh Fritillary butterfly at SAC to habitat loss and fragmentation

Cwm Clydach Woodlands

AA assessment question	Source	Pathway	Possible impact on receiver	Evidence that could be collected to help determine the plan component's effects
Whether BGCBC's LDP Strategic Policy 1 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	The focus of SP1 will be on sustainable growth and regeneration that benefits the whole of Blaenau Gwent.	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 2 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	The emphasis of SP2 will be on building strong, sustainable communities through regeneration	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 3 is likely to cause habitats loss and other deterioration at	SP3 is concerned with the delivery of thriving town centres and establishment of a new hierarchy of town centres	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	

Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC				
Whether BGCBC's LDP Strategic Policy 4 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP4 involves the delivery of quality housing to stem out migration and attract people to the area.	(direct/indirect/ induced pathway) Possible building works including construction activities. Construction of new or improvement of existing infrastructure to support housing.	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of features at SAC to loss of habitat and quality and fragmentation
Whether BGCBC's LDP Strategic Policy 5 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP5 involves the spatial distribution of housing sites to create a network of sustainable linked hubs.	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 6 is likely to cause habitats loss and other deterioration at	SP6 will deliver a sustainable transport network whilst reducing the need to travel	(direct/indirect/induced pathway) Possible road improvement works, new transport infrastructure and traffic management	Significant impact likely due to : Possible loss of habitat area, quality and connectivity	Sensitivity of features at SAC to loss of habitat and quality and fragmentation

Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC			could negatively affect the features	
Whether BGCBC's LDP Strategic Policy 7 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP7 involves creating sustainable high quality development by allocating sites	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 8 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP8 will promote activities to bring about sustainable economic growth	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 9 is likely to cause habitats loss and other deterioration at	SP9 will create safe, healthy, and vibrant communities and protect and enhance the unique natural and built	No pathway	No impact	

Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	environment			
Whether BGCBC's LDP Strategic Policy 10 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP10 will promote the protection and enhancement of the natural environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 11 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP11 will promote the protection and enhancement of the built environment	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 12 is likely to cause habitats loss and other deterioration at	SP12 focuses on securing an adequate supply of minerals	(direct/indirect/ induced pathway) Possible mining and processing works and mass surface storage of aggregates and minerals extracts.	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of features at SAC to loss of habitat and quality and fragmentation

Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC		Construction of new or improvement of existing infrastructure to support mining processing and transportation.		
Whether BGCBC's LDP Strategic Policy 13 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP13 focuses on delivering sustainable waste management across Blaenau Gwent	(indirect/ induced pathway) Possible waste processing works. Construction of new or improvement of existing infrastructure to support waste processing and transportation.	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of features at SAC to loss of habitat and quality and fragmentation

Sugar Loaf Woodlands

AA assessment question	Source	Pathway	Possible impact on receiver	Evidence that could be collected to help determine the plan component's effects
Whether BGCBC's LDP Strategic Policy 1 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	The focus of SP1 will be on sustainable growth and regeneration that benefits the whole of Blaenau Gwent.	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 2 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	The emphasis of SP2 will be on building strong, sustainable communities through regeneration	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 3 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP3 is concerned with the delivery of thriving town centres and establishment of a new hierarchy of town centres	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 4 is likely to cause air pollution of Old	SP4 involves the delivery of quality housing to stem out migration and attract people to	(direct/indirect/induced pathway) Possible building works including construction activities.	Possible deterioration of air composition and quality which could negatively	Existing air quality at SAC Sensitivity of old Sessile Oak trees at SAC to air

sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	the area.	Construction of new or improvement of existing infrastructure to support housing.	affect the feature	Pollution Distance over which air pollution from roads disperses
Whether BGCBC's LDP Strategic Policy 5 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP5 involves the spatial distribution of housing sites to create a network of sustainable linked hubs.	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 6 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP6 will deliver a sustainable transport network whilst reducing the need to travel	(direct/indirect/ induced pathway) Possible road Improvement works, new transport infrastructure and traffic management	Possible deterioration of air composition and quality which could negatively affect the feature	Existing air quality at SAC Sensitivity of old Sessile Oak trees at SAC to air Pollution Distance over which air pollution from roads disperses
Whether BGCBC's LDP Strategic Policy 7 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP7 involves creating sustainable high quality development by allocating sites	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 8 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP8 will promote activities to bring about sustainable economic growth	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	Possible deterioration of air composition and quality which could negatively affect the feature	Existing air quality at SAC Sensitivity of old Sessile Oak trees at SAC to air Pollution Distance over which air pollution from

				roads disperses
Whether BGCBC's LDP Strategic Policy 9 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP9 will create safe, healthy, and vibrant communities and protect and enhance the unique natural and built environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 10 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP10 will promote the protection and enhancement of the natural environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 11 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP11 will promote the protection and enhancement of the built environment	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 12 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP12 focuses on securing an adequate supply of minerals	(direct/indirect/ induced pathway) Possible mining and processing works and mass surface storage of aggregates and minerals extracts. Construction of new or improvement of existing infrastructure to support mining processing and transportation.	Possible deterioration of air composition and quality which could negatively affect the feature	Existing air quality at SAC Sensitivity of old Sessile Oak trees at SAC to air Pollution Distance over which air pollution from roads disperses

Whether BGCBC's LDP Strategic Policy 13 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP13 focuses on delivering sustainable waste management across Blaenau Gwent	(indirect/ induced pathway) Possible waste processing works. Construction of new or improvement of existing infrastructure to support waste processing and transportation.	Possible deterioration of air composition and quality which could negatively affect the feature	Existing air quality at SAC Sensitivity of old Sessile Oak trees at SAC to air Pollution Distance over which air pollution from roads disperses

Usk Bat Sites

AA assessment question	Source	Pathway	Possible impact on receiver	Evidence that could be collected to help determine the plan component's effects
Whether BGCBC's LDP Strategic Policy 1 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	The focus of SP1 will be on sustainable growth and regeneration that benefits the whole of Blaenau Gwent.	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC
Whether BGCBC's LDP Strategic Policy 2 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion	The emphasis of SP2 will be on building strong, sustainable communities through regeneration	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC

forests, and lesser horseshoe bat at Usk Bat Sites SAC				
Whether BGCBC's LDP Strategic Policy 3 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP3 is concerned with the delivery of thriving town centres and establishment of a new hierarchy of town centres	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC
Whether BGCBC's LDP Strategic Policy 4 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP4 involves the delivery of quality housing to stem out migration and attract people to the area.	(direct/indirect/induced pathway) Possible building works including construction activities. Construction of new or improvement of existing infrastructure to support housing.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC

Whether BGCBC's LDP Strategic Policy 5 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP5 involves the spatial distribution of housing sites to create a network of sustainable linked hubs.	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 6 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP6 will deliver a sustainable transport network whilst reducing the need to travel	(direct/indirect/ induced pathway) Possible road Improvement works, new transport infrastructure and traffic management	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC
Whether BGCBC's LDP Strategic Policy 7 is likely to cause loss of habitat, air	SP7 involves creating sustainable high quality development by	(indirect/induced pathway)	No significant impact likely as: The scale of	

pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	allocating sites		physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 8 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP8 will promote activities to bring about sustainable economic growth	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	Possible deterioration of air composition and quality which could negatively affect the feature	Sensitivity studies of critical parameters which impact on features of the SAC
Whether BGCBC's LDP Strategic Policy 9 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following	SP9 will create safe, healthy, and vibrant communities and protect and enhance the unique natural and built environment	No pathway	No impact	

features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC				
Whether BGCBC's LDP Strategic Policy 10 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP10 will promote the protection and enhancement of the natural environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 11 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs,	SP11 will promote the protection and enhancement of the built environment	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	

rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC				
Whether BGCBC's LDP Strategic Policy 12 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP12 focuses on securing an adequate supply of minerals	(direct/indirect/ induced pathway) Possible mining and processing works and mass surface storage of aggregates and minerals extracts. Construction of new or improvement of existing infrastructure to support mining processing and transportation.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC
Whether BGCBC's LDP Strategic Policy 13 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and	SP13 focuses on delivering sustainable waste management across Blaenau Gwent	(indirect/ induced pathway) Possible waste processing works. Construction of new or improvement of existing infrastructure to support waste processing and transportation.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC

lesser horseshoe bat at Usk Bat Sites SAC				

Appendix C Record of Appropriate Assessment (Pro-Forma)

APPROPRIATE ASSESSMENT PROFORMA

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
Site Characterisation: Conservation objectives, key environmental conditions, vulnerabilities, existing pressures and trends	***Key Features*** 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: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
	▪ 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.

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
	▪ 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:

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
	▪ 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: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
Appropriate Assessment Likelihood of adverse effect on integrity:	***Full description and analysis of the potential for the impacts identified to have a significant effect on site integrity. Should include consideration of whether effects are direct, indirect, cumulative etc.*** – Refer to the following sections of the Appropriate Assessment report: • For description and analysis of the potential for the impacts identified to have a significant effect (direct, indirect, induced – both in isolation and "in-combination" with other projects and plans), see sections **6.2, 6.3 and 5.2** of AA report. • For results of assessments, **see tables 3 to 11 and table 12** (for "in-combination" impact) in the report and, Appendix B for a more detailed assessment of impact of the LDP strategic policies on the Cwm Clydach Woodlands SAC.

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
	The findings of the Appropriate Assessment for Cwm Clydach Woodlands SAC can be summarised as follows: • The Appropriate Assessment has identified that, before the consideration of mitigation measures, there was a risk that delivery of 4 out of the 13 LDP strategic policies could potentially have adverse effects on the integrity of the site. However, after the introduction of mitigation measures these risks were removed. • From the source/pathway/analysis carried out (see summary of results in Table 13 of the AA report), it became evident that although it is possible that some of these other project and plans, can have adverse impact on the designated features at Cwm Clydach Woodlands, **the combined effects of these with the LDP** are no different than if they were considered individually – that is, on their own.

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
Possible Avoidance and Mitigation Measures – includes recommendations for policy/proposals	***Any mitigation measures proposed must be evaluated to ensure that they are capable of removing the significant effects identified. Should include responsibilities for delivery/ timescales and monitoring measures.*** – Refer **to table 13, Chapter 7** of the AA report.
Residual Effect?	***Are there any outstanding issues or uncertainties?*** No, there is no residual risk of a significant effect of the LDP or its components on the integrity of the Cwm Clydach Woodland SAC when considered 'in-isolation' or "in-combination with other projects and plans.

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
Conclude no adverse effect on integrity?	***Is it possible to conclude no adverse effect on integrity following consideration of mitigation measures?*** Yes – Refer to Chapters 7 and 8 of the AA report.
Recommendations for Policy/ Proposal	***Summary of mitigation measures if proposed and next steps as necessary.*** – Refer to Chapters 7 and 8 of the AA report.

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
Site Characterisation: Conservation objectives, key environmental conditions, vulnerabilities, existing pressures and trends	***Key Features*** – Refer to the site summary information and characterisations in **Appendix A** of AA report.
Appropriate Assessment Likelihood of adverse effect on integrity:	***Full description and analysis of the potential for the impacts identified to have a significant effect on site integrity. Should include consideration of whether effects are direct, indirect, cumulative etc.*** – Refer to the following sections of the Appropriate Assessment report:

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
	• For description and analysis of the potential for the impacts identified to have a significant effect (direct, indirect, induced – both in isolation and "in-combination" with other projects and plans), see sections **6.2, 6.3 and 5.2** of AA report. • For results of assessments, **see tables 3 to 11 and table 12** (for "in-combination" impact) in the report and, Appendix B for a more detailed assessment of impact of the LDP strategic policies on the Usk Bat Sites SAC. The findings of the Appropriate Assessment for Usk Bat Sites SAC can be summarised as follows:

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
	• The Appropriate Assessment has identified that, before the consideration of mitigation measures, there was a risk that delivery of 8 out of the 13 LDP strategic policies could potentially have adverse effects on the integrity of the site. However, after the introduction of mitigation measures these risks were removed. • From the source/pathway/analysis carried out (see summary of results in **Table 13** of the AA report), it became evident that although it is possible that some of these other project and plans, can have adverse impact on the designated features at Usk Bat Sites, **the combined effects of these with the LDP** are no different than if they

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
	were considered individually – that is, on their own.
Possible Avoidance and Mitigation Measures – includes recommendations for policy/proposals	***Any mitigation measures proposed must be evaluated to ensure that they are capable of removing the significant effects identified. Should include responsibilities for delivery/ timescales and monitoring measures.*** – Refer **to table 13, Chapter 7** of the AA report.

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
Residual Effect?	***Are there any outstanding issues or uncertainties?*** No, there is no residual risk of a significant effect of the LDP or its components on the integrity of the Usk Bat Sites SAC when considered 'in-isolation' or "in-combination with other projects and plans.
Conclude no adverse effect on integrity?	***Is it possible to conclude no adverse effect on integrity following consideration of mitigation measures?*** Yes

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
	– Refer to Chapters 7 and 8 of the AA report.
Recommendations for Policy/ Proposal	***Summary of mitigation measures if proposed and next steps as necessary.*** – Refer to Chapters 7 and 8 of the AA report.

Site Name: **Location:** **Size:**	***Aberbargoed Grasslands SAC*** Aberbargoed Grasslands covers an area of 42.5ha at NGR ST163992 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. Area 42.5 ha
Designation:	**European sites (SACs)** 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
Site Characterisation: Conservation objectives, key environmental conditions, vulnerabilities, existing pressures and trends	***Key Features*** – Refer to the site summary information and characterisations in **Appendix A** of AA report.
Appropriate Assessment Likelihood of adverse effect on integrity:	***Full description and analysis of the potential for the impacts identified to have a significant effect on site integrity. Should include consideration of whether effects are direct, indirect, cumulative etc.*** – Refer to the following sections of the Appropriate Assessment report: • For description and analysis of the potential for the impacts identified to have a

Site Name: **Location:** **Size:**	***Aberbargoed Grasslands SAC*** Aberbargoed Grasslands covers an area of 42.5ha at NGR ST163992 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. Area 42.5 ha
Designation:	**European sites (SACs)** 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
	significant effect (direct, indirect, induced – both in isolation and "in-combination" with other projects and plans), see sections **6.2, 6.3 and 5.2** of AA report. • For results of assessments, **see tables 3 to 11 and table 12** (for "in-combination" impact) in the report and, Appendix B for a more detailed assessment of impact of the LDP strategic policies on the Aberbargoed Grasslands SAC. The findings of the Appropriate Assessment for Aberbargoed Grasslands SAC can be summarised as follows: • The Appropriate Assessment has identified that, before the consideration of mitigation measures, there was a risk that delivery of 4 out of the 13 LDP strategic policies could potentially have adverse effects on the integrity of the site. However,

Site Name: **Location:** **Size:**	***Aberbargoed Grasslands SAC*** Aberbargoed Grasslands covers an area of 42.5ha at NGR ST163992 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. Area 42.5 ha
Designation:	**European sites (SACs)** 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
	after the introduction of mitigation measures these risks were removed. • From the source/pathway/analysis carried out (see summary of results in **Table 13** of the AA report), it became evident that although it is possible that some of these other project and plans, can have adverse impact on the designated features at Aberbargoed Grasslands, **the combined effects of these with the LDP** are no different than if they were considered individually – that is, on their own.
Possible Avoidance and Mitigation Measures – includes recommendations for policy/proposals	***Any mitigation measures proposed must be evaluated to ensure that they are capable of removing the significant effects identified. Should include responsibilities for delivery/ timescales and monitoring measures.*** – Refer **to table 13, Chapter 7** of the AA report.

Site Name: **Location:** **Size:**	***Aberbargoed Grasslands SAC*** Aberbargoed Grasslands covers an area of 42.5ha at NGR ST163992 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. Area 42.5 ha
Designation:	**European sites (SACs)** 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
Residual Effect?	***Are there any outstanding issues or uncertainties?*** No, there is no residual risk of a significant effect of the LDP or its components on the integrity of the Aberbargoed Grasslands SAC when considered 'in-isolation' or "in-combination with other projects and plans.
Conclude no adverse effect on integrity?	***Is it possible to conclude no adverse effect on integrity following consideration of mitigation measures?*** Yes

Site Name: **Location:** **Size:**	***Aberbargoed Grasslands SAC*** Aberbargoed Grasslands covers an area of 42.5ha at NGR ST163992 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. Area 42.5 ha
Designation:	**European sites (SACs)** 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
	– Refer to Chapters 7 and 8 of the AA report.
Recommendations for Policy/ Proposal	***Summary of mitigation measures if proposed and next steps as necessary.*** – Refer to Chapters 7 and 8 of the AA report.

Site Name: **Location:** **Size:**	***Sugar Loaf Woodlands SAC*** 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. It is located at NGR SO295166 in Wales near Brecons. Area 173.84 ha
Designation:	**European sites (SACs)** Annex I Habitats qualifying feature: ▪ Old sessile oak woods with Ilex and Blechnum in the British Isles
Site Characterisation: Conservation objectives, key environmental conditions, vulnerabilities, existing pressures and trends	***Key Features*** – Refer to the site summary information and characterisations in **Appendix A** of AA report.
Appropriate Assessment Likelihood of adverse effect on integrity:	***Full description and analysis of the potential for the impacts identified to have a significant effect on site integrity. Should include consideration of whether effects are direct, indirect, cumulative etc.*** – Refer to the following sections of the Appropriate Assessment report: • For description and analysis of the potential for the impacts identified to have a significant effect (direct, indirect, induced – both in isolation and "in-combination" with other projects and plans), see sections **6.2, 6.3 and 5.2** of AA report. • For results of assessments, **see tables 3 to 11 and table 12** (for "in-combination" impact) in the report and, Appendix B for a more detailed assessment of impact of

Site Name: **Location:** **Size:**	***Sugar Loaf Woodlands SAC*** 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. It is located at NGR SO295166 in Wales near Brecons. Area 173.84 ha
Designation:	**European sites (SACs)** Annex I Habitats qualifying feature: ▪ Old sessile oak woods with Ilex and Blechnum in the British Isles
	the LDP strategic policies on the Sugar Loaf Woodlands SAC. The findings of the Appropriate Assessment for Sugar Loaf Woodlands SAC can be summarised as follows: • The Appropriate Assessment has identified that, before the consideration of mitigation measures, there was a risk that delivery of 5 out of the 13 LDP strategic policies could potentially have adverse effects on the integrity of the site. However, after the introduction of mitigation measures these risks were removed. • From the source/pathway/analysis carried out (see summary of results in **Table 13** of the AA report), it became evident that although it is possible that some of these other project and plans, can have adverse impact on the designated features at Sugar Loaf Woodlands, **the combined effects of these with the LDP** are no different than if they were considered individually – that is, on their own.

Site Name: **Location:** **Size:**	***Sugar Loaf Woodlands SAC*** 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. It is located at NGR SO295166 in Wales near Brecons. Area 173.84 ha
Designation:	**European sites (SACs)** Annex I Habitats qualifying feature: ▪ Old sessile oak woods with Ilex and Blechnum in the British Isles
Possible Avoidance and Mitigation Measures – includes recommendations for policy/proposals	***Any mitigation measures proposed must be evaluated to ensure that they are capable of removing the significant effects identified. Should include responsibilities for delivery/ timescales and monitoring measures.*** – Refer **to table 13, Chapter 7** of the AA report.
Residual Effect?	***Are there any outstanding issues or uncertainties?*** No, there is no residual risk of a significant effect of the LDP or its components on the integrity of the Sugar Loaf Woodlands SAC when considered 'in-isolation' or "in-combination with other projects and plans.
Conclude no adverse effect on integrity?	***Is it possible to conclude no adverse effect on integrity following consideration of mitigation measures?***

Site Name: **Location:** **Size:**	***Sugar Loaf Woodlands SAC*** 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. It is located at NGR SO295166 in Wales near Brecons. Area 173.84 ha
Designation:	**European sites (SACs)** Annex I Habitats qualifying feature: ▪ Old sessile oak woods with Ilex and Blechnum in the British Isles
	Yes – Refer to Chapters 7 and 8 of the AA report.
Recommendations for Policy/ Proposal	***Summary of mitigation measures if proposed and next steps as necessary.*** – Refer to Chapters 7 and 8 of the AA report.

Appendix D Information on Other Plans and Projects

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 E Email from Dwr Cymru (Impact of LDP on Water Resources)

See email below from Welsh Water.

-----Original Message-----

From: Davies Gail [mailto:Gail.Davies@dwrcymru.com]

Sent: 03 August 2010 11:13

To: Lynda Healy - Environment

Subject: Blaenau Gwent

Lynda

Following our discussions last week, I hope you may find the following useful to the basis of our forecasts for Blaenau Gwent.

The Water Resources Management Plan, and our most recent demand forecast, is based upon the Welsh Assembly Government "2006 based Local Authority Property Projections". The WAG projections predict an increase in household properties in Blaenau Gwent between 2006 and 2021 of 4,082 (slightly higher than the latest data from the Local Authority of 3,600). However, in our demand forecasts Welsh Water suppressed the overall growth rate supplied by the WAG projections. This was because the total regional growth forecast in our operating area was significantly higher than anything we had seen in the past ten years (we would be forecasting a 50 % increase in New Connections compared with 2000-2008 when the construction sector was significantly more buoyant) and at the time of revising the demand forecasts we were certainly well within economic recession.

The resulting forecast in our latest demand forecast for Blaenau Gwent is an increase in household properties over the relevant fifteen years of 2,200. This is around 1,400 properties lower than the Blaenau Gwent Local Authority estimate. We are confident in our approach to suppress growth because we are able to frequently update these forecasts in line with the economic climate and we operate within five-year planning periods which would enable us to revise our investment programmes should patterns of growth modify significantly.

It should be noted that all our water demand forecasts are based on population growth and not property growth so unless the Local Authority are suggesting population growth above WAG and ONS projections, the impact of new households will be minor. In Blaenau Gwent the latest WAG projections for population are an increase to 71,100 in 2021 (from a 2006 base of 69,300). This simply means that the household occupancy rate (people per property) would be slightly lower if all 3,600 households forecast by the Local Authority were actually built and this would result in a modest increase in demand of around 0.2 Ml/d (all in SEWCUS zone).

Specifically, with regard to your HRA and comments received from CCW then I have provided a map of the supply area for Blaenau Gwent. This clearly demonstrates the main sources of supply which we use to supply Blaenau Gwent Authority area. Additionally, as your area lies within our wider South-East Wales Conjunctive Use system (SEWCUS) we are also able to support supplies from our wider zone, predominately Pontsticill reservoir.

Critically, therefore, your sources of supply are not designated sources under the Habitats Directive and are not subject to Review of Consents. Although the wider SEWCUS zone will be impacted by major reductions to licences under this process, the area of Blaenau Gwent will remain unaffected by this.

I am happy to confirm therefore that I do not envisage any water supply issues to be noted under your HRA.

I hope that this is useful to you. Please feel free to call me on my mobile should you wish to discuss further. To assist, I will also inform CCW of my response in this matter.

