SHROPSHIRE COUNCIL

Site Allocation & Management of Development (SAMDev) Plan

Habitats Regulations Assessment

July 2014

1. Introduction

1.1 Purpose

This document undertakes a Habitats Regulations Assessment (HRA) of the Shropshire Council Site Allocations and Management of Development (SAMDev) Plan. HRA for mineral applications under development management Policy MD5 is attached at Appendix 6 and summarised in section 5.4 below.

An HRA has already been completed for the adopted Shropshire Core Strategy, contained in two documents dated March 2009 and February 2010. Together these reports include information on the Natura 2000 sites forming a basis for the HRA, which have not changed since 2010 and this information is therefore not repeated. Now the location of development has been identified the assessment of impacts is carried out in detail, with Appropriate Assessment carried out where required.

This version of the HRA has been updated in the light of discussions with Natural England on their objection to the Pre-Submission Draft Plan (Final Plan) received on 28th April 2014. The SAMDev Schedule of Proposed Changes gives details of the amendments agreed informally between the Council and Natural England before the Plan was submitted. A separate Statement of Common Ground (yet to be prepared) will formally set out the approach the Council has taken to addressing the issues raised by Natural England.

1.2 Habitats Regulations Assessment

Habitats Regulations Assessment plays an important role in protecting the conservation objectives of the Natura 2000 network of sites. These sites, often referred to as 'European Sites', include Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Candidate SACs and proposed SPAs. Following UK government policy, sites designated under the Ramsar Convention are also covered by the HRA regulations. The term 'Natura 2000 Site' includes all the above designations and is used throughout this report.

Under the Conservation of Habitats and Species Regulations 2010 (the Habitats Regulations), the purpose of a Habitats Regulation Assessment (HRA) is to ensure that the proposals of any plan or project, or the cumulative effect of a number of plans or projects, will not adversely affect the integrity of any International site.

The 'integrity' of the site is defined in ODPM Circular 06/2005: (Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System) as "*the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or levels of populations of species for which it was classified".*

European guidance (EU 2001) describes a four stage process to HRA and is summarised below

Four stage process to HRA

Stage 1: Screening
The process to identify the likely impacts of a policy or proposal upon a Natura 2000 site, either alone or in combination with other plans and projects, and consider whether the impacts are likely to be **significan**t or uncertainty exists. Straightforward counter-acting measures can be recommended for incorporation into policy wordings and then sites re-screened.
Stage 2: Appropriate assessment
Consideration of impacts on the **integrity** of the Natura 2000 sites, either alone on in combination with other plans and projects, with regard to the site's structure and function and its conservation objectives. Where there are adverse impacts, an assessment of mitigation options is carried out to determine adverse effect on the integrity of the site. If these mitigation options cannot avoid adverse effects then proceed to stage 3.
Stage 3: Assessment of alternative solutions
Examining alternative ways of achieving the objectives of the policy or proposal to establish whether there are solutions that would avoid or have a lesser effect on Natura 2000 sites.
Stage 4: **Assessment where no alternative solutions remain and where adverse impacts remain**:
This is the assessment where no alternative solution exists and where adverse impacts remain. The process to assess whether the development is necessary for imperative reasons of overriding public interest (IROPI) and, if so, the potential compensatory measures needed to maintain the overall coherence of the site or integrity of the European site network

The main purpose of the HRA screening process is to establish whether there are likely to be any significant effects from the policies and proposals contained within the Shropshire Site Allocations and Management of Development Plan on Natura 2000 Sites both within and outside of the Local Authority boundary.

1.3 Background to the Shropshire SAMDev Plan HRA

The Site Allocations and Development Management (SAMDev) Plan sets out proposals for the use of land and policies to guide future development for the period up to 2026.

The key purpose of the SAMDev Plan is to:

- Identify sustainable growth targets for Shropshire's market towns
- Identify community hubs and community clusters in the rural area where some further development will happen

- Identify appropriate sites for future housing and employment development in market towns, community hubs and community clusters
- Provide additional development management policies which can be used in the consideration of planning applications
- Identify appropriate sites for future sand and gravel extraction.

The Plan is not directly connected with or necessary to the management of a European site (regulations 48(1)(b) or 85B(1)(b)).

In 2012 the council consulted on a 'Preferred Options' version of the SAMDev Plan and in 2013 on draft Development Management policies and Revised Preferred Options. Following these consultation exercises Shropshire Council produced a Pre-Submission or 'Final Plan' March 2014.

The Plan contains:

- Development Management policies which provide specific guidance to meet national policy requirements principally in the National Planning Policy Framework (NPPF) or to provide more detailed guidance to supplement those policies already adopted in the Core Strategy. Under policy MD5, site allocations have been made for sand and gravel extraction;
- Settlement policies and site allocations (where relevant) for the market towns and key centres and community hubs and clusters in each of the 18 market town areas, which were identified in the Shropshire Council Adopted Core Strategy as receptors for development. The residential and employment allocations in the SAMDev process are spread across the key centres, hubs, clusters and smaller settlements.

This HRA Report should be read in conjunction with the Shropshire Core Strategy Development Plan Document: Habitats Regulations Assessment, Screening Report (March 2009) and the Core Strategy Development Plan Document: Habitats Regulations Assessment, Stage 2 Report (February 2010). It should be noted that these documents passed down HRA of any sites and policies that were not 'screened out' to the SAMDev stage.

The HRA Reports (2009 and 2010) identified Natura 2000 Sites in and around Shropshire which could potentially be impacted by proposed plans or projects in the County. That information can be found in Appendices 2 – 6 of the Stage 2 Report (2010) but has been updated for sites remaining in the screening exercise within Appendix 1.