Gail Davies

Head of Water Resources

Direct Tel: 01443 452859

Mobile: 07917048060

Email: gail.davies@dwrcymru.com

Appendix F List of Sites (For Selected LDP Allocations)

List of Sites for Allocation – H1 Housing Allocations

Policy Number	Site Name	Area (Ha)	Units
Ebbw Vale			
H1.1	Willowtown	0.63	22
MU1	*Ebbw Vale Northern Corridor*	*28*	*700*
		Total	**722**
Tredegar			
H1.2	Cartref Aneurin Bevan	0.38	13
H1.3	Greenacres	0.50	18
H1.4	Jesmondene Stadium, Cefn Golau	5.26	184
H1.5	Business Resource Centre, Tafarnaubach	1.2	42
H1.6	Land adjacent to Chartist Way	2.89	101
		Total	**358**
Upper Ebbw Fach			
H1.7	Garnfach School, Nantyglo	0.81	28
H1.8	Crawshay House, Brynmawr	0.71	25
H1.9	Infants School and Old Griffin Yard, Brynmawr	1.04	36
H1.10	Hafod Dawel Site, Nantyglo#	0.74	44
H1.11	West of the Recreation Ground, Nantyglo	0.42	15
H1.12	Land to the East of Blaina Road, Brynmawr	0.72	25
H1.13	Land to the North of Winchestown, Nantyglo	0.43	15
MU3	*NMC Factory and Bus Depot*		*60*
		Total	**248**
Lower Ebbw Fach			
H1.14	Six Bells Colliery Site, Six Bells	1.47	40

Policy Number	Site Name	Area (Ha)	Units
H1.15	Warm Turn, Six Bells	0.93	32
H1.16	Roseheyworth Comprehensive, Abertillery	0.95	33
H1.17	Former Mount Pleasant Court, Brynithel#	0.52	18
H1.18	Hillcrest View, Cwmtillery#	0.83	22
H1.19	Quarry Adjacent to Cwm Farm Road, Six Bells	0.64	22
H1.20	Land at Farm Road Swffryd	3.72	130
		Total	**297**
TOTAL			**1,625**

List of Sites for Allocation – HC1 Housing Commitments

Policy Number	Site Name	Area (Ha)	Units
Ebbw Vale			
HC1.1	North of Cwmyrdderch Court Flats, Cwm	1.18	16
HC1.2	Letchworth Road	0.93	16
HC1.3	Old 45 Yard, Steelworks Road	3.49	82
HC1.4	Adjacent Pant-y- Fforest	1.63	21
HC1.5	Heol Elan #	1.2	43
HC1.6	Land at College Road#	1.04	41
HC1.7	Adj Sports Ground, Gwaun Helyg#	2.92	69
HC1.8	Higgs Yard	0.99	29
HC1.9	Mountain Road#	0.47	22
HC1.10	Briery Hill#	0.94	33

Policy Number	Site Name	Area (Ha)	Units
MU2	*'The Works'*		*520*
		Total	**892**
Tredegar			
HC1.11	Derelict Bus Garage, Woodfield Road#	0.36	11
HC1.12	Former LCR Factory, Charles Street	0.25	14
HC1.13	Former Factory Site, Pochin	0.65	28
HC1.14	Land at Poultry Farm, Queen Victoria Street	0.84	3
HC1.15	Upper Ty Gwyn Farm, Nantybwch	1.44	38
HC1.16	Former LCR Factory, opposite Tredegar Comprehensive School#	0.62	47
HC1.17	Peacehaven	4.81	147
HC1.18	The Goldmine, Sirhowy	0.17	16
HC1.19	BKF Plastics, Ashvale	1.83	54
HC1.20	Sirhowy Infants School Site#	0.84	23
HC1.21	Corporation Yard	0.75	23
HC1.22	Park Hill	13.09	160
		Total	**564**
Upper Ebbw Fach			
HC1.23	Recticel and Gwalia Former Factory Site, Brynmawr#	0.96	45
HC1.24	Land at Clydach Street, Brynmawr	0.64	12
HC1.25	TSA Woodcraft, Noble Square Industrial Estate, Brynmawr	0.71	25
HC1.26	Roberto Neckwear, Limestone Road, Nantyglo	0.74	19
HC1.27	Cwm Farm, Blaina	9.01	78
HC1.28	Salem Chapel, Waun Ebbw Road and Pond Road Junction, Nantyglo	0.26	11

Policy Number	Site Name	Area (Ha)	Units
		Total	**190**
Lower Ebbw Fach			
HC1.29	At Cwm Farm Road	0.68	20
HC1.30	Former Swffryd Junior School#	0.41	18
HC1.31	Land at Penrhiw Estate, Brynithel	1.02	23
		Total	**61**
TOTAL			**1,707**

List of Sites for Allocation – T1 Cycle Routes

The existing network of cycle paths and community routes will be extended, improved and enhanced by the completion of the following schemes:

1. HoV Route linking Nine Arches Tredegar to Brynmawr

2. Link from HoV to Rassau Industrial Estate

3. HoV to Ebbw Vale and Cwm

4. Cwm to Aberbeeg

5. Link from HoV to Trefil

6. Links from HoV to Tafarnaubach Industrial Estate

7. Bedwellty Pits, Tredegar to County Boundary

8. Hilltop to Ebbw Vale to Manmoel

9. Brynmawr to Blaenavon

10. Extension of Ebbw Fach Trail from Abertillery to Aberbeeg and completion of missing section through Blaina

11. Link to Cwmtillery Lakes

12. Aberbeeg to Royal Oak

13. Royal Oak to Swfrydd

List of Sites for Allocation – T2 Rail Network and Station Improvements

Land will be safeguarded for the following rail network improvements:

1. Extension of rail link from Ebbw Vale Parkway to Ebbw Vale Town

2. Provision of new station and bus interchange at Ebbw Vale

3. Provision of new station at Cwm

4. Extension of rail link to Abertillery

5. Provision of new station and Park and Ride at Abertillery

6. Rail freight provision at Marine Colliery

List of Sites for Allocation – T4 Improvements to Bus Services

The following bus service improvements are identified:

1. Bus Priority Scheme along the Brynmawr to Newport Bus Corridor

2. Bus Interchange improvement at Brynmawr

3. Bus Interchange improvement at Ebbw Vale

List of Sites for Allocation – EMP1 Employment Allocations

The following sites are allocated for employment uses, in line with their status in the employment hierarchy identified in Policy DM11:

Policy Number	Site Name	Hub	Indicative Developable Area (Ha)
Strategic Sites (B1 and B2 Use Classes and an ancillary facility or service to the proposed employment use)			
MU1	*Rhyd-y-Blew*	*Ebbw Vale*	*13.2*
Business Parks (B1 Use Class and an ancillary facility or service to the proposed employment use)			
MU2	*'The Works' Business Hub*	*Ebbw Vale*	*3.5*
EMP1.1	Land at Festival Park	Ebbw Vale	0.7
EMP1.2	Land at Tredegar Business Park	Tredegar	2.1
EMP1.3	Land at Rising Sun Industrial Estate	Upper Ebbw Fach	1.6
Primary Sites (B1, B2, and B8 Use Classes, an appropriate Sui Generis use and an ancillary facility or service to the proposed employment use)			
MU1	*Bryn Serth*	*Ebbw Vale*	*10.0*
EMP1.4	Rassau Platform A	Ebbw Vale	3.4
EMP1.5	Rassau Platform B	Ebbw Vale	3.7
EMP1.6	Land at Waun-y-Pound	Ebbw Vale	4.6
EMP1.7	Marine Colliery	Ebbw Vale	3.4
EMP1.8	Crown Business Park Platform A	Tredegar	0.7
EMP1.9	Crown Business Park Platform B	Tredegar	1.6
EMP1.10	Land at Roseheyworth Business Park	Lower Ebbw Fach	1.5
		Total Indicative Developable Area	**50.0 ha**

List of Sites for Allocation – EMP2 Employment Area Protection

The following sites are protected for employment use, in line with their status in the employment hierarchy identified in Policy DM11:

Policy Number	Employment Area	Hub
Business Parks (B1 use class and an ancillary facility or service to the proposed employment use)		
EMP2.1	Tredegar Business Park	Tredegar
Primary Sites (B1, B2, and B8 use classes, an appropriate sui generis use and an ancillary facility or service to the proposed employment use)		
EMP2.2	Rassau Industrial Estate	Ebbw Vale
EMP2.3	Waun-y-Pound Industrial Estate	Ebbw Vale
EMP2.4	Festival Park	Ebbw Vale
EMP2.5	Tafarnaubach Industrial Estate	Tredegar
EMP2.6	Crown Business Park	Tredegar
EMP2.7	Pond Road Workshops	Upper Ebbw Fach
EMP2.8	Blaenant Industrial Estate	Upper Ebbw Fach
EMP2.9	Barleyfield Industrial Estate	Upper Ebbw Fach
EMP2.10	Rising Sun Industrial Estate	Upper Ebbw Fach
EMP2.11	Cwmtillery Industrial Estate	Lower Ebbw Fach
EMP2.12	Roseheyworth Business Park	Lower Ebbw Fach
Secondary Sites (B1, B2, and B8 use classes, an appropriate sui generis use, an ancillary facility or service to the proposed employment use and an acceptable commercial service)		
EMP2.13	Cwm Draw Industrial Estate	Ebbw Vale
EMP2.14	Marine Street Industrial Estate	Ebbw Vale
EMP2.15	Sirhowy Hill Industrial Estate	Tredegar

Policy Number	Employment Area	Hub
EMP2.16	Bridge Street Industrial Estate	Tredegar
EMP2.17	Noble Square Industrial Estate	Upper Ebbw Fach
EMP2.18	Blaina Enterprise Centre	Upper Ebbw Fach
EMP2.19	Cwmcrachen Industrial Estate	Upper Ebbw Fach
EMP2.20	Glandwr Industrial Estate	Lower Ebbw Fach
EMP2.21	Llanhilleth Industrial Estate	Lower Ebbw Fach

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Contents

1. Executive Summary 1
2. Introduction 5
3. Method of Assessment 9
4. Appropriate Assessment 14
5. Plan Analysis 18
6. Stage 2C – Other Plans and Projects 30
7. Stage 2D - The Appropriate Assessment Process 32
8. Stage 2E – Mitigation Measures 83
9. Conclusions 89

References

Appendices

Appendix A – European Sites Characterisations
Appendix B – Details of Source/Pathway/Receptor Analysis
Appendix C – Record of Appropriate Assessment (Pro-Forma)
Appendix D – Information on Other Plans and Projects
Appendix E – Email from Dwr Cymru (Impact of LDP Allocations)
Appendix F – List of Sites (For Selected LDP Allocations)

1. Executive Summary

This is a record of the appropriate assessment, required by Regulation 48 of the Habitats Regulations 1994, which has been undertaken by Capita Symonds on behalf of Blaenau Gwent County Borough Council (BGCBC) – the competent authority. The appropriate assessment (AA) was done in respect of the Deposit Local Development Plan (LDP), in accordance with the Habitats Directive (Council Directive 92/43/EEC).

Having considered, by means of the Habitats Regulation Assessment (HRA) screening assessment, that the BGCBC LDP would likely have significant effects on "5 European Sites" within its area of influence (refer to the conclusion – Section 4.3 of the HRA screening report, April, 2011), and that the plan is not directly connected with or necessary to the management of these sites, an appropriate assessment has been undertaken of the implications of the proposal in view of the sites' conservation objectives.

The likely effects of the proposal (Deposit LDP), before the introduction of mitigation measures, on the international nature conservation interests for which the site was designated may be summarised as:

Possible deterioration of air composition and quality;

Possible disturbance of features by effects such as noise, light etc;

Possible loss of habitat area, quality and connectivity;

Possible changes to the flow regime and sediment characteristics;

Possible changes in drainage characteristics;

Possible deterioration of water quality and baseline nutrient loads;

Possible introduction of physical and hydrological barriers etc. in watercourses.

Some key findings from the HRA appropriate assessment are:

- The Appropriate Assessment (AA) has identified that 4 European sites (before the consideration of mitigation measures), could potentially be affected by the delivery of the Deposit LDP – when the LDP is considered on its own.

  A fifth European site – the River Usk, has been taken forward, on the advice of the Countryside Council for Wales (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) – the water resources management network.

- After the introduction of mitigation measures the AA did not identify any European sites which could potentially be affected by the delivery of the Deposit LDP.

- By applying the precautionary principle, the AA also identified that some of the European sites could potentially be affected by the delivery of the Deposit LDP in combination with other projects and plans in SE Wales. This was due more to the uncertainty surrounding the specific spatial and operational details of these other projects and plans, rather than any definitive proof of impact.

- From the source/pathway/receptor analysis carried out (see summary of results in Table 23), it became evident that there was the potential for some of these other projects and plans to have adverse impact on the designated features identified.

- However, for many of these plans/projects, mitigation measures/features were incorporated at the design and development stages. Most of these plans and plan components were also subject to the HRA process to comply with Habitats Directive (Council Directive 92/43/EEC).

- Therefore, it is concluded that there is unlikely to be any adverse contribution from the LDP when considered "in-combination" with other relevant plans and projects as defined under Article 6(3) of the Habitats Directive.

Having considered, by means of the HRA appropriate assessment, the potential impact of Blaenau Gwent County Borough Council (BGCBC) Deposit LDP on the international sites within its area of influence, and that the plan is not directly connected with or necessary to the management of these sites, the assessment has concluded that:

The LDP (as proposed), would adversely affect the integrity of 4 of the 5 European sites identified from the HRA screening report, when considered in isolation from the other plans and projects. The 5th European site – the River Usk, was included because of the precautionary principle applied in this HRA (see further details in Section 7.4).

However, the imposition of conditions or restrictions (mitigation) on the way the Plan is to be carried out has also been considered and it is ascertained that the following conditions and/or restrictions would avoid adverse effects on the integrity of the site

- Preventing loss of natural habitat by activities (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority. Any trees, hedges or water bodies identified by the conservation authority as necessary for the favourable status of the SAC features should not be affected by development.

  This could be achieved by application of some of the Development Management Policies identified e.g. DM15 (Refer to LDP), alongside other relevant National Policies.

- Preventing activities likely to generate harmful air pollutants from affecting the features by ensuring that such activities only take place within a safe buffer distance of the SAC as determined by the conservation authority.

  This could be achieved through the planning determination process and the consultation involved with the relevant regulatory bodies.

- Preventing loss of natural habitat by activities such as the clearing of land or removal of vegetation within the geographical limits of the protected sites.

  This could be achieved by application of some of the Development Management Policies identified e.g. DM15 (Refer to LDP), alongside other relevant National Policies.

- Preventing LDP activities which could cause direct or indirect disturbance to the features (such as light, noise etc.) from occurring by ensuring that such activities only take place at a "safe" distance from the European sites as determined by the conservation authority.

  This could be achieved through the planning determination process which has as its core consultation with the relevant regulatory bodies.

- Requiring measures in new developments to safeguard against increasing atmospheric pollutants (such as photochemical oxidants, particulate matter etc.) above existing levels – particularly those which contribute to acidification and eutrophication.
  This could be achieved through the planning determination process and the consultation involved with the relevant regulatory bodies.

- Requiring new developments to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same.

  This could be achieved through the planning determination process by application of TAN15 and Planning Policy Wales, particularly in regards to land drainage and development in flood risk areas.

- Requiring measures in new developments to prevent site pollutants (including sediments), which are likely to adversely affect water quality from being transported by water to the designated European site.

  This could be achieved through the planning determination process and the consultation involved with the relevant regulatory bodies. The Environment Agency has developed non-statutory Pollution Prevention Guidelines (PPG) which specify best practice procedures for construction and building activities.

  This could also be achieved by application of some of the Development Management Policies identified (Refer to LDP), alongside other relevant National Policies.

- Requiring that approval be obtained from the appropriate regulatory body before consenting to developments which involve:

  - abstraction and/or discharges from/to river

  - in-channel works or construction (including flow diversion or impoundment)

In cases where appropriate mitigation measures are not in place and it is considered that the integrity of the site will be adversely affected then in accordance with the Habitats Directive 92/43/EEC) development will not be permitted.

The preparation of an Annual Monitoring Report will assess the effectiveness of policies in the LDP. This will provide an effective tool to monitor the Strategic Policies, which in turn indicates the success of the Development Management Polices and Allocation Policies.

The conservation authority, Countryside Council for Wales (CCW) was consulted under Regulation 48(3) during the HRA screening and scoping and Capita Symonds has had regard for their representations (see Section 2.3 in HRA screening report, April 2011). Formal consultation for the AA has been undertaken.

The sites' conservation objectives have been taken into account; including consideration of the citation for the site and information supplied by CCW (see Appendix A).

2. Introduction

2.1 General Background

Blaenau Gwent County Borough Council is currently developing its Deposit Local Development Plan and is undertaking Habitats Regulations Assessment (HRA) in line with the requirements set by the Conservation (Natural Habitats &c) (Amendment) Regulations 2007.

This HRA report addresses the Appropriate Assessment stage of the HRA which considers how the likely significant effects on designated European Sites identified through the first Screening stage of the HRA (Habitats Regulations Assessment Screening Report, Blaenau Gwent County Borough Council Deposit Local Development Plan) may affect European site integrity.

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.

The Screening Report identified the potential for the Deposit Local Development Plan to have a negative impact on 4 European sites identified within a 15km search area around the Blaenau Gwent County Borough Council's (BGCBC) Planning Authority boundary. These 4 sites are Cwm Clydach Woodlands, Usk Bat Site, Aberbargoed Grasslands and Sugar Loaf Woodlands.

A fifth European site – the River Usk, has been taken forward, on the advice of the Countryside Council for Wales (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) – the water resources management network (see further details in Section 7.4).

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

This report addresses the Appropriate Assessment stage of the HRA; it outlines the key tasks undertaken and the key findings/ recommendations emerging from the assessment.

2.2 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. 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 of that site. Where significant negative effects are identified, alternative options or mitigation measures should be examined to avoid any potential damaging effects.

The scope of the HRA/AA is dependent on the location, size and significance of the proposed plan or project and the sensitivities and nature of the interest features of the European sites under consideration. If it is not possible to avoid or remove the identified effects assessed as arising from the plan implementation, then [if the plan makers wish to proceed with the policies/ proposals as set] it must be demonstrated that there are Imperative Reasons of Overriding Public Interest (IROPI) to continue with the plan [(Article 6(4) of the Habitats Directive).

2.3 GUIDANCE FOR HABITATS REGULATIONS ASSESSMENT (APPROPRIATE ASSESSMENT)

2.3.1 AN OVERVIEW

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 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 Appropriate Assessment are based on the formal Welsh guidance currently available and emergent practice, which recommends that HRA is approached in three main stages – outlined in Table 1. This report outlines the method and findings for stage 2 of the HRA process – the Appropriate Assessment.

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***
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 affect 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

Table 1.0 Key Stages of the Habitats Regulation Assessment (HRA)

2.4 CONSULTATION

The Habitats Regulations require the plan making/competent authority – Blaenau Gwent County Borough Council (BGCBC) to consult the appropriate nature conservation statutory body [Countryside Council for Wales (CCW)]. CCW have agreed the proposed Enfusion methodology to be used for this Appropriate Assessment stage.

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. Therefore, in addition to the statutory consultation to be undertaken with CCW this report can be made available for wider public consultation.

2.5 PURPOSE AND STRUCTURE OF REPORT

This report documents the process and the findings from the Appropriate Assessment stage of the HRA for Blaenau Gwent County Borough Council Deposit Local Development Plan. Following this introductory section the document is organised into a further four sections:

Section 2 – outlines the method used for the Appropriate Assessment and includes reference to the key information sources used. It presents an overview of the stages and requirements for consultation.

Section 3 – outlines the process of the Appropriate Assessment. It provides detailed analysis of the Deposit Local Development Plan. This involves examining the proposed Plan, identifying key components and objectives. It also focuses on other plans and projects which could have an 'in-combination' negative effect on the European sites under Article 6(3).

Section 4 – is the core of the study and constitutes the appropriate assessment of the Plan. It establishes the assessment guidelines and develops (in detail) each of the individual assessment stages identified in the methodology. This section also summarizes all the impact avoidance and mitigation measures proposed for the Deposit LDP.

Section 5 – outlines the conclusions and how the plan should now proceed with reference to the Habitats Regulations.

3. Method of Assessment

3.1 Outline of Methodology

3.1.1 Overview of Stages

The first Screening Stage report of the HRA (Habitats Regulations Assessment Screening Report) for the Blaenau Gwent County Borough Council Deposit Local Development Plan, identified which European sites around the plan area should be considered in further detail as part of an Appropriate Assessment. The Screening combined a plan and a site focus.

- The plan focus first screened out those elements of the plan unlikely to affect European site integrity and then considered the impacts of the remaining elements on European sites, including the potential for 'in-combination' impacts.

- The site focus considered the environmental conditions of the sites and the factors required to maintain site integrity, and then looked at the potential impacts the plan may have [including in-combination impacts].

The results of the screening identified that the following European sites may be potentially affected by activities/ impacts arising from the plan.

- Cwm Clydach Woodlands;

- Usk Bat Site;

- Aberbargoed Grasslands;

- The River Usk;

- Sugar Loaf Woodlands

The River Usk was included purely on the basis of the precautionary principle (see Section 7.4 for further details).

The potential impacts that could arise from these policies were generally considered to be:

- 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

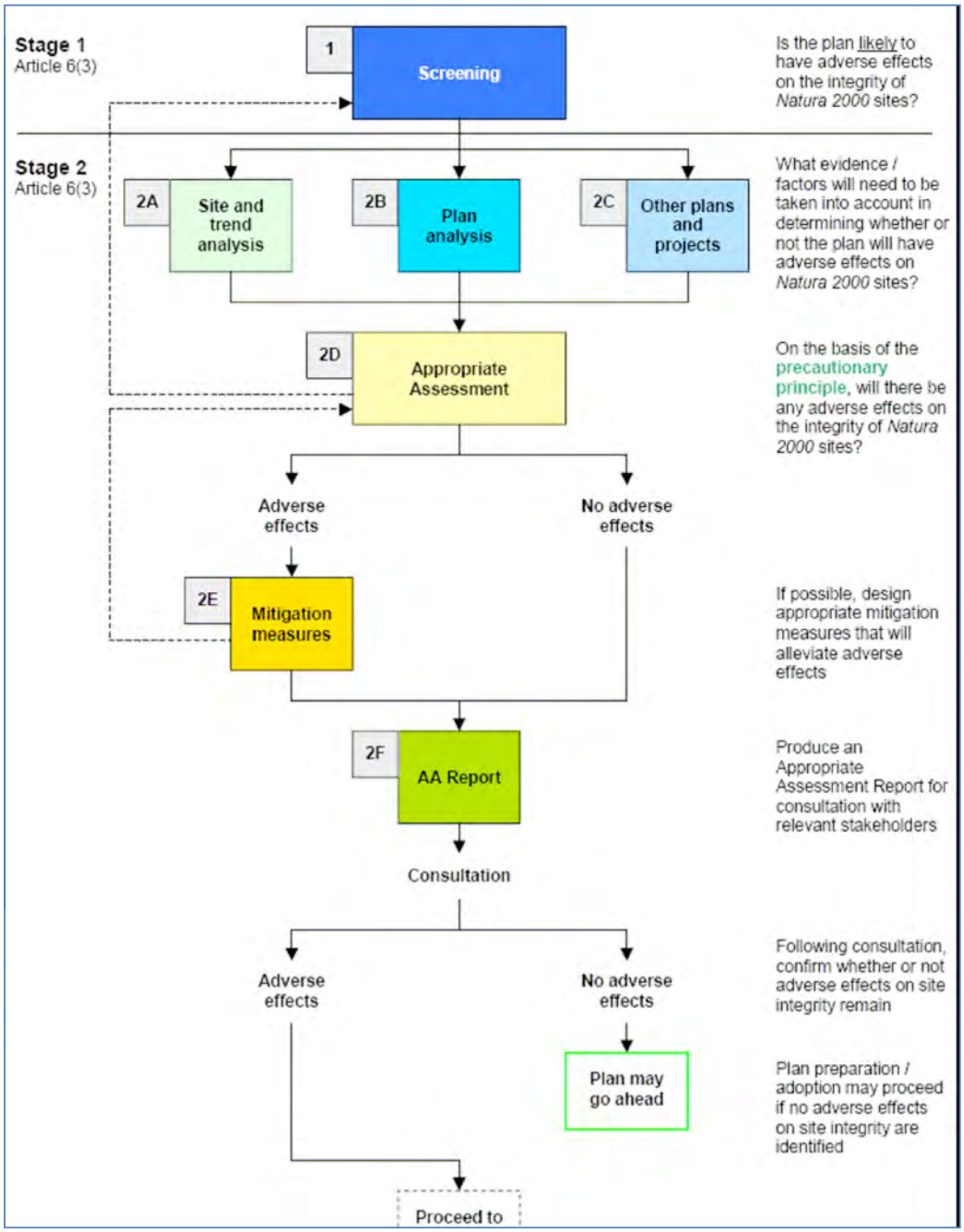


Figure 1.0 Shows a schematic diagram of further details of the HRA process

Table 2 Appropriate Assessment Stage 1: Key Tasks	
Task 1 **Scoping and Additional Information Gathering**	• Gathering additional information on European sites • Gathering additional data on background environmental conditions • Further analysis of plans/projects that have the potential to generate 'in-combination' effects
Task 2 **Assessing the Impacts (in-combination) Appropriate Assessment**	• Examination of the policies and proposals identified during the screening phase and their likely significant effects on European sites • Consideration of whether effects are direct/indirect/cumulative • Consideration of whether other plans and programmes are likely to generate effects that have the potential to act cumulatively with those arising from the plan
Task 3 **Developing Mitigation Measures (including initial avoidance)**	• If effects identified – either arising from the plan alone and/or 'in-combination' with other plans – consider initial opportunities to avoid (e.g delete/remove or amend policy from plan) • Develop mitigation measures – must be deliverable by the plan and have clear delivery/monitoring responsibilities
Task 4 **Findings and Recommendations**	• Conclude the asesssment, explain key findings and analysis informing conclusions
Task 5 **Consultation**	• Undertaken further consultation with CCW (assumes that consultation has also been an iterative process throughout the HRA/AA)

Table 2.0 Key Tasks involved in the Habitats Regulation Assessment (HRA)

3.2 Overview of Stages

Under Article 6 of the Habitats Directive, the AA stage of the Habitat Regulation Process (HRA) considers the impact of the Deposit LDP on the integrity of the 5 European sites identified from the HRA screening, alone or in combination with other projects or plans, with respect to the sites' structure, integrity and function and their conservation objectives.

As can be seen in figure 1.0, the AA stage – identified as Stage 2 can be further subdivided into six sub-stages or tasks. These are:

- Stage 2A – Analysis of the sites and the reasons for their designation, and the underlying trends affecting them.

- Stage 2B – Analysis of the plan, including its key components and how it would be implemented in practice.

- Stage 2C – Analysis of other plans and projects that could contribute to 'in combination' effects.
- Stage 2D – Analysis of how the plan, the "in-combination" effects of other plans and projects and the subject site will 'interact' come plan implementation.
- Stage 2E – Where applicable, to propose and assess mitigation measures for addressing adverse effects.
- Stage 2F – To prepare an Appropriate Assessment Report for consultation with key stakeholders including the conservation authority.

Overall then, the principal steps in carrying out the Appropriate Assessment are:

- To collate information on sites and evaluate impact in light of conservation objectives;
- To consider how the plan 'in combination' with other plans and programmes will interact when implemented;
- To consider how effect on integrity of site could be avoided by changes to plan and the consideration of alternatives;
- To develop mitigation measures (including timescale and mechanisms);
- To report the outcomes of AA and develop monitoring strategies

Consultation by means of email and telephone was carried out by Capita Symonds and Blaenau Gwent County Borough Council with the following:

- Countryside County for Wales local team staff;
- Environment Agency local team staff;
- Local planning authority officers;
- Local authority ecologists;

The objectives of these consultations were to gain agreement on:

- the spatial extent of likely impact from the LDP;
- the significance of impact – taking into account the 'in combination' factor.

These consultations were also to:

- Confirm key environmental conditions supporting site integrity;
- Identify other plans and projects with the potential to have an 'in combination' effect with the deposit LDP;
- Identify possible mitigation measures.

These consultations also helped to confirm 'cross-cutting' issues that could potentially affect more than one of the designated sites. These are:

- Water resources;
- Water quality;
- Air quality;
- Climate change

4. Appropriate Assessment

4.1 What is Required?

As noted in Section 3.1 of this report, the HRA Screening Report, Blaenau Gwent County Borough Council Deposit Local Development Plan, April 2011 set out details of the European Sites and the types of impact to be considered in the more detailed Appropriate Assessment work.

The degree to which a plan's effects on a European site can be demonstrated is related to whether the site's "integrity" is affected.

Article 6(3) of the Habitats Directive requires that: "the competent national authorities shall agree to the plan, only after having ascertained that it will not adversely affect the integrity of the site concerned."
'Integrity' is, in turn, defined by the European Commission (2000) as relating to the reasons for the site's designation.

According to guidelines on the assessment of plans, a key stage in the AA process is identifying why a European site was designated, by collating information on the following, where possible, for each relevant European site:

- Qualifying interest features: These are the reasons why the European site has been designated, for instance the endangered species that occupy the SAC; rare habitats that occur there; or threatened birds that breed or over-winter in the SPA. The AA focuses on the qualifying interest features that were the primary reasons for the site's designation.

- The site's conservation objectives: These help to focus the assessment. Conservation objectives are a statement of the overall nature conservation requirements for a site, expressed in terms of the favourable condition required for the habitats and / or species for which the site was selected.

- The Favourable Condition Table for the site: Although these tables are designed primarily for monitoring the state of a site, they give information on the trends and environmental conditions required to sustain or promote qualifying interest features and site integrity. However, they should be treated with caution, as favourable conditions as assessed for SSSIs may have little bearing on the conservation status of the features for which a site has been designated.

- The relevant conservation authorities are important sources for most of this information – in the case of this assessment Countryside Council for Wales (CCW).

- Vital information on European sites and their interest features was obtained from the Internet, particularly from sites including www.jncc.gov.uk, www.natureonthemap.org.uk, and the environment agency and CCW websites.

See table showing requirements for favourable condition and the conservation objectives in Appendix A.

The EC (2000) guidance defines the 'integrity of the site' as 'the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified'

When looking at the 'integrity of the site', it is therefore important to take into account a range of factors, including the possibility of effects manifesting themselves in the short, medium and long-term.

The integrity of the site involves its ecological functions. The decision as to whether it is adversely affected **should focus on and be limited to the site's conservation objectives**.

Some key ecological processes, resources, and environmental conditions identified as being important to the designated features and habitats at the immediate site and proximate areas are:

- Hydrological and hydro-geological regimes and characteristics (ph, water depth, flow rate, water quality parameters, wetland coverage);
- Food – distribution, availability, competition (obstacles: physical and non-physical – in accessing feeding areas);
- Ecosystems pattern and connectivity; Biological diversity and biological species requirement;
- Temperature profile, rainfall pattern and micro-climate;
- Nutrient turnover (nutrient availability);
- Air composition and quality.

See table showing the key ecological and physical processes & relevant resources and environmental conditions required by the designated features in Appendix A

4.1.1 WHAT TRENDS AFFECT THEM?

Trends – direct and indirect – that could affect a European site include, for instance, increasing nitrous oxide emissions from vehicles, declining water levels due to temperature changes and over-abstraction, increasing urbanisation of an area leading to increased green house gases emissions and water consumption.

They also include those factors that have led to the current state of the site and which may or may not be continuing e.g. scrub encroachment on a heathland site. Trends relating to climate change may be a particularly important consideration.

For this assessment, some of the relevant parameters whose trends (underlying patterns) require close examination are:

Acid deposition;

'Nitrogen oxide' deposition;

Green house gas;

Water levels;

pH;

Land cover;

Land-use;

Deforestation rate (square miles);

Dissolved oxygen levels;

Turbidity;

BOD;

River flow;

Species population;

Recreational pressure;

Population growth of non-native species. Invasive species threaten biodiversity, habitat quality and ecosystem function;

Biological diversity (agents which cause biological diversity loss are called "biological pollutants").

An assessment of the baseline environmental status of a site is important to establish the environmental characteristics of the area prior to the implementation of a proposal or plan, to provide an information-base against which to monitor and assess an activity's progress and effectiveness during implementation and after the activity is completed.

Such an assessment also serves to identify the factors which influence these characteristics and to determine the sensitivities of these individual factors to change.

In the absence of site-specific baseline studies for the European sites concerned, this study has taken into consideration the findings of the biodiversity action plans (BAPS) as well as regional environmental statements carried out in the area e.g. the 'SEA of Sewta's Regional Transport Plan: Baseline Study Report, October 2006'

4.2 IMPACT TYPES AND LIKELY SIGNIFICANCE

Impact Type	Significance Indicator
Disturbance	Intensity; time of occurrence (daytime/nigh time/breeding season); permanence
Distance from	Habitat/feature; presence of attenuation elements (to shield reception position e.g topography, barrier etc)
Water Resources (Quantity & Availability)	Likely to cause unfavourable changes in the indicative parameters (hydrograph shape, time of peak etc), velocity, water level, wetted perimeter – function of distance and attenuating influences; distance from habitat/feature; sensitivity to changes of indicative parameter
Water Quality	Likely to cause unfavourable changes in indicative (physical and chemical) parameters: suspended solids, turbidity, dissolved oxygen, pH, temperature, nitrates etc – function of dilution, volume and the degree to suspended solids settle; also how bioavailable these parameters are, likelihood of biodegration, and sensitivity to changes of indicative parameter.
Habitat Loss	Area of loss, time of occurrence, permanence, reversibility of loss, availability of nearby alternative, how critical is loss to features' integrity (breeding, food, shelter from predation), possibility and effectiveness of mitigation measures
Habitat Fragmentation	Time of occurrence, permanence, reversibility, impact on structural complexity and connectivity, impact on diversity
Habitat Severance	Similar to fragmentation – but of major relevance re: linear/transport schemes

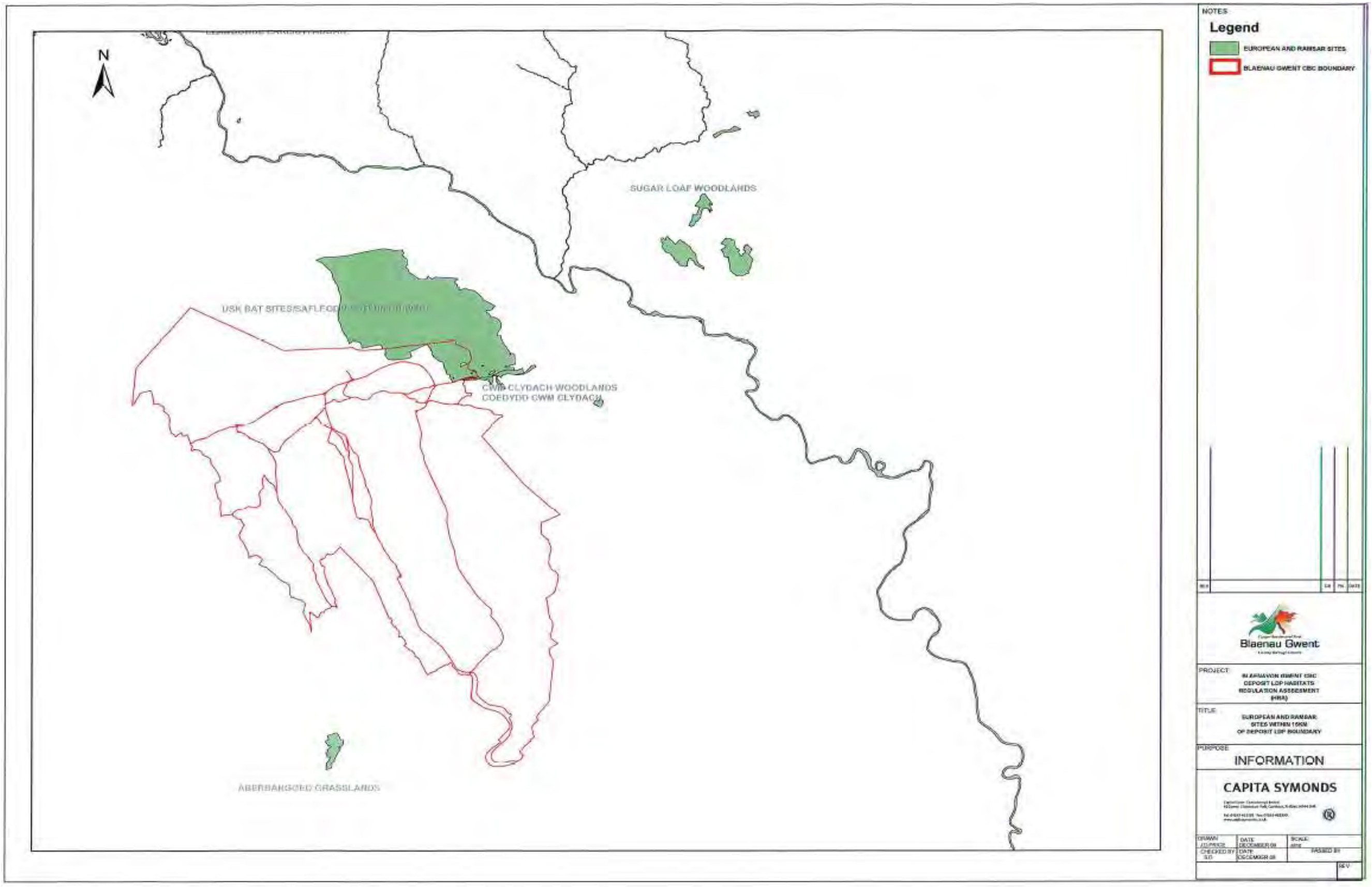
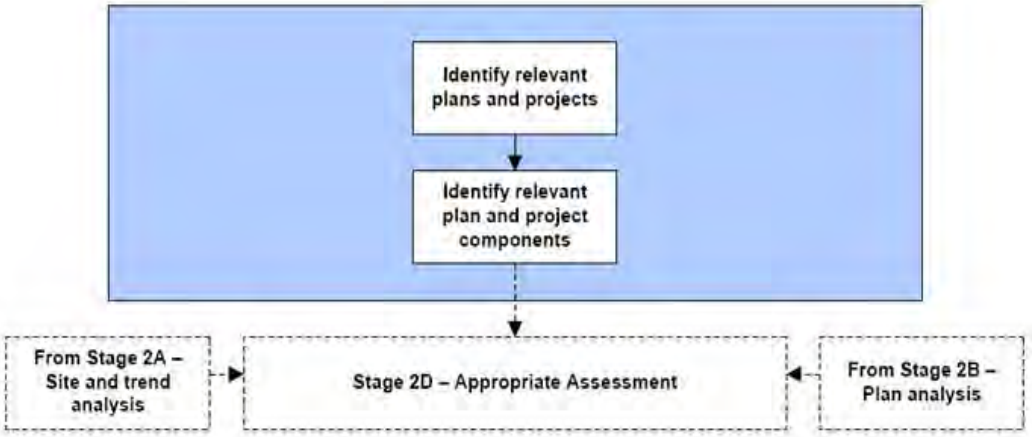


Figure 2.0 Showing the location of the 4 European sites and the LDP Boundary

5. Plan Analysis

5.1 OVERVIEW



(Source: Appropriate Assessment of plans, Levett-Therivel Consultants, September 2006)
Figure 3.0 Schematic diagram of Stage 2B (Plan Analysis)

An analysis of the deposit LDP as a whole should always take place. In this way, the plan's impacts can be considered in their totality. In addition, prior to the formulation of the plan, it may be useful to carry out an assessment of the plan's various components as they emerge. This can help to ensure that inappropriate components are not taken forward and included in the final plan."

- A plan's components may include:
- Objectives – the plan's aspirations;
- Options – the choices open to the plan authors for achieving the plan objectives;
- Preferred options – the chosen options which provide the plan's foundations;
- Detailed policies and proposals – the preferred options expressed in detail through plan policies and proposals.

5.2 PURPOSE OF DEPOSIT LDP

The main purpose of LDPs is to:

- Reflect longer-term local aspirations, based on a vision agreed by the community and stakeholders;
- Provide a plan-led strategy, specific to the area covered, to act as a basis for rational and consistent decisions about the use and development of land;

- Guide growth and change while protecting local diversity, character and sensitive environments;

5.3 THE LDP COMPONENTS: VISION, AIMS STRATEGY, POLICIES

5.3.1 THE VISION

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.

Having drawn up the Vision, 4 key themes were identified and 16 objectives developed setting out the way forward.

5.3.2 THEMES OF DEPOSIT LDP

Theme 1: Create a Network of Sustainable Vibrant Valley Communities.

- By 2021, Ebbw Vale will be the main service and retail hub for the County Borough supported by a network of vibrant district/local centres (secondary hubs) that provide a range of local services and facilities for their local communities. The district hubs will be well linked to the main hub of Ebbw Vale through sustainable modes of transport.

- By 2021, the population will have increased from 69,300 to 71,100 as a result of natural change and other people being attracted to the area. The overall population structure will be generally in line with that of Wales.

- By 2021, 3666 new houses will have been built, approximately 800 of which will be affordable. New housing sites alongside improvements to existing houses will have helped create sustainable communities.

- By 2021, the use of sustainable modes of transport, particularly public transport, walking and cycling, will have increased and the quality and frequency of the public transport system improved.

- All developments have been built in accordance with design guidance, are sustainable, safe by design, and appropriate to their context and have helped improve the quality of the physical and natural environment.

- New development has minimised further climate change contributions and, where appropriate, mitigated or adapted to its predicted effects. This has been achieved by:

  - Maximising the use of land;
  - Promoting the re-use and restoration of derelict land and buildings;
  - By focusing development away from areas vulnerable to flooding;

- By reducing energy consumption through improved design and locating development close to hubs and public transport routes; and
- By increasing the supply of renewable energy.

Theme 2: Create Opportunities for Sustainable Economic Growth and Promote Learning and Skills.

- By 2021, the regeneration plans for 'The Works', Ebbw Vale Northern Corridor and other key regeneration sites have been delivered benefiting the residents of the County Borough through the delivery of jobs, houses and community infrastructure

- By 2021, employment and economic activity rates will have increased and unemployment decreased with levels nearer the national averages. This has been achieved by diversifying the economic base into construction, business services, health and social care, tourism, and leisure and environmental industries whilst supporting the manufacturing sector.

- By 2021, 50 hectares of employment land and a range of premises have been delivered which meet the needs of local businesses and offers employment opportunities for local people.

By 2021, the delivery of the Learning Zone, new schools and integrated education services, including life-long learning have facilitated improvements and broadened opportunities for education levels and skills.

Theme 3: Create Safe, Healthy, and Vibrant Communities and Protect and Enhance the Unique Natural and Built Environment.

- By 2021, an accessible network of green open spaces and high quality leisure infrastructure has helped increase participation in sport and active recreation and, contributes to improvements in health and well-being.

- The unique landscape and natural heritage, has helped foster sustainable tourism and promoted community pride.

- By 2021, the biodiversity resource of Blaenau Gwent has been enhanced and the connectivity of ecological networks have been improved from 2006 levels.

- Blaenau Gwent's historical and cultural environment has been protected and enhanced and has contributed to the regeneration of the area.

Theme 4: Create opportunities to secure an Adequate Supply of Minerals and Reduce Waste.

- The 3 million tonnes of mineral resources required to be provided in Blaenau Gwent by the Regional Plan has been identified and resources of local, regional and national importance safeguarded.

- A sustainable, integrated approach to waste management has minimised the production of waste and its impact on the environment, and maximised the use of

unavoidable waste as a resource. By 2021, national recycling and composting targets outlined in the Wales Waste Strategy: 'Towards Zero Waste' have been met.

5.3.3 THE DEPOSIT LDP STRATEGY

The Strategy is based on regenerating the area through 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 the benefits of growth and regeneration are shared widely.

Vital to delivering this is ensuring good connectivity between the principal hub of Ebbw Vale and the district hubs of Tredegar, Brynmawr and Abertillery. In turn ensuring that each hub is accessible to the areas they serve. In the case of the Upper Ebbw Fach area the Brynmawr District Hub is also supported by the Local Town Centre of Blaina, which serves local needs. Each of the 4 hub areas is supported by **Holistic Area Regeneration Plans (HARPs)**, which provide more detailed projects and actions to ensure these areas are regenerated through partnership working'.

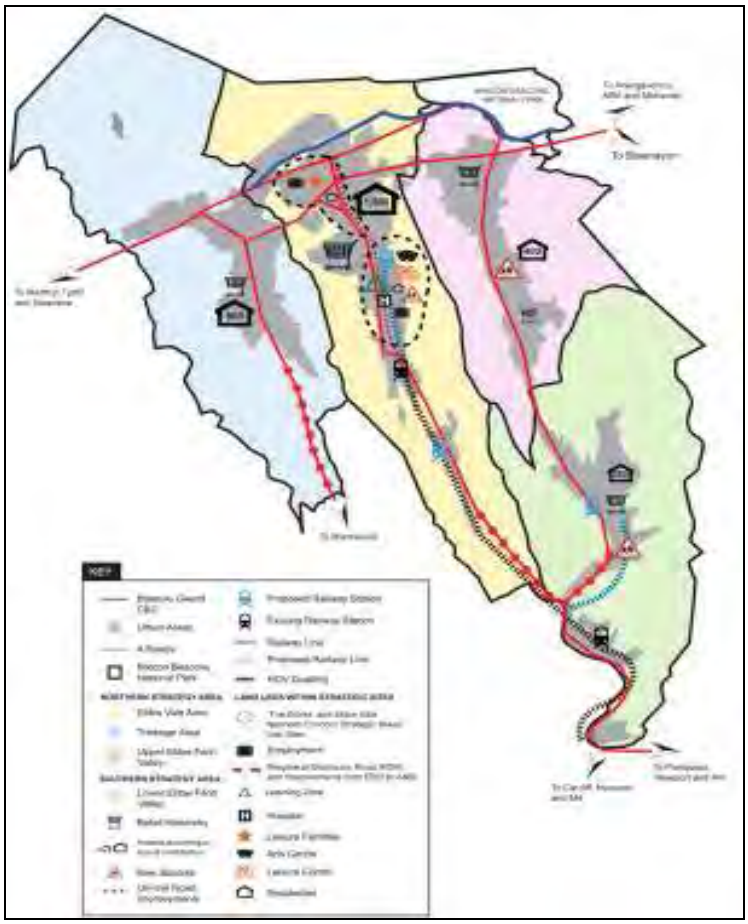


Figure 4.0 Showing LDP proposals for the BGCBC LDP area

Create a Network of Sustainable Vibrant Valley Communities

SP1 Northern Strategy Area – Sustainable Growth and Regeneration

In the Northern Strategy Area the focus will be on sustainable growth and regeneration that benefits the whole of Blaenau Gwent. This will be achieved by:

- Supporting the creation of a network of sustainable hubs around the principal hub of Ebbw Vale.
- Promoting Ebbw Vale as the principal hub for Blaenau Gwent, where the majority of social and economic growth will be accommodated. The Town Centre will be the main centre for service provision where major retail expansion, administrative and cultural developments will take place.
- Delivering strategic sustainable regeneration flagship schemes at 'The Works' and 'Ebbw Vale Northern Corridor'.

Supporting new roles for district and local centres:

  - Tredegar District Town Centre will expand its tourism offer through maximising the benefits of local heritage;
  - Brynmawr District Town Centre will explore opportunities to develop complementary roles around tourism; and
  - Blaina Local Town Centre will build on and exploit its local heritage

- Enabling diversification of the economic base through mixed-use development in the district hubs of Tredegar and Brynmawr where it supports and reinforces the roles of the town centres.
- Supporting a major destination attraction that would draw large numbers of people to the area and provide a significant number of jobs.

SP2 Southern Strategy Area – Regeneration

Proposals in the Southern Strategy Area will be required to regenerate the area by:

- Ensuring that the district hub of Abertillery is well connected to Ebbw Vale and the wider region through safe, frequent and reliable public transport links;
- Supporting Abertillery District Town Centre in developing complementary roles around culture, leisure and tourism;
- Delivering 'Activity Tourism' opportunities in the area;
- Ensuring the removal of dereliction by promoting the reuse of under used and derelict land and buildings;
- Delivering regeneration schemes which provide residential development and infrastructure; and

- Building on the unique identity of the area by protecting the built heritage and the natural environment.

SP3 The Retail Hierarchy and Vitality and Viability of the Town Centres

In order to deliver thriving town centres a new hierarchy of town centres is defined as follows:

Principal Town Centre

- Ebbw Vale will perform a sub regional retail role.

District Town Centres

- Abertillery, Tredegar and Brynmawr will act as district shopping centres principally to serve the needs of the district. Brynmawr District Town Centre will be well related to the new retail provision at Lakeside Retail Park.

Local Town Centres

- Blaina will act as a local shopping centre that will be protected and enhanced to provide facilities for the local communities.

In order to improve the vitality and viability of the town centres:

- Shops, offices and other commercial premises will be upgraded by means of refurbishment and redevelopment;
- Opportunities to improve the retail offer will be explored;
- The provision of better vehicular access and circulation arrangements, improved public transport facilities and provision of additional car parking spaces will be provided where necessary; and
- Disabled access and facilities will be improved.

SP4 Delivering Quality Housing

- To stem out migration and attract people to the area:
  - Provision will be made for the development of 3,666 new dwellings leading to an increase of population from 69,300 in 2006 to 71,100 in 2021;
  - Support will be given to proposals to regenerate social housing areas;
  - Private sector housing improvements will be supported; and
  - Proposals to bring empty properties back into use will be supported.

- To ensure that local housing need is met and sustainable linked communities are created:

  - A mix of dwelling types, sizes and tenure, including approximately 800 units of affordable and special needs housing will be delivered to meet the needs of Blaenau Gwent's current and future population (327 of which will be delivered through S106 Agreements); and

  - Provision will be made for 6 pitches for unmet gypsy and traveller accommodation.

SP5 Spatial Distribution of Housing Sites

In order to create a network of sustainable linked hubs provision for new housing will be located in the following hub areas:

Approx	
Ebbw Vale	1,600 dwellings
Tredegar	900 dwellings
Ebbw Fach Upper	400 dwellings
Ebbw Fach Lower	350 dwellings

An allowance for: completions to date, units under construction, windfall contributions, small sites, conversions and demolitions totalling 853 dwellings are made across the County Borough.

The Delivery of the houses will be increased in five-year periods recognising the step change required to reach the higher completion figures and in light of current market conditions.

2006-2011	820
2011-2016	1,320
2016-2021	1,526

SP6 Ensuring Accessibility

The Council will work with partner organisations, including the Welsh Assembly Government, South East Wales Transport Alliance, public transport operators, community transport providers, Network Rail and neighbouring Authorities to deliver a sustainable transport network which, whilst reducing the need to travel:

- Increases connectivity through improving rail, bus and road links:

  - With other key settlements in the South East Wales Region, Wales, the UK and Europe;

  - Between the principal hub of Ebbw Vale and other identified district hubs (Tredegar, Brynmawr and Abertillery);

- Facilitates and supports economic growth, regeneration and development priorities whilst minimising harm to the built and natural environment and local communities;

- Promotes Ebbw Vale as a regional public transport hub which integrates cycling, walking, bus, and rail, networks;

- Facilitates an integrated and safe system of cycle and pedestrian routes connecting settlements with employment areas and town centres;

- Facilitates the transportation of freight on the core network whilst encouraging the use of rail; and

- Secure appropriate provisions for people with special access and mobility requirements.

SP7 Climate Change

The Council will seek to address climate change and reduce energy demand to improve the sustainability of the valley communities in Blaenau Gwent by:

- Addressing the causes of climate change through:

  - Encouraging more of the County Borough's electricity and heat requirements to be generated by renewable and low/zero carbon technologies;

  - Supporting development proposals that incorporate decentralised heating, cooling and power networks powered by renewable energy sources, or that connect to existing communal/district heating networks;

  - Implementing the energy hierarchy as set out in national planning policy; and

  - Promoting efficient use of land through giving preference to brownfield land and development at higher densities on sites located close to transport corridors or town centres.

- Adapting to direct and indirect impacts of climate change through:

  - Ensuring that developments accord with objectives of sustainability and good design as set out in national planning policy;

  - Directing new development away from those areas which are at high risk of flooding in line with Technical Advice Note (TAN) 15; and

  - Managing flood risk through incorporating measures in design and construction to reduce the effects of flooding.

Deliver Opportunities for Sustainable Economic Growth and the Promotion of Learning and Skills

SP8 Sustainable Economic Growth

In order to improve life chances, increase economic activity, diversify the economy and ensure that residents of Blaenau Gwent maximise their economic potential:

- 50 ha of land for employment and business purposes will be allocated to meet economic development and employment needs;
- The employment roles of major industrial areas will be identified to assist in the diversification of employment and to support the sustainable development of manufacturing;
- Employment in Health and Social Care will be encouraged in town centres and in conjunction with the new hospital at 'The Works';
- Tourism, leisure and heritage initiatives will be encouraged in town centres;
- Activity tourism will be promoted in the countryside;
- A first class learning infrastructure will be put in place to ensure that residents gain the skills they require;
- Local labour agreements will be negotiated with developers to enable local people to secure employment and skills development.

Create Safe, Healthy, and Vibrant Communities and Protect and Enhance the Unique Natural and Built Environment

SP9 Active and Healthy Communities

To create active and healthy communities the Council will:

- Promote the Valleys Regional Park and leisure activities.
- Protect and improve existing open space, sport and leisure facilities; and
- Protect and enhance accessibility to natural green spaces for all members of the community;

SP10 Protection and Enhancement of the Natural Environment

Blaenau Gwent's unique natural environment and designated landscape will be protected, preserved and, where appropriate, enhanced. This will be achieved through:

- Protecting national and international nature conservation sites in line with national planning policy and guidance;

- Protecting those attributes and features which make a significant contribution to the character, quality and amenity of the landscape;

- Giving appropriate consideration to European and nationally designated protected sites and important species and habitats in line with national planning policy and guidance;

- Maintaining and enhancing the Green Infrastructure including creating a network of local wildlife sites and wildlife corridors, links and stepping stones;

- Ensuring that development retains, protects and enhances features of ecological or geological interest, and provides for the appropriate management of these features; and

- Ensuring development seeks to produce a net gain in biodiversity by designing in wildlife, and ensuring any unavoidable impacts are appropriately mitigated for.

SP11 Protection and Enhancement of the Built Environment

Blaenau Gwent's distinctive built environment will be protected, preserved and, where appropriate, enhanced. This will be achieved through:

- Safeguarding nationally designated sites from inappropriate development in line with national guidance and also protecting locally designated buildings of local importance;

- Enhancing sites of historic or archaeological value; and

- The promotion of heritage tourism.

Secure an Adequate Supply of Minerals and Reduce Waste

SP12 Securing an Adequate Supply of Minerals

Blaenau Gwent will contribute to the local, regional and national demand for aggregate supplies by:

- Maintaining a 10-year land bank of permitted aggregate reserves in line with national planning policy and guidance and addressing the 3Mt apportionment identified in the Regional Technical Statement;

- Safeguarding existing mineral reserves and potential resources from development that would preclude their future extraction or encouraging the pre-working of mineral resources, where appropriate;

- Ensuring that future mineral working accords with national planning policy and guidance in terms of protecting areas of importance of natural and built heritage and limiting the environmental impact of mineral extraction;

- Ensuring that high standards of restoration and aftercare measures are incorporated at sites;

- Ensuring that impacts upon residential areas from mineral and coal operations are limited to an acceptable proven safe limit through identification of buffer zones and areas where coal working will not be acceptable; and

- Promoting the efficient use of minerals and use of alternatives to naturally occurring minerals including the re-use of secondary aggregates.

SP13 Delivering Sustainable Waste Management

To help deliver sustainable waste management across Blaenau Gwent the Council will ensure that:

Sufficient land is identified to enable an integrated network of waste management facilities to be developed across the County Borough through:

- Allocating land to meet the South East Wales Regional Waste Plan requirement of 0.4- 4 hectares (Policy W1); and

- Encouraging the provision of in-building treatment facilities on Primary and Secondary Employment Sites (Policy DM9).

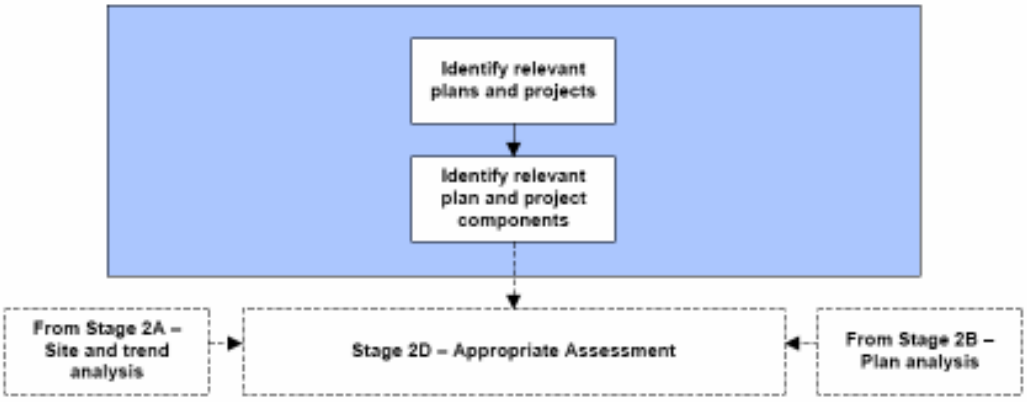
Support is provided for treatment facilities, measures and strategies that represent the best practicable environmental option, having regard to the waste hierarchy and the proximity principle (Policy DM19);

Provision is made for sustainable waste management storage and collection arrangements in all appropriate developments; and

Waste minimization is encouraged during construction.

6. Stage 2C – Other Plans and Projects

6.1 IDENTIFYING OTHER PLANS



(Source: Appropriate Assessment of Plans, Levett-Therivel Consultants, September 2006)
Figure 5 Schematic of Stage 2C

6.1.1 OVERVIEW

For the purpose of this study the expression 'in combination' is taken to refer to the aggregated effects of all the projects and plans which can reasonably be expected to have some bearing on sites in the context of prevailing environmental conditions.

This process therefore takes account of reasonably foreseeable impacts arising from both plans and projects and from 'background' environmental changes or trends.

The review considered the most relevant plans. In deciding on the relevant plans and projects for assessment, consideration was given to those whose impact areas coincide with the designated sites within the area of influence of 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.

6.1.2 Inventory of 'Other Plans'

See Appendix D for list of the "other projects and plans" considered for this Appropriate Assessment. These plans fall broadly under the following categories:

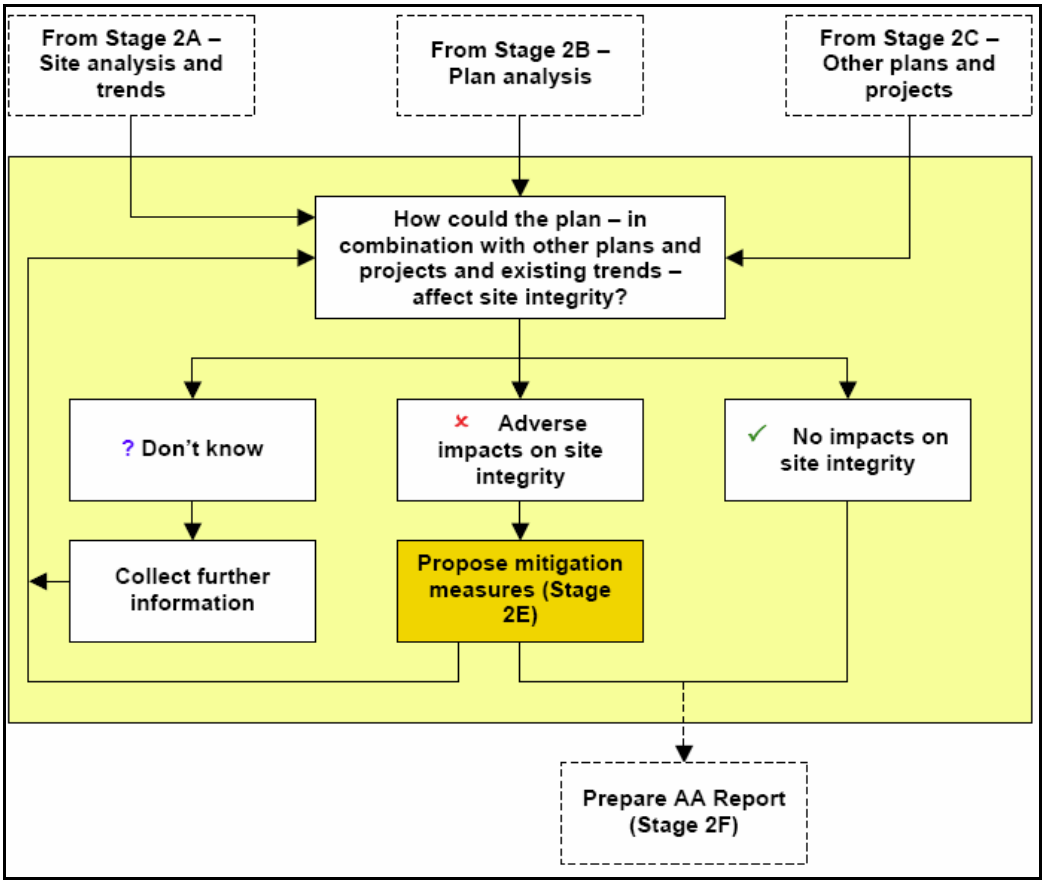
- UK and International Plans, Programmes and Strategies;
- Wales-wide Plans, Programmes and Strategies;
- Regional Plans, Programmes and Strategies
- Local Plans, Programmes and Strategies

6.2 Cumulative Assessment

6.2.1 Steps in the Assessment

- Identify all plans /programmes/ projects which might act in combination;
- Impact identification: identify the types of impacts (e.g. noise, water resource reduction, chemical emissions, etc) that are likely to affect aspects of the structure and functions of the site vulnerable to change;
- Define boundaries for assessment;
- Pathway identification: identify potential cumulative pathways (e.g. via water, air etc.; accumulation of the effects in time or space). Examine site conditions to identify where vulnerable aspects of the structure and function of the site are at risk;
- Prediction: prediction of the magnitude/extent of identified likely cumulative effects;
- Assessment: comment on whether or not the potential cumulative impacts are likely to be significant.

7. Stage 2D - The Appropriate Assessment Process



(Source: Appropriate Assessment of plans, Levett-Therivel Consultants, September 2006)

Figure 6.0 Schematic of Stage 2D

7.1 INTRODUCTION

7.1.1 OVERVIEW

The HRA Screening Report Deposit Local Development Plan, April 2011, described the aims, objectives and outlined the key policies of the plan. The Screening also considered and identified which policies had the potential (in implementation) to affect the integrity of the European sites within the plan's area of influence.

This section considers in more detail where the impacts identified are likely to have a significant effect on site integrity either alone or in-combination with other plans and projects.

7.2 OVERVIEW OF SOURCE/PATHWAY/RECEIVER ANALYSIS

According to the "Appropriate Assessment of plans" by Levett-Therivel Consultants, September 2006, much of the work for Stage 2D involves determining whether there is a pathway from the source (the plan) to the receiver (the European site). The pathway may be very simple, leading to a direct impact, or it may be more complex and lead to an indirect and / or induced impact. In the context of AA, it does not matter whether an impact is 'direct', 'indirect' or 'induced'; the emphasis should be in the identification of any effect of the plan that might affect site integrity, regardless of the complexity of the impact pathway.

Direct impacts represent a straight route between an action or event and a resultant effect on the ecological interest feature.

Indirect impacts do not arise directly from the plan but instead 'occur away from the original effect or as a result of a complex pathway' (ODPM, 2005).
Indirect impacts are also referred to as secondary impacts or included within the term cumulative effects. As there is not a straight-line route between cause and effect it is potentially more challenging to ensure that all the possible indirect impacts of the plan – in combination with other plans and projects have been established.

Induced impacts are secondary actions which may result from the actions set out in the plan, e.g. those impacts arising from development which promotes further development or change which, in turn, affects the integrity of European sites. These are non-ecological impacts in the first instance but will result in ecological impacts later in the pathway of effects.

Pathways can differ for different scales and types of plans: it may be possible to show a pathway for a local plan but not a regional one or vice-versa.

Methods for identifying and describing pathways between source and receiver include network analysis, GIS and modelling. IEEM (2006) provides further information. However, the use of such tools should never hide clear, logical analysis, nor prevent a transparent record of all decisions made.

For the AA of the Deposit LDP, the source/pathway/receptor analysis was carried out using GIS mapping and flow diagrams to track the pathway between source and receptor. Components of the LDP were assessed individually working from the higher-level components such as objectives and aims successively downwards to the lower-level, more detailed components individual policies and actions. The results of these assessments are summarised in Tables 3 to 11.

More detailed representation of these assessments can be seen in Appendix B.

7.3 Significant Impact – How is it Assessed?

According to the European Commission methodological guidance report on assessment of plans and projects significantly affecting Natura 2000 sites, this is the process of evaluating the importance or significance of project/plan impacts (whether adverse or beneficial).

In most cases, this is essentially a judgment, built up from a number of factors, but it may also be made more objective with the use of criteria and standards. The assessment of significance will be based upon factors such as the following:

- the character and perceived value of the affected environment;

- the magnitude, spatial extent and duration of anticipated change;
- the resilience of the environment to cope with change;
- confidence in the accuracy of predictions of change;
- the existence of policies, programmes, plans, etc. which can be used as criteria;
- the existence of environmental standards against which a proposal can be assessed (e.g. air quality standards, water quality standards);
- the degree of public interest and concern in the environmental resources concerned and the issues associated with a proposed project;
- scope for mitigation, sustainability and reversibility.

A common means of determining the significance of effects is through the use of key indicators as outlined in section 4.2 in collaboration with baseline information on the environmental status.

Assessment of Plan Components				
Site	Qualifying features	Key relevant environmental conditions to support site integrity	Possible impacts arising from the Deposit LDP Strategy Policies	Significance of Impact (see characterisation of significance of impact in section 7.3)
Aberbargoed Grasslands SAC	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) Marsh fritillary butterfly Euphydryas (Eurodryas, Hypodryas) aurinia	Maintenance of habitat in good status (habitat area, quality and connectivity)	Possible loss of habitat area , quality and connectivity could negatively affect the features	Possible significant impact
Sugar Loaf Woodlands SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles	Minimal atmospheric pollution – may increase acidification and cause damage to features.	Possible deterioration of air composition and quality which could negatively affect the feature	Possible significant impact
Usk Bat Sites SAC	European dry heaths Degraded raised bogs still capable of natural regeneration Blanket bogs Calcareous rocky slopes with chasmophytic vegetation Caves not open to the public Tilio-Acerion forests of slopes, screes and ravines	Management of the hydrology of the area, ensuring that flow regime is preserved Maintenance of good water quality and management of sediment load and sediment-causing processes Lesser horseshoe bats require protected roosts and foraging routes Minimal atmospheric pollution – may increase	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (e.g. maturity roosts, foraging areas, hibernation sites, severance of flightlines between bat roosting and foraging sites); changes in drainage which could negatively affect the feature	Possible significant impact

	Lesser horseshoe bat Rhinolophus hipposideros	acidification and cause damage to features.		
Cwm Clydach Woodlands SAC	Asperulo-Fagetum beech forests Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	Maintenance of habitat in good status (habitat area , quality and connectivity)	Possible loss of habitat area, quality and connectivity could negatively affect the features.	Possible significant impact
River Usk[1] SAC	Watercourses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation Otter (*Lutra lutra*); Atlantic salmon (*Salmo salar*); Bullhead (*Cottus gobio*); sea lamprey (*Petromyzon marinus*); brook lamprey (*Lampetra planeri*); river lamprey (*Lampetra fluviatilis*); twaite shad (*Alosa fallax*); and allis shad (*Alosa alosa*).	Management of the hydrology of the area, ensuring that flow regime is preserved Maintenance of good water quality and management of sediment load and sediment-causing processes Flows, water quality, substrate quality and quantity at fish spawning sites and nursery areas will not be depleted by abstraction, discharges, engineering or gravel extraction activities or other impacts to the extent that these sites are damaged or destroyed.	Possible deterioration of water quality and alteration of flow regime and flow characteristics of the River from possible abstraction of water to meet increased water demand	No impact (see section 7.4)

Table 3.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components (at sites)

[1] Further details regarding the inclusion of River Usk SAC in the Appropriate Assessment as well as the likely impacts considered are provided in Section 7.4

Definition of significant impact is given in Section 7.4

See mitigation measures in Table 24 (Chapter 8.0)

Initial Assessment of Deposit LDP Themes				
Theme 1: Create a Network of Sustainable Vibrant Valley Communities.				
Impact on Sites	By 2021, Ebbw Vale will be the main service and retail hub for the County Borough supported by a network of vibrant district/local centres (secondary hubs).	By 2021, the population will have increased from 69,300 to 71,100 as a result of people remaining in the area and other being attracted to the area.	By 2021, 3,666 new houses will have been built, approximately 800 of which will be affordable. New housing sites alongside improvements to existing houses.	By 2021, the use of sustainable modes of transport, particularly public transport, walking and cycling, will have increased and the quality and frequency of the public transport system improved.
Aberbargoed Grasslands	No impact	No impact	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact	No impact	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 4.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Themes				
Theme 1: Create a Network of Sustainable Vibrant Valley Communities.			**Theme 2: Create Opportunities for Sustainable Economic Growth and Promote Learning and Skills.**	
Impact on Sites	All developments have been built to a high standard, are sustainable, safe, and appropriate to their context and have helped improve the quality of the physical and natural environment.	New development has minimised further climate change contributions and, where appropriate, mitigated or adapted to its predicted effects.	By 2021, the regeneration plans for 'The Works', Ebbw Vale North and other key regeneration sites have been delivered.	By 2021, employment and economic activity rates will have increased and unemployment decreased. This has been achieved by diversifying the economic base into tourism, leisure, health and renewable technologies whilst supporting the manufacturing sector.
Aberbargoed Grasslands	No impact	No impact	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact	No impact	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact	No impact (see section 7.4)	No impact (see section 7.4)

Table 5.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Themes				
Theme 2: Create Opportunities for Sustainable Economic Growth and Promote Learning and Skills.			**Theme 3: Create Safe, Healthy, and Vibrant Communities and Protect and Enhance the Unique Natural and Built Environment.**	
Impact on Sites	By 2021, 50 hectares of employment land and a range of premises will have been delivered to meet the needs of local businesses and local people.	By 2021, the deliveries of the Learning Zone, new schools and integrated education services, including life-long learning have helped improve education levels and skills.	By 2021, an accessible network of green open spaces and high quality leisure infrastructure has helped increase participation in sport and active recreation and, contributes to improvements in health and well-being.	The unique landscape and natural heritage, has helped foster sustainable tourism and promoted community pride.
Aberbargoed Grasslands	No impact	No impact	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact	No impact	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	No impact	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	No impact	No impact	No impact
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact	No impact

Table 6.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Themes				
Theme 3: Create Safe, Healthy, and Vibrant Communities and Protect and Enhance the Unique Natural and Built Environment.			**Theme 4: Create opportunities to secure an Adequate Supply of Minerals and Reduce Waste.**	
Impact on Sites	By 2021, the biodiversity resource of Blaenau Gwent has been protected and enhanced and the connectivity of ecological networks has been improved from 2006 levels.	Blaenau Gwent's historical and cultural environment has been protected and enhanced and has played a key role in regenerating the area.	The 3 million tonnes of mineral resources required to be provided in Blaenau Gwent by the Regional Plan has been identified and resources of local, regional and national importance safeguarded.	A sustainable, integrated approach to waste management has minimised the production of waste and its impact on the environment, and maximised the use of unavoidable waste as a resource.
Aberbargoed Grasslands	No impact	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Cwm Clydach Woodlands	No impact	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Sugar Loaf Woodlands	No impact	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	No impact	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact	No impact	No impact (see section 7.4)	No impact (see section 7.4)

Table 7.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Strategic Policies (SP)				
Strategy: Create a Network of Sustainable Vibrant Valley Communities				
Impact on Sites	SP1 Northern Strategy Area – Sustainable Growth and Regeneration (see details of policy in 5.3.3)	SP2 Southern Strategy Area – Regeneration (see details of policy in 5.3.3)	SP3 The Retail Hierarchy and Vitality and Viability of the Town Centres (see details of policy in 5.3.3)	SP4 Delivering Quality Housing (see details of policy in 5.3.3)
Aberbargoed Grasslands	No impact	No impact	No impact	Possible significant impact; impact could be mitigated
Cwm Clydach Woodlands	No impact	No impact	No impact	Possible significant impact; impact could be mitigated
Sugar Loaf Woodlands	No impact	No impact	No impact	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 8.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Strategic Policies (SP)			
Strategy: Create a Network of Sustainable Vibrant Valley Communities			
Impact on Site	SP5 Spatial Distribution of Housing Sites (see details of policy in 5.3.3)	SP6 Ensuring Accessibility (see details of policy in 5.3.3)	SP7 Climate Change (see details of policy in 5.3.3)
Aberbargoed Grasslands	No impact	Possible significant impact; impact could be mitigated	No impact
Cwm Clydach Woodlands	No impact	Possible significant impact; impact could be mitigated	No impact
Sugar Loaf Woodlands	No impact	Possible significant impact; impact could be mitigated	No impact
Usk Bat Sites	No impact	Possible significant impact; impact could be mitigated	No impact
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact

Table 9.0 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Strategic Policies (SP)				
Strategy: Deliver Opportunities for Sustainable Economic Growth and the Promotion of Learning and Skills		**Strategy: Create Safe, Healthy, and Vibrant Communities and Protect and Enhance the Unique Natural and Built Environment**		
Impact on Sites	SP8 Sustainable Economic Growth (see details of policy in 5.3.3)	SP9 Active and Healthy Communities (see details of policy in 5.3.3)	SP10 Protection and Enhancement of the Natural Environment (see details of policy in 5.3.3)	SP11 Protection and Enhancement of the Built Environment (see details of policy in 5.3.3)
Aberbargoed Grasslands	No impact	No impact	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact	No impact	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	No impact	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	No impact	No impact	No impact
River Usk SAC	No impact (see section 7.4)	No impact	No impact	No impact

Table 10 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Initial Assessment of Deposit LDP Strategic Policies (SP)		
Strategy: Secure an Adequate Supply of Minerals and Reduce Waste		
Impact on Sites	SP12 Securing an Adequate Supply of Minerals (see details of policy in 5.3.3)	SP13 Delivering Sustainable Waste Management (see details of policy in 5.3.3)
Aberbargoed Grasslands	No impact	Possible significant impact; impact could be mitigated
Cwm Clydach Woodlands	No impact	Possible significant impact; impact could be mitigated
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)

Table 11 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components

Assessment of Deposit LDP Allocations				
Allocation: Settlement boundaries – areas within which development will normally be permitted, subject to policies within the LDP and material planning considerations.		**Allocations: Mixed use sites**		
Impact of proposed activities (at allocated locations) on protected Sites	SB1: Settlement Boundaries Promote the full and effective use of urban land Prevent inappropriate development in the countryside. (reference proposal maps in LDP and Chapter 8 in LDP)	MU1: land is allocated north of Ebbw Vale Town Centre for the construction of 700 dwellings, a commercial leisure hub, road side services, employment and a strategic mixed use employment site. (reference proposal maps in LDP – Mixed use and Chapter 8 in LDP)	MU2: land is allocated at the former steelworks site for mixed use including: the construction of a new hospital, learning zone, leisure centre, playing pitches, arts centre, approximately 520 houses, business hub, family history & genealogy visitor centre, environmental resource centre and wetland park. (reference proposal maps in LDP – Mixed use and Chapter 8 in LDP)	MU3: land is allocated at the NMC Factory and Bus Depot for mixed use including; 60 houses and commercial/leisure/ community facility opportunity (reference proposal maps in LDP – Mixed use and Chapter 8 in LDP)
Aberbargoed Grasslands	No impact	No impact	No impact	No impact
Cwm Clydach Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 12 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations		
Allocation: Retail		
Impact of proposed activities (at allocated locations) on protected Sites	AA1 Action Area: Southern Gateway, Ebbw Vale; Market Square, Ebbw Vale (reference proposal maps in LDP – retail action area and Chapter 8 in LDP)	R1 Retail Allocations (reference proposal maps in LDP – retail action area and Chapter 8 in LDP)
Aberbargoed Grasslands	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)

Table 13 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations			
Allocation: Housing (see further details in Appendix F)			
Impact of proposed activities (at allocated locations) on protected Sites	H1 Housing Allocation: Total 1,625 which comprises: Ebbw Vale 722 Tredegar 358 Upper Ebbw Fach 248 Lower Ebbw Fach 297 (Full list of sites are in Chapter 8 of LDP) Land identified for 100% affordable housing (reference proposal maps in LDP – Housing)	HC1 Housing Commitments: Total 1,707 which comprises: Ebbw Vale 892 Tredegar 564 Upper Ebbw Fach 190 Lower Ebbw Fach 61 (Full list of sites are in Chapter 8 of LDP) Land identified for 100% affordable housing (reference proposal maps in LDP – Housing)	GT1 Gypsy and Traveller Accommodation Land is allocated south of the Cwmcrachen Gypsy and Traveller Site to accommodate 6 pitches. (reference proposal maps in LDP – Gypsy Traveller Site)
Aberbargoed Grasslands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact
Cwm Clydach Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 14 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations			
Allocation: Transport (see further details in Appendix F)			
Impact of proposed activities (at allocated locations) on protected Sites	T1 Cycle Routes The existing network of cycle paths and community routes will be extended, improved and enhanced by the completion of the following schemes: HoV Route linking Nine Arches Tredegar to Brynmawr; Link from HoV to Rassau Industrial Estate; HoV to Ebbw Vale and Cwm; Cwm to Aberbeeg; Link from HoV to Trefil; Links from HoV to Tafarnaubach Industrial Estate; Bedwellty Pits, Tredegar to County Boundary; Hilltop to Ebbw Vale to Manmoel; Brynmawr to Blaenavon; Extension of Ebbw Fach Trail from Abertillery to Aberbeeg and completion of missing section through Blaina; Link to Cwmtillery Lakes; Aberbeeg to Royal Oak; Royal Oak to Swfrydd (reference proposal maps in LDP – Existing and Proposed Cycle Network)	T2 Rail Networks and Station Improvements Land will be safeguarded for: Extension of rail link from Ebbw Vale Parkway to Ebbw Vale Town; Provision of new station and bus interchange at Ebbw Vale; Provision of new station at Cwm; Extension of rail link to Abertillery; Provision of new station and Park and Ride at Abertillery; and Rail freight provision at Marine Colliery. (reference proposal maps in LDP – Rail Network and Station Improvement)	T3 Safeguarding of disused Railway Infrastructure Disused railway infrastructure will be protected from development that would compromise its future transport use where reuse is a realistic prospect in the future. (reference proposal maps in LDP – Rail Network and Station Improvement)
Aberbargoed Grasslands	No impact	No impact	No impact
Cwm Clydach	No impact	Possible significant impact; impact could	No impact

Woodlands		be mitigated	
Sugar Loaf Woodlands	No impact	Possible significant impact; impact could be mitigated	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	No impact
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact

Table 15 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations			
Allocation: Transport (see further details in Appendix F)			
Impact of proposed activities (at allocated locations) on protected Sites	T4 Improvements to Bus Services The following bus service improvements are identified: Bus Priority Scheme along the Brynmawr to Newport Bus Corridor Bus Interchange improvement at Brynmawr Bus Interchange improvement at Ebbw Vale (reference proposal maps in LDP)	T5 New Roads to Facilitate Development Construction of a Peripheral Distributor Road through 'The Works' Online improvements between the Peripheral Distributor Road and the A465. (reference proposal maps in LDP)	T6 Regeneration Led Highway Improvements Dualling of the A465 Heads of the Valleys Road (Tredegar to Brynmawr) Online improvements to the A4046 south of Cwm Online improvements to the A4048 south of Tredegar Online improvements to the A467 south of Abertillery (reference proposal maps in LDP – Regeneration Led Highway Improvement)
Aberbargoed Grasslands	No impact	Possible significant impact; impact could be mitigated	No impact
Cwm Clydach Woodlands	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Sugar Loaf Woodlands	No impact	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 16 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations		
Allocation: Employment (see further details in Appendix F)		
Impact of proposed activities (at allocated locations) on protected Sites	EMP1 (Total 50.0 ha indicative developable area) The following sites are allocated for employment uses, in line with their status in the employment hierarchy identified in Policy DM11: *Strategic Sites* 13.2 (ha) indicative developable area. (B1 and B2 Use Classes and an ancillary facility or service to the proposed employment use) *Business Parks* 7.9 (ha) indicative developable area. (B1 Use Class and an ancillary facility or service to the proposed employment use) *Primary Sites* 28.9 (ha) indicative developable area. (B1, B2, and B8 Use Classes, an appropriate Sui Generis use and an ancillary facility or service to the proposed employment use) (reference proposal maps in LDP – Employment allocations and Chapter 8 of LDP)	EMP2 The following sites are protected for employment use, in line with their status in the employment hierarchy identified in Policy DM11: *Business Parks:* 1 employment area (B1 use class and an ancillary facility or service to the proposed employment use) *Primary Sites:* 11 employment areas (B1, B2, and B8 use classes, an appropriate sui generis use and an ancillary facility or service to the proposed employment use) *Secondary Sites:* 9 employment areas (B1, B2, and B8 use classes, an appropriate sui generis use, an ancillary facility or service to the proposed employment use and an acceptable commercial service) (reference proposal maps in LDP – Employment areas and Chapter 8 of LDP)

Aberbargoed Grasslands	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)

Table 17 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations		
Allocation: Community Facilities		
Impact of proposed activities (at allocated locations) on protected Sites	ED.1 Education Provision The following sites are allocated for education: Ysgol Gymraeg, Brynmawr – New primary school Lower Plateau Six Bells Colliery Site – New primary school (reference proposal maps in LDP – Education Provision and Chapter 8 of LDP)	CF1 Community Centre The following site is allocated for a community centre: Former Sirhowy Infants School, Tredegar (reference proposal maps in LDP and Chapter 8 of LDP)
Aberbargoed Grasslands	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	No impact
River Usk SAC	No impact (see section 7.4)	No impact (see section 74)

Table 18 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations		
Allocation: Tourism and Leisure		**Allocation: Leisure**
Impact on Sites	TM1 Tourism and Leisure Sites are allocated for tourism related activities at the following sites: Eastern Valley Slopes, Garden Festival, Blue Lakes, Bedwellty House and Park, Parc Bryn Bach (including a hotel), Nantyglo Roundhouse and Towers, Land adjacent to Blaen y Cwm School, Cwmtillery Lakes, Brynmawr Roundabout (reference proposal maps in LDP – Tourism and Leisure and Chapter 8 of LDP)	L1 Formal Leisure Facilities Land is identified for leisure facilities at: Chartist Way, Tredegar (reference proposal maps in LDP – Tourism and Leisure and Chapter 8 of LDP)
Aberbargoed Grasslands	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact
Usk Bat Sites	Possible significant impact; impact could be mitigated	No impact
River Usk SAC	No impact (see section 7.4)	No impact

Table 19 Summary of results of Assessment of LDP Allocations

Allocation: Environment			
Impact of proposed activities (at allocated locations) on protected Sites	ENV1 Green Wedges Green Wedges have been identified to prevent the coalescence between and within settlements at: Beaufort and Brynmawr; Tredegar and Ebbw Vale; reference proposal maps in LDP – Green Wedges and Chapter 8 of LDP)	ENV2 Special Landscape Areas Special Landscape Areas are identified and will be protected at the following locations: St Illtyd Plateau and Ebbw Eastern Sides Eastern Ridge and Mynydd James Cwm Tyleri and Cwm Celyn Mynydd Carn-y-Cefn and Cefn yr Arail Mynydd Bedwellty, Rhymney Hill and Sirhowy Sides Cefn Manmoel Trefil and Garnlydan Surrounds Beaufort Common reference proposal maps in LDP – Special landscape area and Chapter 8 of LDP)	ENV3 Sites of importance for nature Conservation All designated sites meeting the Criteria for the Selection of Sites of Importance for Nature Conservation in the County Boroughs of Blaenau Gwent, Caerphilly, Merthyr Tydfil and Rhondda Cynon Taff (the 'Mid-Valleys Area'), 2008, will be covered by this Policy. reference proposal maps in LDP and Chapter 8 of LDP)
Aberbargoed Grasslands	No impact	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact	No impact
Usk Bat Sites	No impact	No impact	No impact
River Usk SAC	No impact	No impact	No impact

Table 20 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations		
Allocation: Environment		
Impact of proposed activities (at allocated locations) on protected Sites	ENV4: Land Reclamation Schemes Land reclamation schemes are proposed at the following locations: Cwmcrachen, Brynmawr; Pennant Street phase 2, Ebbw Vale; Llanhilleth Pithead Baths, Llanhilleth; Parc Bryn Bach, Tredegar (reference proposal maps in LDP – Land Reclamation and Chapter 8 of LDP)	ENV5: Cemeteries Extensions to the existing cemeteries are identified at the following locations: Cefn Golau Cemetery, Tredegar; Dukestown Cemetery, Tredegar: Blaina Cemetery, Blaina (reference proposal maps in LDP – Cemetery Extensions and Chapter 8 of LDP)
Aberbargoed Grasslands	No impact	No impact
Cwm Clydach Woodlands	No impact	No impact
Sugar Loaf Woodlands	No impact	No impact
Usk Bat Sites	No impact	No impact
River Usk SAC	No impact	No impact (see section 7.4)

Table 21 Summary of results of Assessment of LDP Allocations

Assessment of Deposit LDP Allocations				
Allocation: Waste		**Allocations: Minerals**		
Impact of proposed activities (at allocated locations) on protected Sites	W1: Land for Waste Management The South East Regional Waste Plan indicates that between 0.4 and 4 hectares of land will be required for waste management facilities within Blaenau Gwent to serve more than one local authority. The following site is identified to accommodate regional waste management facilities: • Land south of Waun-y-Pound, Ebbw Vale The following site is identified to accommodate local waste management facilities: • Silent Valley, Cwm (reference proposal maps in LDP – Waste and Chapter 8 of LDP)	M1: Safeguarding of Minerals The following mineral resources are identified on the Proposals Maps: The Limestone resource; The Sandstone resource; The Primary and Secondary Coal resource , (reference proposal maps in LDP – Mineral Existing Sites and Chapter 8 of LDP)	M2: Mineral Buffer Zones Buffer zones are identified around permitted mineral sites to safeguard sites from new development that would prejudice future extraction of permitted reserves or the operation of the site. (reference proposal maps in LDP – Minerals: Aggregates, Coal & Buffer and Chapter 8 of LDP)	M3: Preferred areas A recent permission for the deepening of Trefil Quarry has resulted in an additional resource allocation of 2.24 million tonnes which means that Blaenau Gwent needs to identify a further 0.76million tonnes. (reference proposal maps in LDP – Minerals Preferred Area of Search and Chapter 8 of LDP)
Aberbargoed Grasslands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated

Cwm Clydach Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Sugar Loaf Woodlands	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
Usk Bat Sites	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated	Possible significant impact; impact could be mitigated
River Usk SAC	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)	No impact (see section 7.4)

Table 22 Summary of results of Assessment of LDP Allocations

Tables 4 to 22 represent the HRA assessment of the total allocations (of sites) under consideration for the Deposit LDP. No additional sites are anticipated (at the time of writing this report), that will require further HRA assessment prior to the Deposit Plan being finalised.

7.4 APPROPRIATE ASSESSMENT OF THE RIVER USK SAC

7.4.1 OVERVIEW OF THE RIVER USK SAC – A SPECIAL CASE

The River Usk SAC is not a part of the natural drainage area defined by the physical boundary of the BGCBC Deposit LDP. Hence, it is not a natural receptor or sink for natural surface water runoff, overland outflow and discharge from drainage outfalls.

The catchment area for the LDP is the River Ebbw. The River Usk is of no relevance to the HRA assessment of the LDP as there are no direct natural hydrological linkages with the LDP area.

The Usk SAC was progressed from the screening phase of the HRA based only on the precautionary principle and not because there were likely direct impacts identified on the Usk SAC.

This European site was 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).

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.

Below is an extract from an email to BGCBC from Gail Davies, Head of Water Resources at Dŵr Cymru, in response to questions raised by CCW concerning the capacity of the local water resources to meet the water demand of the activities proposed in the Deposit LDP. Refer to the email in Appendix E.

"The Water Resources Management Plan, and our most recent demand forecast, is based upon the Welsh Assembly Government "2006 based Local Authority Property Projections". The WAG projections predict an increase in household properties in Blaenau Gwent between 2006 and 2021 of 4,082 (slightly higher than the latest data from the Local Authority of 3,600). However, in our demand forecasts Welsh Water suppressed the overall growth rate supplied by the WAG projections. This was because the total regional growth forecast in our operating area was significantly higher than anything we had seen in the past ten years (we would be forecasting a 50 % increase in New Connections compared with 2000-2008 when the construction sector was significantly more buoyant) and at the time of revising the demand forecasts we were certainly well within economic recession.

The resulting forecast in our latest demand forecast for Blaenau Gwent is an increase in household properties over the relevant fifteen years of 2,200. This is around 1,400 properties lower than the Blaenau Gwent Local Authority estimate. We are confident in our approach to suppress growth because we are able to frequently update these forecasts in line with the economic climate and we operate within five-year planning periods which would enable us to revise our investment programmes should patterns of growth modify significantly.

It should be noted that all our water demand forecasts are based on population growth and not property growth so unless the Local Authority are suggesting population growth above

WAG and ONS projections, the impact of new households will be minor. In Blaenau Gwent the latest WAG projections for population are an increase to 71,100 in 2021 (from a 2006 base of 69,300). This simply means that the household occupancy rate (people per property) would be slightly lower if all 3,600 households forecast by the Local Authority were actually built and this would result in a modest increase in demand of around 0.2 Ml/d (all in SEWCUS zone).

Specifically, with regard to your HRA and comments received from CCW then I have provided a map of the supply area for Blaenau Gwent. This clearly demonstrates the main sources of supply which we use to supply Blaenau Gwent Authority area. Additionally, as your area lies within our wider South-East Wales Conjunctive Use system (SEWCUS) we are also able to support supplies from our wider zone, predominantly Pontsticill reservoir.

Critically, therefore, your sources of supply are not designated sources under the Habitats Directive and are not subject to Review of Consents. Although the wider SEWCUS zone will be impacted by major reductions to licences under this process, the area of Blaenau Gwent will remain unaffected by this."

Refer to Figure 7 for map of water supply area for Blaenau Gwent area.

7.4.2 RESULT OF ASSESSMENT

The proposed level of population growth envisaged under the Deposit LDP (which has been estimated to equate to a water demand of 0.2 ML/d) can be adequately accommodated within the local water resources identified by Dŵr Cymru for Blaenau Gwent from the following sources: Cwmtillery Reservoir, Lower Carno Reservoir, Shon Sheffrey Reservoir, Blaen-y-Cwm Reservoir and Ffynnon Gisfaen Spring. These water resources are part of the River Ebbw catchment area, which is entirely separate from the River Usk catchment area.

There would be additional supply capacity available, if required, from the water storage of the Pontsticill Reservoir located on the River Taff, so the area of Blaenau Gwent would remain unaffected. There are no plans to deploy water from the Usk to the area of Blaenau Gwent.

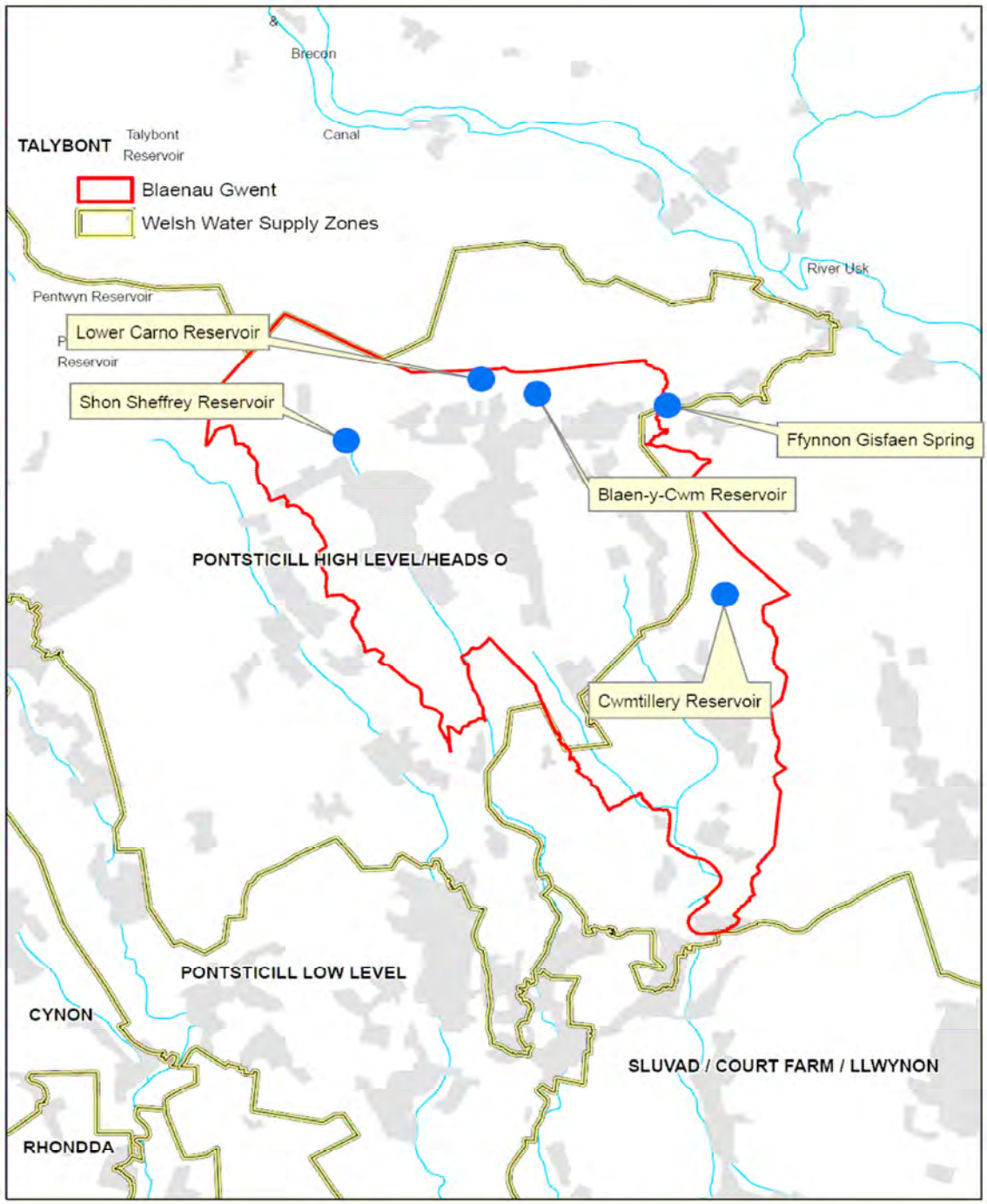


Figure 7.0 Map of Water Supply Blaenau Gwent Area (Dŵr Cymru)

7.5 Assessment of 'In-Combination' Impact with Other Projects/Plans

7.5.1 Source Pathway Receptor Analysis: Other Projects and Plans

Refer to Section 6.2 and Sections 7.2 and 7.3 for the procedure followed.

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

Based on the features and habitats for which the European sites in the vicinity of the LDP area have been designated, it is evident that the predominant pathways for the impacts described in this report are water and air.

The plans and projects in Chapter 6 and Appendix D were examined in order to establish whether any 'in-combination' impacts with the LDP on the European sites of interest are likely. These plans were assessed using the source/pathway/receptor analysis previously described.

Because of the large number of plans involved, the results of the analysis for representative plans and projects from the broad categories identified in Section 6.1 are summarised in Table 23 below.

AA question	Source	Pathway	Possible Impact on receiver	Risk of an adverse effect on site integrity?	Proposed Mitigation
Whether the *Environment Agency for Wales Review of Consents* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	This is a primarily desk-based R&D study. Field activities are limited to water activities such as sampling and monitoring of trends and environmental conditions.	Possibly indirect and induced pathways via water from sampling and environmental monitoring activities.	No adverse impact likely	No	

Whether the *Environment Strategy for Wales (2006)* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	The Environment Strategy provides the framework for the Assembly Government and its partners to protect and enhance the environment in Wales.	Possibly direct, indirect and induced pathways via water and air from development policies, actions and activities.	No adverse impact likely	No	
Whether the *Peoples, Places, Futures – The Wales Spatial Plan 2008 Update* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	This first Wales Spatial Plan is about reflecting honestly and clearly the way a whole range of activity and investment occurs across the geographic space It sets the context for local and community planning	Possibly direct, indirect and induced pathways via water and air from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of air and water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects	Preventing loss of natural habitat by activities such as the clearing of land or removal of vegetation within the geographical limits of Protected Sites. Requiring measures in new developments to safeguard against increasing atmospheric pollutants (such as photochemical oxidants, particulate matter etc.) above existing levels – particularly those which contribute to

					acidification and eutrophication. Preventing activities likely to generate harmful air pollutants from affecting the features by ensuring that such activities only take place within a safe buffer distance of the SAC as determined by the conservation authority Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Preventing loss of natural habitat by

					activities (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation authority as necessary for the favourable status of the SAC features should not be affected by development
Whether the *Wales: A Vibrant Economy (Consultation Document)* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	The vision is of a vibrant Welsh economy delivering strong and sustainable economic growth by providing opportunities for all.	Possibly direct, indirect and induced pathways via water and air from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of air and water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any	Preventing loss of natural habitat by activities such as the clearing of land or removal of vegetation within the geographical limits of Protected Sites Requiring measures in new developments to safeguard against

				significant effects	increasing atmospheric pollutants (such as photochemical oxidants, particulate matter etc.) above existing levels – particularly those which contribute to acidification and eutrophication. Preventing activities likely to generate harmful air pollutants from affecting the features by ensuring that such activities only take place within a safe buffer distance of the SAC as determined by the conservation authority Require new developments of any size to not alter natural drainage and surface runoff characteristics and

					processes. The predevelopment and post development runoff volumes and rates should be the same. Preventing loss of natural habitat by activities (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation authority as necessary for the favourable status of the SAC features should not be affected by development
Whether the *South East Wales Regional Waste Plan 2004* is	The Regional Waste Plan is a land use framework to facilitate planning and	Possibly direct, indirect and induced pathways via water and air and land from development	Possible disturbance of features, deterioration of air and water quality and, changes to the	Potential for 'in-combination' effects, prior to the consideration of the	Preventing loss of natural habitat by activities such as the clearing of land or

likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	controlling the development of an integrated network of facilities to treat and dispose of waste in South East Wales	policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	flow regime and sediment characteristics which could negatively affect the features	mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects	removal of vegetation within the geographical limits of Protected Sites. Requiring measures in new developments to safeguard against increasing atmospheric pollutants (such as photochemical oxidants, particulate matter etc.) above existing levels – particularly those which contribute to acidification and eutrophication. Preventing activities likely to generate harmful air pollutants from affecting the features by ensuring that such activities only take place within a safe buffer distance

					of the SAC as determined by the conservation authority Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Preventing loss of natural habitat by activities (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation

					authority as necessary for the favourable status of the SAC features should not be affected by development
Whether the *Regional Technical Statement for Aggregates (2007)* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	The overarching objective seeks to ensure a sustainably managed supply of aggregates (which are essential for construction), striking the best balance between environmental, economic and social costs.	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects	Preventing loss of natural habitat by activities such as the clearing of land or removal of vegetation within the geographical limits of Protected Sites. Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Preventing loss of natural habitat by activities (such as light, noise) from

					occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation authority as necessary for the favourable status of the SAC features should not be affected by development
Whether the *Strategy for the Heads of the Valley* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	vision for the Heads of the Valleys within the context of the Wales Spatial Plan. it sets out a shared vision for what the area will look and feel like by the year 2020	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities such as: upgrading of the A465 Heads of the Valleys road and rail links continued major public investment large scale renewal of public sector/social	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects	Preventing loss of natural habitat by activities such as the clearing of land or removal of vegetation within the geographical limits of Protected Sites. Require new developments of any size to not alter natural drainage and surface runoff characteristics and

		housing There is also the possible loss of habitat (area, quality and connectivity).			processes. The predevelopment and post development runoff volumes and rates should be the same. Preventing loss of natural habitat by activities (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation authority as necessary for the favourable status of the SAC features should not be affected by development
Whether the *Catchment Flood Management Plans* in SE Wales are likely to have an 'in	This is a planning tool which provides a means of understanding the complex causes of flooding thus allowing	Possibly direct, indirect and induced pathways via water and air from flood defence and risk management policies,	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures	Preventing loss of natural habitat by activities such as the clearing of land or removal of

combination' effect on features and habitats of interest in the relevant European sites	co-ordinated action to be taken on every front in partnership with others to reduce flood risk	actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	characteristics which could negatively affect the features	already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects	vegetation within the geographical limits of Protected Sites. Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Preventing loss of natural habitat by activities (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation authority as

					necessary for the favourable status of the SAC features should not be affected by development
Whether Local Authority *SPGs* in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	These are non statutory supporting information and advice which amplifies the policies and proposals of Local Plans in SE Wales and add adds detail to policies in the Plans	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects	Preventing loss of natural habitat by activities such as the clearing of land or removal of vegetation within the geographical limits of Protected Sites. Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Preventing loss of natural habitat by activities (such as light, noise) from occurring by

					ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation authority as necessary for the favourable status of the SAC features should not be affected by development
Whether Core Management Plans for SACs in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	These are the CCW's management plan for the protected sites in SE Wales. They set out what needs to be achieved on the sites, the results of monitoring and advice on the action required. They also provide CCW's statement of the Conservation Objectives for the relevant Natura 2000 sites.	Possibly indirect and induced pathways via water air and land from sampling and environmental monitoring activities.	No adverse impact likely	No	
Whether	A Biodiversity Action	Possibly indirect and	No adverse impact	No	

Biodiversity Action Plans for protected sites in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	Plan (BAP) is an internationally recognized program addressing threatened species and habitats and is designed to protect and restore biological systems.	induced pathways via water air and land from sampling and environmental monitoring activities. It may also involve habitat protection measures.	likely		
Whether *Water Resources Management Plans* in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	These are documents which the water undertakers in SE Wales are statutorily required to produce for the EA. These plans set out the management vision of water resources in the region under the headings of demand management and resource development.	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects	Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Preventing loss of natural habitat by activities (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees,

					hedges or water bodies identified by the conservation authority as necessary for the favourable status of the SAC features should not be affected by development

Whether *Local Authority Municipal Waste Management Strategy* in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	This looks at all aspects of waste management including new and effective methods of disposal and recycling, the development of new facilities and a continuing process of obtaining value and quality while best serving the communities and residents	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects	Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Preventing loss of natural habitat by activities (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation authority as necessary for the favourable status of the SAC features should not be

					affected by development
Whether the SE Wales *Draft Regional Transport Plan* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	The RTP vision is for a modern, accessible, integrated and sustainable transport system for South East Wales	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects	Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Preventing loss of natural habitat by activities (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation authority as necessary for the favourable status of the SAC features

					should not be affected by development
Whether *Local Transport Plans* in SE Wales are likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites.	These include examples of good practice, technical guidance, accessibility planning, major schemes, performance indicators and details of all annual capital settlements to date in the different local planning authorities in SE Wales.	Possibly direct, indirect and induced pathways via water and air and land from development policies, actions and activities. There is also the possible loss of habitat (area, quality and connectivity).	Possible disturbance of features, deterioration of water quality and, changes to the flow regime and sediment characteristics which could negatively affect the features	Potential for 'in-combination' effects, prior to the consideration of the mitigation measures already incorporated in the Plan design and development. Therefore, it has been assessed that the Plan "in-combination with the proposed LDP would not have any significant effects	Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Preventing loss of natural habitat by activities (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation authority as necessary for the favourable status of

					the SAC features should not be affected by development
Whether *The Children and Young People Strategy* is likely to have an 'in combination' effect on features and habitats of interest in the relevant European sites	This fosters a climate in which service providers give priority to developing and delivering high quality, innovative and responsive provision for children and young people.	Possibly indirect and induced pathways via water air and land from provision of service and support, infrastructure development and management activities.	No adverse impact likely	No	

Table 23 Summary of results of in-combination assessment

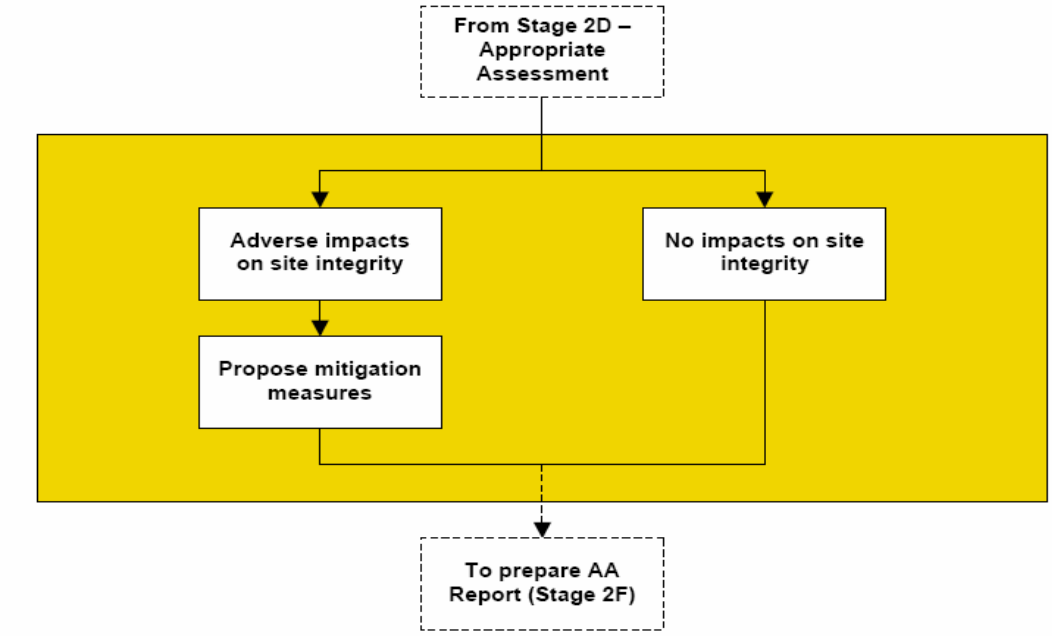
7.5.2 FINDINGS

From the source/pathway/analysis carried out (see summary of results in Table 23), it became evident that it is possible that some of these Plans/Projects, notably the larger scale ones, could potentially have adverse impact on the designated features – when considered without the effects of mitigation.

However, for many of these Plans/Projects, mitigation measures/features were incorporated at Plan design and development. Most of these Plans and Plan components were subject to the HRA process to comply with Habitats Directive (Council Directive 92/43/EEC).

Therefore, the conclusion was drawn that is unlikely that there will be any adverse contribution from the LDP when considered "in-combination" with other relevant plans and projects as defined under Article 6(3) of the Habitats Directive.

8. Stage 2E – Mitigation Measures



Source: Appropriate Assessment of Plans, Levett-Therivel Consultants, September 2006)

Figure 8.0 Schematic of Stage 2E

8.1 OVERVIEW

The core aim of the Habitats Directive is to support the maintenance and promotion of biodiversity. Habitats Regulations Assessment provides the tool through which planners can ensure that they are meeting the commitments and legal requirements of the European and National legislation.

Following the more detailed AA, 8 of the 13 strategic policies (namely: SP1, SP2, SP3, SP4, SP6, SP8, SP12 and SP13) of the Deposit LDP are identified as having **the potential,** prior to the consideration of mitigation measures**,** to significantly impact on the following European sites: Cwm Clydach Woodlands, Usk Bat Site, Aberbargoed Grasslands and Sugar Loaf Woodlands.
Similarly, twenty-two of the thirty proposed allocations were identified to have the potential for causing significant effects on these four European sites. The allocations provide details on how the Strategies of the Deposit LDP are to be delivered on the ground, that is, where new developments are to be located. None of Plan components of BGCBC Deposit LDP were found to have the potential for causing significant effects on the Usk SAC.

It has therefore been necessary to consider mitigation measures for these strategic policies and other Plan components, which when applied are capable of reducing the effects to a level where they are negligible and will not adversely affect the integrity of these four European sites.

It is worthwhile to note that many of the Development Management Policies have been identified within the Deposit LDP as tools which will be used alongside National Planning Policies and guidance as the basis for determining planning applications. These management and National policies that are part of the planning determination process will provide mitigation for some of the effects identified in Chapter 7.

The mitigation measures considered and the likelihood of residual effect following their application is detailed in the Appropriate Assessment Proforma (Appendix C).

Mitigation will take a range of forms, depending on the European interest feature affected. It could include, for example:

- prevent certain activities within a given distance of a site or interest feature;
- allow only certain activities within a given distance of a site or interest feature;
- require the preservation or management of environmental features within a given distance of a site or interest feature;
- require project-level mitigation measures.

This section also includes a table which contains a summary of the mitigation proposed for the plan as well as an indication of the risk of residual impacts.

This is important as European Commission guidance requires an analysis of the effectiveness of proposed avoidance/mitigation measures.

8.2 Avoidance and Mitigation Measures

A list of recommendations for the BGCBC LDP is included in the conclusions chapter of this AA report.

This section also includes a table which contains a summary of the mitigation proposed for the plan as well as an indication of the risk of residual impacts.

This is important as European Commission guidance requires an analysis of the effectiveness of proposed avoidance/mitigation measures.

Assessment of Deposit LDP Strategic Policies (SP)					
Site	Qualifying features	Key relevant environmental conditions to support site integrity	Possible impacts arising from the Deposit LDP Strategy Policies	Proposed mitigation	Remaining risk of a significant effect
Aberbargoed Grasslands SAC	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) Marsh fritillary butterfly Euphydryas (Eurodryas, Hypodryas) aurinia	Maintenance of habitat in good status (habitat area, quality and connectivity)	Possible loss of habitat area , quality and connectivity could negatively affect the features	Preventing loss of natural habitat by activities such as the clearing of land or removal of vegetation within the geographical limits of Aberbargoed Grasslands SAC. Preventing activities which could cause disturbance to the features (such as light, noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority	None
Sugar Loaf Woodlands SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles	Minimal atmospheric pollution – may increase acidification and cause damage to features.	Possible deterioration of air composition and quality which could negatively affect the feature	Requiring measures in new developments to safeguard against increasing atmospheric pollutants (such as photochemical oxidants, particulate matter etc.) above existing levels – particularly those which contribute to acidification and eutrophication.	None

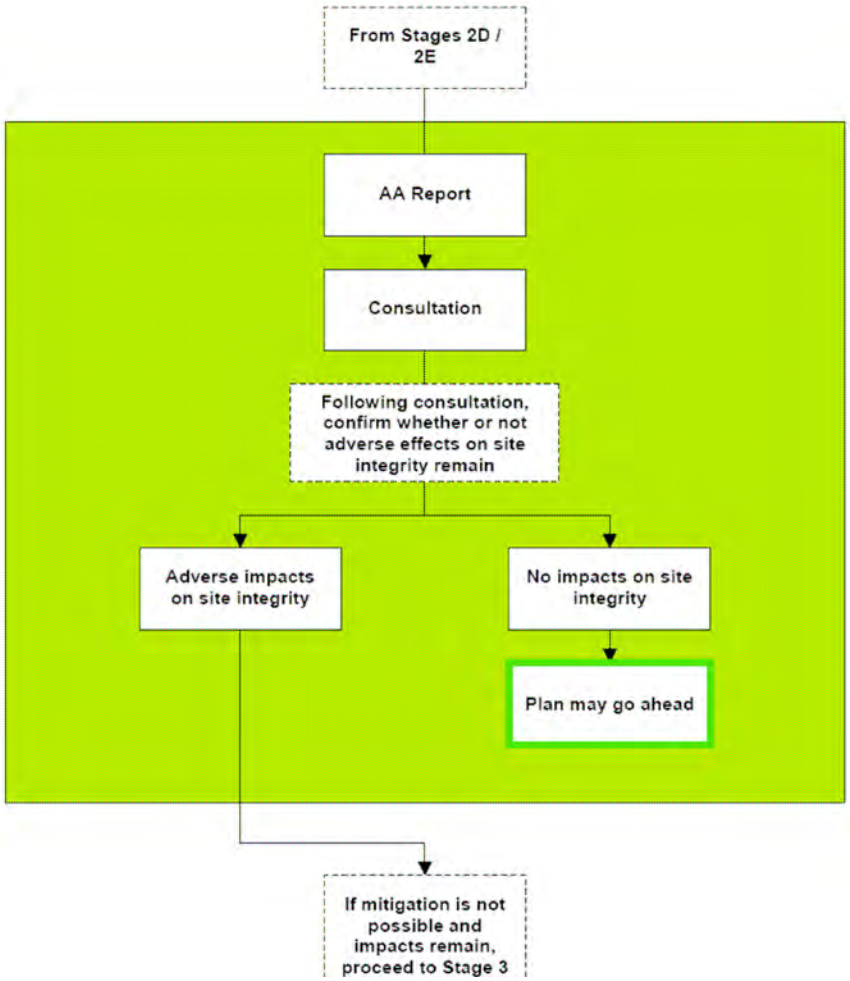
				Preventing activities likely to generate harmful air pollutants from affecting the features by ensuring that such activities only take place within a safe buffer distance of the SAC as determined by the conservation authority	
Usk Bat Sites SAC	European dry heaths Degraded raised bogs still capable of natural regeneration Blanket bogs Calcareous rocky slopes with chasmophytic vegetation Caves not open to the public Tilio-Acerion forests of slopes, screes and ravines Lesser horseshoe bat Rhinolophus hipposideros	Management of the hydrology of the area, ensuring that flow regime is preserved Maintenance of good water quality and management of sediment load and sediment-causing processes Lesser horseshoe bats require protected roosts and foraging routes Minimal atmospheric pollution – may increase acidification and cause damage to features.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (e.g. maturity roosts, foraging areas, hibernation sites, severance of flightlines between bat roosting and foraging sites); changes in drainage which could negatively affect the feature	Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Requiring measures in new developments to safeguard against increasing atmospheric pollutants (such as photochemical oxidants, particulate matter etc.) above existing levels – particularly those which contribute to acidification and eutrophication. Preventing activities likely to generate harmful air pollutants from affecting the features by ensuring that	None

				such activities only take place within a safe buffer distance of the SAC as determined by the conservation authority. Preventing loss of natural habitat by activities such as noise) from occurring by ensuring that such activities only take place at a "safe" distance from the SAC as determined by the conservation authority Any trees, hedges or water bodies identified by the conservation authority as necessary for the favourable status of the SAC features should not be affected by development.	
Cwm Clydach Woodlands SAC	Asperulo-Fagetum beech forests Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion roboripetraeae or Ilici-Fagenion)	Management of the hydrology of the area, ensuring that flow regime is preserved. Minimal atmospheric pollution – may increase acidification and cause damage to features.	Coastal impacts are unlikely, but there is possible deterioration of air composition and quality, water quality and, changes to the flow regime which could negatively affect the feature	Require new developments of any size to not alter natural drainage and surface runoff characteristics and processes. The predevelopment and post development runoff volumes and rates should be the same. Requiring measures in new developments to safeguard against increasing	None

				atmospheric pollutants (such as photochemical oxidants, particulate matter etc.) above existing levels – particularly those which contribute to acidification and eutrophication. Preventing activities likely to generate harmful air pollutants from affecting the features by ensuring that such activities only take place within a safe buffer distance of the SAC as determined by the conservation authority	

Table 24 Summary of results of Source/Pathway/Receiver Analysis of the LDP Components (post-mitigation)

9. Conclusions



Source: Appropriate Assessment of plans, Levett-Therivel Consultants, September 2006)

Figure 9 Schematic of Stage 2D/E

According to the "Appropriate Assessment of Plans", Levett-Therivel Consultants, September 2006, the 'appropriate assessment' proper is a statement which says whether the plan does, or does not, affect the integrity of a European site(s). It forms part of an AA report which sets out the reasons why the plan is undergoing AA (Stage 1 – Screening); the evidence base used to undertake the AA (Stages 2A – 2C); the AA findings (Stage 2D); and any mitigation measures proposed (Stage 2E).

The appropriate assessment is a consideration of the impact on the integrity of the European site, either alone or in combination with other plans or projects, with respect to the site's structure, function and its conservation objectives. Where adverse effects arise then avoidance or mitigation measures are to be proposed.

The key question to be answered by the AA is whether the Deposit LDP is likely to have a significant effect on the integrity of any of the relevant European sites.

This HRA has identified:

- the potential LDP components that might have a significant effect on European Sites (before and after mitigation measures);
- the potential European Sites whose integrity might be adversely affected (before and after mitigation measures);

9.1 MAIN FINDINGS OF ASSESSMENT

9.1.1 POTENTIAL OBJECTIVES

The Appropriate Assessment has identified that, before the consideration of mitigation measures, there was a risk that delivery of 8 out of the 13 Deposit LDP strategic policies could potentially have adverse effects on the integrity of the sites concerned. However, after the introduction of mitigation measures these risks were removed.

Table 25 below is a summary of the risks of the various plan components in terms of the potential to adversely affect the integrity of the sites concerned – both before and after the consideration of mitigation.

Plan Component Assessed *(in isolation from other project and plans)*	**Impact likely** to be impossible to mitigate; eliminate from consideration	**Impact could be mitigated**; 'flag' now, and revisit later in the assessment	**No Impact**; bring forward to next stage
	Number of Plan Components Considered (Pre-Mitigation/Amendment)		
Plan Themes	0	3	1
Strategic Policies	0	8	5
	Number of Plan Components Considered (Post-Mitigation/Amendment)		
Plan Themes	0	0	0
Strategic Policies	0	0	0

Table 25 Result of the Source/Pathway/Receiver analysis of the LDP components

9.1.2 POTENTIALLY AFFECTED SITES

The Appropriate Assessment has identified that, before the consideration of mitigation measures, **4 European sites could potentially be affected** by the delivery of the LDP when considered on its own. However, after the introduction of mitigation measures the AA **did not identify any** of the European sites which could potentially be affected by the delivery of the LDP.
From the source/pathway/analysis carried out (see summary of results in Table 23), it became evident that although it is possible that some of these other project and plans, can have adverse impact on the designated features, the combined effects of these with the LDP are no different than if they were considered individually – that is, on their own.

Therefore, it is unlikely that there will be any adverse contribution from the
LDP when considered "in-combination" with other relevant plans and projects as defined under Article 6(3) of the Habitats Directive.

9.2 RECOMMENDATIONS

Most of the impacts identified (pre-mitigation) related to the wording of particular plan components, which because of the high-level language used, did not always explicitly exclude the possibility of adverse effects on the integrity of the sites concerned.
Although there are two existing strategic policies – SP 9 and SP10 that focus on reducing the impact of LDP on the natural, built and historic environment, they do not specifically address the protection of European sites as required under the Habitats Directive (Council Directive 92/43/EEC).

It is therefore considered that the general recommendation below will remove these risks of impact:

- The inclusion, as an LDP strategic policy, or a clear statement that the proposed LDP and its components will meet the specific requirements of Habitats Directive (Council Directive 92/43/EEC) and will not adversely affect the integrity of the sites concerned.

Although the LDP has been demonstrated not to have significant effects on water resources, both locally and in a wider context (see section 7.4), it is recommended that a clear statement be included in the LDP specifying that no development activity proposed under the BGCBC Deposit LDP will be allowed if it can be demonstrated that there is likely to be adverse impact on the water resources, both locally and regionally.

It is also recommended that any development project that could have any impact on connectivity corridors or cause direct or indirect disturbance to the features (such as light, noise etc) must be subject to a project level HRA.

9.3 RESPONSIBILITIES

The competent authority as defined in Regulation 6(1) of the Habitats Regulations shall be responsible for the following actions:

- Demonstrating how the mitigations and recommendations proposed will be secured and implemented and by whom;
- Providing a timescale, relative to the project or plan, when they will be implemented;
- Demonstrating how the measures will be monitored and managed.

References

Legislation

European Communities (1992) Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("Habitats Directive"): http://europa.eu.int/comm/environment/nature/nature_conservation/eu_nature_legislation/habitats_directive/index_en.htm

European Communities (1979) Council Directive 79/409/EEC on the conservation of wild birds ("Birds Directive"): http://europa.eu.int/comm/environment/nature/nature_conservation/eu_nature_legislation/birds_directive/index_en.htm

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Guidance

Department for Communities and Local Government (2006). Planning for the Protection of European Sites: Appropriate Assessment – Guidance for Regional Spatial Strategies and Local Development Documents, http://www.communities.gov.uk/index.asp?id=1502244.

European Communities (2000) Managing Natura 2000 Sites: http://europa.eu.int/comm/environment/nature/nature_conservation/eu_nature_legislation/specific_articles/art6/pdf/art6_en.pdf

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Welsh Assembly Government: Environment Strategy for Wales

European Commission: Managing Natura 2000 Sites – The Provisions of Articles 6 of HD 92/43/EEC

European Commission: Assessment of Plans and Projects significantly affecting Natura 2000 sites – Methodological Guidance

European Commission: Life in UK Rivers (2003)

Enfusion Environmental Planning and Management for Sustainability: European Species Characterisation

South East Wales Regional Waste Plan (March 2004)

The Royal Society for the Protection of Birds: The Appropriate Assessment of Spatial Plans in England

Welsh Assembly government: Strategic Planning Guidance for SE Wales – Summary (July 2007)

Capita Symonds: Strategic Environmental Assessment – SEWTA's Regional Transport plan

Welsh Assembly Government: Peoples, Places, Futures – the Wales Spatial Plan (November 2004)

Welsh Assembly Government: Wales – A Vibrant Economy Consultation Document (November 2005)

Welsh Assembly Government: The Wales Spatial Plan 2008 Update

Welsh Assembly Government: Turning heads, A strategy for the Heads of the Valley

SEWTA: South East Wales Regional Transport Plan (Draft)

Blaenau Gwent County Borough Council Deposit Local Development Plan (Draft)

Appendix A European Sites Characterisations

Blaenau Gwent County Borough Council
Deposit Local Development Plan
Habitats Regulations Assessments
Appropriate Assessment – April 2011
Amended January 2012

CAPITA SYMONDS

Appendix B Details of Source/Pathway/Receptor Analysis

Blaenau Gwent County Borough Council
Deposit Local Development Plan
Habitats Regulations Assessments
Appropriate Assessment – April 2011
Amended January 2012

CAPITA SYMONDS

Appendix C Record of Appropriate Assessment (Pro-Forma)

CAPITA SYMONDS

Appendix D Information on Other Plans and Projects

CAPITA SYMONDS

Appendix E Email from Dwr Cymru (Impact of LDP on Water Resources)

CAPITA SYMONDS

Appendix F List of Sites (For Selected LDP Allocations)

CAPITA SYMONDS

Appendix A European Sites Characterisations

CAPITA SYMONDS

Information on European Sites

(Source of Appendix A: Enfusion Environmental Planning and Management for Sustainability)

European Sites Information Proforma

Special Areas of Conservation

1. Aberbargoed Grasslands
2. Cym Clydach Woodlands
3. Sugar Loaf Woodlands
4. 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***

Site Name: Aberbargoed Grasslands Location Grid Ref: ST163992 JNCC Site Code: UK0030071 Size: 39.78 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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: 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: 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

Site Name: Sugar Loaf Woodlands Location Grid Ref: SO295166 JNCC Site Code: UK0030072 Size: 173.84 Designation: SAC	Habitats Regulations Assessment: Data Proforma
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; ▪ 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

Site Name: Sugar Loaf Woodlands Location Grid Ref: SO295166 JNCC Site Code: UK0030072 Size: 173.84 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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 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

Site Name: Sugar Loaf Woodlands Location Grid Ref: SO295166 JNCC Site Code: UK0030072 Size: 173.84 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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. ▪ **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**

Site Name: Sugar Loaf Woodlands Location Grid Ref: SO295166 JNCC Site Code: UK0030072 Size: 173.84 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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 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

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	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) ▪ 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/Environm]entAndPlanning/Planning/ForwardPlanning/Publications/HabitatsRegulationAssessment.pdf

* 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

Site Name: Sugar Loaf Woodlands Location Grid Ref: SO295166 JNCC Site Code: UK0030072 Size: 173.84 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ 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

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	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	○ 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).

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ 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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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.

- 5% cover of non-native trees in the canopy.
- 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.
  - 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.
  - 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.
  - Upper limits: Overall grazing pressure of 0.05 livestock units/ha/year on the bog area.

  AND:

- Minimal winter grazing.

AND:

- No stock feeding
- 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.
  - 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.
  - 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:
  - Sulphur dioxide - 20µg/m³
  - 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/EnvironmentAndPlanning/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.

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*

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ 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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	▪ 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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
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.

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
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.

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: 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,

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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

Site Name: Usk Bat Sites Location Grid Ref: SO190145 JNCC Site Code: UK0014784 Size: 1686.4 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	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: Usk Bat Sites **Location Grid Ref: SO190145** **JNCC Site Code: UK0014784** **Size: 1686.4** **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.

Appendix B Details of Source/Pathway/Receptor Analysis

Aberbargoed Grasslands

AA assessment question	Source	Pathway	Possible impact on receiver	Evidence that could be collected to help determine the plan component's effects
Whether BGCBC's LDP Strategic Policy 1 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	The focus of SP1 will be on sustainable growth and regeneration that benefits the whole of Blaenau Gwent.	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	No significant impact likely as: The location of the proposed work is geographically separated from the Aberbargoed Grasslands. The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 2 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	The emphasis of SP2 will be on building strong, sustainable communities through regeneration	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	No significant impact likely as: The location of the proposed work is geographically separated from the Aberbargoed Grasslands. The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 3 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP3 is concerned with the delivery of thriving town centres and establishment of a new hierarchy of town centres	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	No significant impact likely as: The location of the proposed work is geographically separated from the Aberbargoed Grasslands. The scale of	

			physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 4 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP4 involves the delivery of quality housing to stem out migration and attract people to the area.	(direct/indirect/ induced pathway) Possible building works including construction activities. Construction of new or improvement of existing infrastructure to support housing.	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of Molinia Meadows and Marsh Fritillary butterfly at SAC to habitat loss and fragmentation
Whether BGCBC's LDP Strategic Policy 5 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP5 involves the spatial distribution of housing sites to create a network of sustainable linked hubs.	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 6 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP6 will deliver a sustainable transport network whilst reducing the need to travel	(direct/indirect/ induced pathway) Possible road improvement works, new transport infrastructure and traffic management	Significant impact likely due to : Possible loss of habitat area , quality and connectivity which could negatively affect the features	Sensitivity of Molinia Meadows and Marsh Fritillary butterfly at SAC to habitat loss and fragmentation
Whether BGCBC's LDP Strategic Policy 7 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP7 involves creating sustainable high quality development by allocating sites	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	

Whether BGCBC's LDP Strategic Policy 8 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP8 will promote activities to bring about sustainable economic growth	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 9 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP9 will create safe, healthy, and vibrant communities and protect and enhance the unique natural and built environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 10 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP10 will promote the protection and enhancement of the natural environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 11 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP11 will promote the protection and enhancement of the built environment	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 12 is likely to cause loss of vital habitats required for Molinia Meadows	SP12 focuses on securing an adequate supply of minerals	(direct/indirect/ induced pathway) Possible mining and processing works and mass surface storage of	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of Molinia Meadows and Marsh Fritillary butterfly at SAC to habitat loss and fragmentation

and Marsh Fritillary butterfly at Aberbargoed Grassland SAC		aggregates and minerals extracts. Construction of new or improvement of existing infrastructure to support mining processing and transportation.		
Whether BGCBC's LDP Strategic Policy 13 is likely to cause loss of vital habitats required for Molinia Meadows and Marsh Fritillary butterfly at Aberbargoed Grassland SAC	SP13 focuses on delivering sustainable waste management across Blaenau Gwent	(indirect/ induced pathway) Possible waste processing works. Construction of new or improvement of existing infrastructure to support waste processing and transportation.	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of Molinia Meadows and Marsh Fritillary butterfly at SAC to habitat loss and fragmentation

Cwm Clydach Woodlands

AA assessment question	Source	Pathway	Possible impact on receiver	Evidence that could be collected to help determine the plan component's effects
Whether BGCBC's LDP Strategic Policy 1 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	The focus of SP1 will be on sustainable growth and regeneration that benefits the whole of Blaenau Gwent.	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 2 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	The emphasis of SP2 will be on building strong, sustainable communities through regeneration	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 3 is likely to cause habitats loss and other deterioration at	SP3 is concerned with the delivery of thriving town centres and establishment of a new hierarchy of town centres	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	

Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC				
Whether BGCBC's LDP Strategic Policy 4 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP4 involves the delivery of quality housing to stem out migration and attract people to the area.	(direct/indirect/ induced pathway) Possible building works including construction activities. Construction of new or improvement of existing infrastructure to support housing.	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of features at SAC to loss of habitat and quality and fragmentation
Whether BGCBC's LDP Strategic Policy 5 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP5 involves the spatial distribution of housing sites to create a network of sustainable linked hubs.	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 6 is likely to cause habitats loss and other deterioration at	SP6 will deliver a sustainable transport network whilst reducing the need to travel	(direct/indirect/induced pathway) Possible road improvement works, new transport infrastructure and traffic management	Significant impact likely due to : Possible loss of habitat area, quality and connectivity	Sensitivity of features at SAC to loss of habitat and quality and fragmentation

Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC			could negatively affect the features	
Whether BGCBC's LDP Strategic Policy 7 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP7 involves creating sustainable high quality development by allocating sites	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 8 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP8 will promote activities to bring about sustainable economic growth	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 9 is likely to cause habitats loss and other deterioration at	SP9 will create safe, healthy, and vibrant communities and protect and enhance the unique natural and built	No pathway	No impact	

Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	environment			
Whether BGCBC's LDP Strategic Policy 10 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP10 will promote the protection and enhancement of the natural environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 11 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP11 will promote the protection and enhancement of the built environment	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 12 is likely to cause habitats loss and other deterioration at	SP12 focuses on securing an adequate supply of minerals	(direct/indirect/ induced pathway) Possible mining and processing works and mass surface storage of aggregates and minerals extracts.	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of features at SAC to loss of habitat and quality and fragmentation

Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC		Construction of new or improvement of existing infrastructure to support mining processing and transportation.		
Whether BGCBC's LDP Strategic Policy 13 is likely to cause habitats loss and other deterioration at Asperulo-Fagetum beech forests and Atlantic acidophilous beech forests with Ilex at Cwm Clydach Woodlands SAC	SP13 focuses on delivering sustainable waste management across Blaenau Gwent	(indirect/ induced pathway) Possible waste processing works. Construction of new or improvement of existing infrastructure to support waste processing and transportation.	Significant impact likely. Possible loss of habitat quality from noise, dust etc.	Sensitivity of features at SAC to loss of habitat and quality and fragmentation

Sugar Loaf Woodlands

AA assessment question	Source	Pathway	Possible impact on receiver	Evidence that could be collected to help determine the plan component's effects
Whether BGCBC's LDP Strategic Policy 1 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	The focus of SP1 will be on sustainable growth and regeneration that benefits the whole of Blaenau Gwent.	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 2 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	The emphasis of SP2 will be on building strong, sustainable communities through regeneration	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 3 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP3 is concerned with the delivery of thriving town centres and establishment of a new hierarchy of town centres	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	No significant impact likely as: The scale of physical works is also expected to be small.	
Whether BGCBC's LDP Strategic Policy 4 is likely to cause air pollution of Old	SP4 involves the delivery of quality housing to stem out migration and attract people to	(direct/indirect/induced pathway) Possible building works including construction activities.	Possible deterioration of air composition and quality which could negatively	Existing air quality at SAC Sensitivity of old Sessile Oak trees at SAC to air

sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	the area.	Construction of new or improvement of existing infrastructure to support housing.	affect the feature	Pollution Distance over which air pollution from roads disperses
Whether BGCBC's LDP Strategic Policy 5 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP5 involves the spatial distribution of housing sites to create a network of sustainable linked hubs.	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 6 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP6 will deliver a sustainable transport network whilst reducing the need to travel	(direct/indirect/ induced pathway) Possible road Improvement works, new transport infrastructure and traffic management	Possible deterioration of air composition and quality which could negatively affect the feature	Existing air quality at SAC Sensitivity of old Sessile Oak trees at SAC to air Pollution Distance over which air pollution from roads disperses
Whether BGCBC's LDP Strategic Policy 7 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP7 involves creating sustainable high quality development by allocating sites	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 8 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP8 will promote activities to bring about sustainable economic growth	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	Possible deterioration of air composition and quality which could negatively affect the feature	Existing air quality at SAC Sensitivity of old Sessile Oak trees at SAC to air Pollution Distance over which air pollution from

				roads disperses
Whether BGCBC's LDP Strategic Policy 9 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP9 will create safe, healthy, and vibrant communities and protect and enhance the unique natural and built environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 10 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP10 will promote the protection and enhancement of the natural environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 11 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP11 will promote the protection and enhancement of the built environment	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 12 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP12 focuses on securing an adequate supply of minerals	(direct/indirect/ induced pathway) Possible mining and processing works and mass surface storage of aggregates and minerals extracts. Construction of new or improvement of existing infrastructure to support mining processing and transportation.	Possible deterioration of air composition and quality which could negatively affect the feature	Existing air quality at SAC Sensitivity of old Sessile Oak trees at SAC to air Pollution Distance over which air pollution from roads disperses

Whether BGCBC's LDP Strategic Policy 13 is likely to cause air pollution of Old sessile oak woods with Ilex and Blechnum at Sugar Loaf Woodlands SAC	SP13 focuses on delivering sustainable waste management across Blaenau Gwent	(indirect/ induced pathway) Possible waste processing works. Construction of new or improvement of existing infrastructure to support waste processing and transportation.	Possible deterioration of air composition and quality which could negatively affect the feature	Existing air quality at SAC Sensitivity of old Sessile Oak trees at SAC to air Pollution Distance over which air pollution from roads disperses

Usk Bat Sites

AA assessment question	Source	Pathway	Possible impact on receiver	Evidence that could be collected to help determine the plan component's effects
Whether BGCBC's LDP Strategic Policy 1 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	The focus of SP1 will be on sustainable growth and regeneration that benefits the whole of Blaenau Gwent.	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC
Whether BGCBC's LDP Strategic Policy 2 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion	The emphasis of SP2 will be on building strong, sustainable communities through regeneration	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC

forests, and lesser horseshoe bat at Usk Bat Sites SAC				
Whether BGCBC's LDP Strategic Policy 3 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP3 is concerned with the delivery of thriving town centres and establishment of a new hierarchy of town centres	(indirect/induced pathway) Possible infrastructure Improvement works and the associated transportation activities.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC
Whether BGCBC's LDP Strategic Policy 4 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP4 involves the delivery of quality housing to stem out migration and attract people to the area.	(direct/indirect/induced pathway) Possible building works including construction activities. Construction of new or improvement of existing infrastructure to support housing.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC

Whether BGCBC's LDP Strategic Policy 5 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP5 involves the spatial distribution of housing sites to create a network of sustainable linked hubs.	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 6 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP6 will deliver a sustainable transport network whilst reducing the need to travel	(direct/indirect/ induced pathway) Possible road Improvement works, new transport infrastructure and traffic management	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC
Whether BGCBC's LDP Strategic Policy 7 is likely to cause loss of habitat, air	SP7 involves creating sustainable high quality development by	(indirect/induced pathway)	No significant impact likely as: The scale of	

pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	allocating sites		physical works is expected to be small.	
Whether BGCBC's LDP Strategic Policy 8 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP8 will promote activities to bring about sustainable economic growth	(indirect/induced pathway) Possible infrastructure improvement works and the associated transportation activities.	Possible deterioration of air composition and quality which could negatively affect the feature	Sensitivity studies of critical parameters which impact on features of the SAC
Whether BGCBC's LDP Strategic Policy 9 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following	SP9 will create safe, healthy, and vibrant communities and protect and enhance the unique natural and built environment	No pathway	No impact	

features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC				
Whether BGCBC's LDP Strategic Policy 10 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP10 will promote the protection and enhancement of the natural environment	No pathway	No impact	
Whether BGCBC's LDP Strategic Policy 11 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs,	SP11 will promote the protection and enhancement of the built environment	(indirect/induced pathway)	No significant impact likely as: The scale of physical works is expected to be small.	

rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC				
Whether BGCBC's LDP Strategic Policy 12 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and lesser horseshoe bat at Usk Bat Sites SAC	SP12 focuses on securing an adequate supply of minerals	(direct/indirect/ induced pathway) Possible mining and processing works and mass surface storage of aggregates and minerals extracts. Construction of new or improvement of existing infrastructure to support mining processing and transportation.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC
Whether BGCBC's LDP Strategic Policy 13 is likely to cause loss of habitat, air pollution and changes in the drainage characteristics of the following features/habitats: European dry heaths, degraded raised bogs, blanket bogs, rocky slopes with chasmophytic vegetation, caves, Tilio-Acerion forests, and	SP13 focuses on delivering sustainable waste management across Blaenau Gwent	(indirect/ induced pathway) Possible waste processing works. Construction of new or improvement of existing infrastructure to support waste processing and transportation.	Possible deterioration of air composition and quality; loss of habitat area , quality and connectivity (by disturbance)	Sensitivity studies of critical parameters which impact on features of the SAC

lesser horseshoe bat at Usk Bat Sites SAC				

Appendix C Record of Appropriate Assessment (Pro-Forma)

APPROPRIATE ASSESSMENT PROFORMA

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
Site Characterisation: Conservation objectives, key environmental conditions, vulnerabilities, existing pressures and trends	***Key Features*** 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: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
	▪ 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.

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
	▪ 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:

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
	▪ 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: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
Appropriate Assessment Likelihood of adverse effect on integrity:	***Full description and analysis of the potential for the impacts identified to have a significant effect on site integrity. Should include consideration of whether effects are direct, indirect, cumulative etc.*** – Refer to the following sections of the Appropriate Assessment report: • For description and analysis of the potential for the impacts identified to have a significant effect (direct, indirect, induced – both in isolation and "in-combination" with other projects and plans), see sections **6.2, 6.3 and 5.2** of AA report. • For results of assessments, **see tables 3 to 11 and table 12** (for "in-combination" impact) in the report and, Appendix B for a more detailed assessment of impact of the LDP strategic policies on the Cwm Clydach Woodlands SAC.

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
	The findings of the Appropriate Assessment for Cwm Clydach Woodlands SAC can be summarised as follows: • The Appropriate Assessment has identified that, before the consideration of mitigation measures, there was a risk that delivery of 4 out of the 13 LDP strategic policies could potentially have adverse effects on the integrity of the site. However, after the introduction of mitigation measures these risks were removed. • From the source/pathway/analysis carried out (see summary of results in Table 13 of the AA report), it became evident that although it is possible that some of these other project and plans, can have adverse impact on the designated features at Cwm Clydach Woodlands, **the combined effects of these with the LDP** are no different than if they were considered individually – that is, on their own.

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
Possible Avoidance and Mitigation Measures – includes recommendations for policy/proposals	***Any mitigation measures proposed must be evaluated to ensure that they are capable of removing the significant effects identified. Should include responsibilities for delivery/ timescales and monitoring measures.*** – Refer **to table 13, Chapter 7** of the AA report.
Residual Effect?	***Are there any outstanding issues or uncertainties?*** No, there is no residual risk of a significant effect of the LDP or its components on the integrity of the Cwm Clydach Woodland SAC when considered 'in-isolation' or "in-combination with other projects and plans.

Site Name: **Location:** **Size:**	***Cwm Clydach Woodlands*** The site is situated at NGR SO207123 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. Area 28.81 ha
Designation:	**European sites (SACs)** 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)
Conclude no adverse effect on integrity?	***Is it possible to conclude no adverse effect on integrity following consideration of mitigation measures?*** Yes – Refer to Chapters 7 and 8 of the AA report.
Recommendations for Policy/ Proposal	***Summary of mitigation measures if proposed and next steps as necessary.*** – Refer to Chapters 7 and 8 of the AA report.

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
Site Characterisation: Conservation objectives, key environmental conditions, vulnerabilities, existing pressures and trends	***Key Features*** – Refer to the site summary information and characterisations in **Appendix A** of AA report.
Appropriate Assessment Likelihood of adverse effect on integrity:	***Full description and analysis of the potential for the impacts identified to have a significant effect on site integrity. Should include consideration of whether effects are direct, indirect, cumulative etc.*** – Refer to the following sections of the Appropriate Assessment report:

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
	• For description and analysis of the potential for the impacts identified to have a significant effect (direct, indirect, induced – both in isolation and "in-combination" with other projects and plans), see sections **6.2, 6.3 and 5.2** of AA report. • For results of assessments, **see tables 3 to 11 and table 12** (for "in-combination" impact) in the report and, Appendix B for a more detailed assessment of impact of the LDP strategic policies on the Usk Bat Sites SAC. The findings of the Appropriate Assessment for Usk Bat Sites SAC can be summarised as follows:

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
	• The Appropriate Assessment has identified that, before the consideration of mitigation measures, there was a risk that delivery of 8 out of the 13 LDP strategic policies could potentially have adverse effects on the integrity of the site. However, after the introduction of mitigation measures these risks were removed. • From the source/pathway/analysis carried out (see summary of results in **Table 13** of the AA report), it became evident that although it is possible that some of these other project and plans, can have adverse impact on the designated features at Usk Bat Sites, **the combined effects of these with the LDP** are no different than if they

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
	were considered individually – that is, on their own.
Possible Avoidance and Mitigation Measures – includes recommendations for policy/proposals	***Any mitigation measures proposed must be evaluated to ensure that they are capable of removing the significant effects identified. Should include responsibilities for delivery/ timescales and monitoring measures.*** – Refer **to table 13, Chapter 7** of the AA report.

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
Residual Effect?	***Are there any outstanding issues or uncertainties?*** No, there is no residual risk of a significant effect of the LDP or its components on the integrity of the Usk Bat Sites SAC when considered 'in-isolation' or "in-combination with other projects and plans.
Conclude no adverse effect on integrity?	***Is it possible to conclude no adverse effect on integrity following consideration of mitigation measures?*** Yes

Site Name: **Location:** **Size:**	***Usk Bat Sites SAC*** The site is situated at NGR SO190145 and 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. Area 1686.4 ha
Designation:	**European sites (SACs)** 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
	– Refer to Chapters 7 and 8 of the AA report.
Recommendations for Policy/ Proposal	***Summary of mitigation measures if proposed and next steps as necessary.*** – Refer to Chapters 7 and 8 of the AA report.

Site Name: **Location:** **Size:**	***Aberbargoed Grasslands SAC*** Aberbargoed Grasslands covers an area of 42.5ha at NGR ST163992 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. Area 42.5 ha
Designation:	**European sites (SACs)** 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
Site Characterisation: Conservation objectives, key environmental conditions, vulnerabilities, existing pressures and trends	***Key Features*** – Refer to the site summary information and characterisations in **Appendix A** of AA report.
Appropriate Assessment Likelihood of adverse effect on integrity:	***Full description and analysis of the potential for the impacts identified to have a significant effect on site integrity. Should include consideration of whether effects are direct, indirect, cumulative etc.*** – Refer to the following sections of the Appropriate Assessment report: • For description and analysis of the potential for the impacts identified to have a

Site Name: **Location:** **Size:**	***Aberbargoed Grasslands SAC*** Aberbargoed Grasslands covers an area of 42.5ha at NGR ST163992 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. Area 42.5 ha
Designation:	**European sites (SACs)** 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
	significant effect (direct, indirect, induced – both in isolation and "in-combination" with other projects and plans), see sections **6.2, 6.3 and 5.2** of AA report. • For results of assessments, **see tables 3 to 11 and table 12** (for "in-combination" impact) in the report and, Appendix B for a more detailed assessment of impact of the LDP strategic policies on the Aberbargoed Grasslands SAC. The findings of the Appropriate Assessment for Aberbargoed Grasslands SAC can be summarised as follows: • The Appropriate Assessment has identified that, before the consideration of mitigation measures, there was a risk that delivery of 4 out of the 13 LDP strategic policies could potentially have adverse effects on the integrity of the site. However,

Site Name: **Location:** **Size:**	***Aberbargoed Grasslands SAC*** Aberbargoed Grasslands covers an area of 42.5ha at NGR ST163992 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. Area 42.5 ha
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	after the introduction of mitigation measures these risks were removed. • From the source/pathway/analysis carried out (see summary of results in **Table 13** of the AA report), it became evident that although it is possible that some of these other project and plans, can have adverse impact on the designated features at Aberbargoed Grasslands, **the combined effects of these with the LDP** are no different than if they were considered individually – that is, on their own.
Possible Avoidance and Mitigation Measures – includes recommendations for policy/proposals	***Any mitigation measures proposed must be evaluated to ensure that they are capable of removing the significant effects identified. Should include responsibilities for delivery/ timescales and monitoring measures.*** – Refer **to table 13, Chapter 7** of the AA report.

Site Name: **Location:** **Size:**	***Aberbargoed Grasslands SAC*** Aberbargoed Grasslands covers an area of 42.5ha at NGR ST163992 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. Area 42.5 ha
Designation:	**European sites (SACs)** 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
Residual Effect?	***Are there any outstanding issues or uncertainties?*** No, there is no residual risk of a significant effect of the LDP or its components on the integrity of the Aberbargoed Grasslands SAC when considered 'in-isolation' or "in-combination with other projects and plans.
Conclude no adverse effect on integrity?	***Is it possible to conclude no adverse effect on integrity following consideration of mitigation measures?*** Yes

Site Name: **Location:** **Size:**	***Aberbargoed Grasslands SAC*** Aberbargoed Grasslands covers an area of 42.5ha at NGR ST163992 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. Area 42.5 ha
Designation:	**European sites (SACs)** 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
	– Refer to Chapters 7 and 8 of the AA report.
Recommendations for Policy/ Proposal	***Summary of mitigation measures if proposed and next steps as necessary.*** – Refer to Chapters 7 and 8 of the AA report.

Site Name: **Location:** **Size:**	***Sugar Loaf Woodlands SAC*** 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. It is located at NGR SO295166 in Wales near Brecons. Area 173.84 ha
Designation:	**European sites (SACs)** Annex I Habitats qualifying feature: ▪ Old sessile oak woods with Ilex and Blechnum in the British Isles
Site Characterisation: Conservation objectives, key environmental conditions, vulnerabilities, existing pressures and trends	***Key Features*** – Refer to the site summary information and characterisations in **Appendix A** of AA report.
Appropriate Assessment Likelihood of adverse effect on integrity:	***Full description and analysis of the potential for the impacts identified to have a significant effect on site integrity. Should include consideration of whether effects are direct, indirect, cumulative etc.*** – Refer to the following sections of the Appropriate Assessment report: • For description and analysis of the potential for the impacts identified to have a significant effect (direct, indirect, induced – both in isolation and "in-combination" with other projects and plans), see sections **6.2, 6.3 and 5.2** of AA report. • For results of assessments, **see tables 3 to 11 and table 12** (for "in-combination" impact) in the report and, Appendix B for a more detailed assessment of impact of

Site Name: **Location:** **Size:**	***Sugar Loaf Woodlands SAC*** 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. It is located at NGR SO295166 in Wales near Brecons. Area 173.84 ha
Designation:	**European sites (SACs)** Annex I Habitats qualifying feature: ▪ Old sessile oak woods with Ilex and Blechnum in the British Isles
	the LDP strategic policies on the Sugar Loaf Woodlands SAC. The findings of the Appropriate Assessment for Sugar Loaf Woodlands SAC can be summarised as follows: • The Appropriate Assessment has identified that, before the consideration of mitigation measures, there was a risk that delivery of 5 out of the 13 LDP strategic policies could potentially have adverse effects on the integrity of the site. However, after the introduction of mitigation measures these risks were removed. • From the source/pathway/analysis carried out (see summary of results in **Table 13** of the AA report), it became evident that although it is possible that some of these other project and plans, can have adverse impact on the designated features at Sugar Loaf Woodlands, **the combined effects of these with the LDP** are no different than if they were considered individually – that is, on their own.

Site Name: **Location:** **Size:**	***Sugar Loaf Woodlands SAC*** 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. It is located at NGR SO295166 in Wales near Brecons. Area 173.84 ha
Designation:	**European sites (SACs)** Annex I Habitats qualifying feature: ▪ Old sessile oak woods with Ilex and Blechnum in the British Isles
Possible Avoidance and Mitigation Measures – includes recommendations for policy/proposals	***Any mitigation measures proposed must be evaluated to ensure that they are capable of removing the significant effects identified. Should include responsibilities for delivery/ timescales and monitoring measures.*** – Refer **to table 13, Chapter 7** of the AA report.
Residual Effect?	***Are there any outstanding issues or uncertainties?*** No, there is no residual risk of a significant effect of the LDP or its components on the integrity of the Sugar Loaf Woodlands SAC when considered 'in-isolation' or "in-combination with other projects and plans.
Conclude no adverse effect on integrity?	***Is it possible to conclude no adverse effect on integrity following consideration of mitigation measures?***

Site Name: **Location:** **Size:**	***Sugar Loaf Woodlands SAC*** 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. It is located at NGR SO295166 in Wales near Brecons. Area 173.84 ha
Designation:	**European sites (SACs)** Annex I Habitats qualifying feature: ▪ Old sessile oak woods with Ilex and Blechnum in the British Isles
	Yes – Refer to Chapters 7 and 8 of the AA report.
Recommendations for Policy/ Proposal	***Summary of mitigation measures if proposed and next steps as necessary.*** – Refer to Chapters 7 and 8 of the AA report.

Appendix D Information on Other Plans and Projects

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 E Email from Dwr Cymru (Impact of LDP on Water Resources)

See email below from Welsh Water.

-----Original Message-----

From: Davies Gail [mailto:Gail.Davies@dwrcymru.com]

Sent: 03 August 2010 11:13

To: Lynda Healy - Environment

Subject: Blaenau Gwent

Lynda

Following our discussions last week, I hope you may find the following useful to the basis of our forecasts for Blaenau Gwent.

The Water Resources Management Plan, and our most recent demand forecast, is based upon the Welsh Assembly Government "2006 based Local Authority Property Projections". The WAG projections predict an increase in household properties in Blaenau Gwent between 2006 and 2021 of 4,082 (slightly higher than the latest data from the Local Authority of 3,600). However, in our demand forecasts Welsh Water suppressed the overall growth rate supplied by the WAG projections. This was because the total regional growth forecast in our operating area was significantly higher than anything we had seen in the past ten years (we would be forecasting a 50 % increase in New Connections compared with 2000-2008 when the construction sector was significantly more buoyant) and at the time of revising the demand forecasts we were certainly well within economic recession.

The resulting forecast in our latest demand forecast for Blaenau Gwent is an increase in household properties over the relevant fifteen years of 2,200. This is around 1,400 properties lower than the Blaenau Gwent Local Authority estimate. We are confident in our approach to suppress growth because we are able to frequently update these forecasts in line with the economic climate and we operate within five-year planning periods which would enable us to revise our investment programmes should patterns of growth modify significantly.

It should be noted that all our water demand forecasts are based on population growth and not property growth so unless the Local Authority are suggesting population growth above WAG and ONS projections, the impact of new households will be minor. In Blaenau Gwent the latest WAG projections for population are an increase to 71,100 in 2021 (from a 2006 base of 69,300). This simply means that the household occupancy rate (people per property) would be slightly lower if all 3,600 households forecast by the Local Authority were actually built and this would result in a modest increase in demand of around 0.2 Ml/d (all in SEWCUS zone).

Specifically, with regard to your HRA and comments received from CCW then I have provided a map of the supply area for Blaenau Gwent. This clearly demonstrates the main sources of supply which we use to supply Blaenau Gwent Authority area. Additionally, as your area lies within our wider South-East Wales Conjunctive Use system (SEWCUS) we are also able to support supplies from our wider zone, predominately Pontsticill reservoir.

Critically, therefore, your sources of supply are not designated sources under the Habitats Directive and are not subject to Review of Consents. Although the wider SEWCUS zone will be impacted by major reductions to licences under this process, the area of Blaenau Gwent will remain unaffected by this.

I am happy to confirm therefore that I do not envisage any water supply issues to be noted under your HRA.

I hope that this is useful to you. Please feel free to call me on my mobile should you wish to discuss further. To assist, I will also inform CCW of my response in this matter.

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Appendix F List of Sites (For Selected LDP Allocations)

List of Sites for Allocation – H1 Housing Allocations

Policy Number	Site Name	Area (Ha)	Units
Ebbw Vale			
H1.1	Willowtown	0.63	22
MU1	*Ebbw Vale Northern Corridor*	*28*	*700*
		Total	**722**
Tredegar			
H1.2	Cartref Aneurin Bevan	0.38	13
H1.3	Greenacres	0.50	18
H1.4	Jesmondene Stadium, Cefn Golau	5.26	184
H1.5	Business Resource Centre, Tafarnaubach	1.2	42
H1.6	Land adjacent to Chartist Way	2.89	101
		Total	**358**
Upper Ebbw Fach			
H1.7	Garnfach School, Nantyglo	0.81	28
H1.8	Crawshay House, Brynmawr	0.71	25
H1.9	Infants School and Old Griffin Yard, Brynmawr	1.04	36
H1.10	Hafod Dawel Site, Nantyglo#	0.74	44
H1.11	West of the Recreation Ground, Nantyglo	0.42	15
H1.12	Land to the East of Blaina Road, Brynmawr	0.72	25
H1.13	Land to the North of Winchestown, Nantyglo	0.43	15
MU3	*NMC Factory and Bus Depot*		*60*
		Total	**248**
Lower Ebbw Fach			
H1.14	Six Bells Colliery Site, Six Bells	1.47	40

Policy Number	Site Name	Area (Ha)	Units
H1.15	Warm Turn, Six Bells	0.93	32
H1.16	Roseheyworth Comprehensive, Abertillery	0.95	33
H1.17	Former Mount Pleasant Court, Brynithel#	0.52	18
H1.18	Hillcrest View, Cwmtillery#	0.83	22
H1.19	Quarry Adjacent to Cwm Farm Road, Six Bells	0.64	22
H1.20	Land at Farm Road Swffryd	3.72	130
		Total	**297**
TOTAL			**1,625**

List of Sites for Allocation – HC1 Housing Commitments

Policy Number	Site Name	Area (Ha)	Units
Ebbw Vale			
HC1.1	North of Cwmyrdderch Court Flats, Cwm	1.18	16
HC1.2	Letchworth Road	0.93	16
HC1.3	Old 45 Yard, Steelworks Road	3.49	82
HC1.4	Adjacent Pant-y- Fforest	1.63	21
HC1.5	Heol Elan #	1.2	43
HC1.6	Land at College Road#	1.04	41
HC1.7	Adj Sports Ground, Gwaun Helyg#	2.92	69
HC1.8	Higgs Yard	0.99	29
HC1.9	Mountain Road#	0.47	22
HC1.10	Briery Hill#	0.94	33

Policy Number	Site Name	Area (Ha)	Units
MU2	*'The Works'*		*520*
		Total	**892**
Tredegar			
HC1.11	Derelict Bus Garage, Woodfield Road#	0.36	11
HC1.12	Former LCR Factory, Charles Street	0.25	14
HC1.13	Former Factory Site, Pochin	0.65	28
HC1.14	Land at Poultry Farm, Queen Victoria Street	0.84	3
HC1.15	Upper Ty Gwyn Farm, Nantybwch	1.44	38
HC1.16	Former LCR Factory, opposite Tredegar Comprehensive School#	0.62	47
HC1.17	Peacehaven	4.81	147
HC1.18	The Goldmine, Sirhowy	0.17	16
HC1.19	BKF Plastics, Ashvale	1.83	54
HC1.20	Sirhowy Infants School Site#	0.84	23
HC1.21	Corporation Yard	0.75	23
HC1.22	Park Hill	13.09	160
		Total	**564**
Upper Ebbw Fach			
HC1.23	Recticel and Gwalia Former Factory Site, Brynmawr#	0.96	45
HC1.24	Land at Clydach Street, Brynmawr	0.64	12
HC1.25	TSA Woodcraft, Noble Square Industrial Estate, Brynmawr	0.71	25
HC1.26	Roberto Neckwear, Limestone Road, Nantyglo	0.74	19
HC1.27	Cwm Farm, Blaina	9.01	78
HC1.28	Salem Chapel, Waun Ebbw Road and Pond Road Junction, Nantyglo	0.26	11

Policy Number	Site Name	Area (Ha)	Units
		Total	**190**
Lower Ebbw Fach			
HC1.29	At Cwm Farm Road	0.68	20
HC1.30	Former Swffryd Junior School#	0.41	18
HC1.31	Land at Penrhiw Estate, Brynithel	1.02	23
		Total	**61**
TOTAL			**1,707**

List of Sites for Allocation – T1 Cycle Routes

The existing network of cycle paths and community routes will be extended, improved and enhanced by the completion of the following schemes:

1. HoV Route linking Nine Arches Tredegar to Brynmawr

2. Link from HoV to Rassau Industrial Estate

3. HoV to Ebbw Vale and Cwm

4. Cwm to Aberbeeg

5. Link from HoV to Trefil

6. Links from HoV to Tafarnaubach Industrial Estate

7. Bedwellty Pits, Tredegar to County Boundary

8. Hilltop to Ebbw Vale to Manmoel

9. Brynmawr to Blaenavon

10. Extension of Ebbw Fach Trail from Abertillery to Aberbeeg and completion of missing section through Blaina

11. Link to Cwmtillery Lakes

12. Aberbeeg to Royal Oak

13. Royal Oak to Swfrydd

List of Sites for Allocation – T2 Rail Network and Station Improvements

Land will be safeguarded for the following rail network improvements:

1. Extension of rail link from Ebbw Vale Parkway to Ebbw Vale Town

2. Provision of new station and bus interchange at Ebbw Vale

3. Provision of new station at Cwm

4. Extension of rail link to Abertillery

5. Provision of new station and Park and Ride at Abertillery

6. Rail freight provision at Marine Colliery

List of Sites for Allocation – T4 Improvements to Bus Services

The following bus service improvements are identified:

1. Bus Priority Scheme along the Brynmawr to Newport Bus Corridor

2. Bus Interchange improvement at Brynmawr

3. Bus Interchange improvement at Ebbw Vale

List of Sites for Allocation – EMP1 Employment Allocations

The following sites are allocated for employment uses, in line with their status in the employment hierarchy identified in Policy DM11:

Policy Number	Site Name	Hub	Indicative Developable Area (Ha)
Strategic Sites (B1 and B2 Use Classes and an ancillary facility or service to the proposed employment use)			
MU1	*Rhyd-y-Blew*	*Ebbw Vale*	*13.2*
Business Parks (B1 Use Class and an ancillary facility or service to the proposed employment use)			
MU2	*'The Works' Business Hub*	*Ebbw Vale*	*3.5*
EMP1.1	Land at Festival Park	Ebbw Vale	0.7
EMP1.2	Land at Tredegar Business Park	Tredegar	2.1
EMP1.3	Land at Rising Sun Industrial Estate	Upper Ebbw Fach	1.6
Primary Sites (B1, B2, and B8 Use Classes, an appropriate Sui Generis use and an ancillary facility or service to the proposed employment use)			
MU1	*Bryn Serth*	*Ebbw Vale*	*10.0*
EMP1.4	Rassau Platform A	Ebbw Vale	3.4
EMP1.5	Rassau Platform B	Ebbw Vale	3.7
EMP1.6	Land at Waun-y-Pound	Ebbw Vale	4.6
EMP1.7	Marine Colliery	Ebbw Vale	3.4
EMP1.8	Crown Business Park Platform A	Tredegar	0.7
EMP1.9	Crown Business Park Platform B	Tredegar	1.6
EMP1.10	Land at Roseheyworth Business Park	Lower Ebbw Fach	1.5
		Total Indicative Developable Area	**50.0 ha**

List of Sites for Allocation – EMP2 Employment Area Protection

The following sites are protected for employment use, in line with their status in the employment hierarchy identified in Policy DM11:

Policy Number	Employment Area	Hub
Business Parks (B1 use class and an ancillary facility or service to the proposed employment use)		
EMP2.1	Tredegar Business Park	Tredegar
Primary Sites (B1, B2, and B8 use classes, an appropriate sui generis use and an ancillary facility or service to the proposed employment use)		
EMP2.2	Rassau Industrial Estate	Ebbw Vale
EMP2.3	Waun-y-Pound Industrial Estate	Ebbw Vale
EMP2.4	Festival Park	Ebbw Vale
EMP2.5	Tafarnaubach Industrial Estate	Tredegar
EMP2.6	Crown Business Park	Tredegar
EMP2.7	Pond Road Workshops	Upper Ebbw Fach
EMP2.8	Blaenant Industrial Estate	Upper Ebbw Fach
EMP2.9	Barleyfield Industrial Estate	Upper Ebbw Fach
EMP2.10	Rising Sun Industrial Estate	Upper Ebbw Fach
EMP2.11	Cwmtillery Industrial Estate	Lower Ebbw Fach
EMP2.12	Roseheyworth Business Park	Lower Ebbw Fach
Secondary Sites (B1, B2, and B8 use classes, an appropriate sui generis use, an ancillary facility or service to the proposed employment use and an acceptable commercial service)		
EMP2.13	Cwm Draw Industrial Estate	Ebbw Vale
EMP2.14	Marine Street Industrial Estate	Ebbw Vale
EMP2.15	Sirhowy Hill Industrial Estate	Tredegar

Policy Number	Employment Area	Hub
EMP2.16	Bridge Street Industrial Estate	Tredegar
EMP2.17	Noble Square Industrial Estate	Upper Ebbw Fach
EMP2.18	Blaina Enterprise Centre	Upper Ebbw Fach
EMP2.19	Cwmcrachen Industrial Estate	Upper Ebbw Fach
EMP2.20	Glandwr Industrial Estate	Lower Ebbw Fach
EMP2.21	Llanhilleth Industrial Estate	Lower Ebbw Fach

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