Internal Habitats Regulations Assessment of potential housing allocations was prepared in October 2011 for the Site Allocations and Management of Development DPD. HRA was also carried out for potential allocation settlements which have come forward since that report was prepared and developing issues within the catchment of the River Clun SAC. Internal draft reports have considered Development Management Policies and employment

and mineral allocations at earlier stages in the process and these reports have now been finalised.

2. Stage 1: Screening

2.1 Methodology

The purpose of the screening stage is to:

a) Identify all aspects of the plan which would have no effect on a Natura 2000 site, so that that they can be eliminated from further consideration in respect of this and other plans;

b) identify all aspects of the plan which would not be likely to have a significant effect on a Natura 2000 site (i.e. would have some effect, but minor residual), either alone or in combination with other aspects of the same plan or other plans or projects, which therefore do not require 'appropriate assessment'; and

c) identify those aspects of the plan where it is not possible to rule out the risk of significant effects on a Natura 2000 site, either alone or in combination with other plans or projects. This provides a clear scope for the parts of the plan that will require appropriate assessment.

The screening process has three key steps:

- Screening step 1: screening out general policy statements
- Screening step 2: screening out projects referred to in, but not proposed by, the plan
- Screening step 3: screening out aspects of a plan that could have no likely significant effect on a site, alone or in combination with other aspects of the same plan, or with other plans or projects.

The screening stage assessment adopted here uses a method for coding based on impacts, taken from David Tyldesley (2012). The codes used are defined as follows:

Category A: No negative effect

This category applies where the proposal could have no negative effect at all, which can relate to policies, but does not apply to the site specific allocations, which have all been screened for effects on Natura 2000 sites.

Category B: No significant effect
Elements of the plan/options that could have an effect, but the likelihood is there would be no significant negative effect on the Natura 2000 site either alone or in combination with other elements of the same plan, other plans or

projects. Policies or allocations failing this screening category go to category C.

Category C: Likely significant effect (alone)
Where policies or allocations fall into this category mitigation measures should be considered so that the likelihood of a significant effect can be ruled out. The policy or allocation will then be subject to re-screening and if likely significant effects still remain, they will require Appropriate Assessment before the plan may be adopted, unless the HRA is more appropriately dealt with at the project stage.

C1	The option, policy or proposal could **directly affect** a Natura 2000 site because it provides for, or steers, a quantity or type of development onto a Natura 2000 site, or adjacent to it.
C2	The option, policy or proposal could **indirectly affect** a Natura 2000 site e.g. because it provides for, or steers, a quantity or type of development that may be very close to it, or ecologically, hydrologically or physically connected with it or it may increase disturbance as a result of increased recreational pressure.
C3	Proposals with a **magnitude of development** that, no matter where it was locations, the development would be likely to have a significant effect on a Natura 2000 site.
C4	An option, or policy, that makes provision for a quantity/type of development generally (and may indicate a broad scale and/or one of more broad locations e.g. a particular part of the plan area), so a likelihood of a significant effect cannot be ruled out, but the more precise scale and/or detailed location is to be selected following **consideration of options in a later, more specific, lower tier plan,** subject to Habitat Regulations Appraisal.
C5	Options, policies or proposals for developments or infrastructure projects that could **block options or alternatives** for the provision of other development or projects in the future, which will be required in the interest of public interest, that may lead to adverse effects on a Natura 2000 site, which would otherwise be avoided.
C6	Options, policies or proposals which **depend on how the policies etc are implemented** in due course, for example, through the development management process. There is a theoretical possibility that if implemented in one or more particular ways, the proposal could possibly have a significant effect on a Natura 2000 site, and is not merely a general statement of policy.
C7	Any other options, policies or proposals that would be **vulnerable to failure** under the Habitats Regulations at project assessment stage; to include them in the plan would be regarded by the EC as 'faulty planning.'
C8	Any other proposal that may have an adverse effect on a Natura 2000 site, which might try to pass the tests of the Habitats Regulations at project assessment stage by arguing that the **plan provides the imperative reasons** for overriding public interest to justify its consent despite a negative assessment.

Policies and allocations which would not have a likely significant effect when considered in isolation will then be considered 'in combination' (see Category D).

Category D: Likely to have a significant effect in combination with other elements of the same plan, or other plans or projects. Where policies or allocations fall into this category mitigation measures should be considered so that the likelihood of a significant effect can be ruled out. The policy or allocation will then be subject to re-screening and if likely significant effects still remain, they will require Appropriate Assessment before the plan may be adopted, unless the HRA is more appropriately dealt with at the project stage.

D1	The option, policy or proposal alone would not be likely to have significant effects but if its effects are combined with the effects of other policies or proposals **provided for or coordinated by** the plan (internally) the **cumulative** effects would be likely to be significant.
D2	Options, policies or proposals that alone would not be likely to have significant effects but if their effects are **combined with the effects of other plans or projects**, and possible the effects of other projects provided for in the plan as well, the combined effects would be likely to be significant.
D3	Options or proposals that are, or could be, part of a **programme or sequence of development** delivered over a period, where the implementation of the early stages would not have a significant effect on Natura 2000 sites, but which would dictate the nature, scale, duration, location, timing of the whole project, the later stages of which could have an adverse effect on such sites.

The likelihood of impacts occurring at Natura 2000 sites is considered at sections 2 and 4. This HRA Report will identify any potential effect pathways by which proposed site allocations for the Shropshire Core Strategy plan period might impact upon Natura 2000 Designated Sites in section 2.4.

Where the interest features of a Natura 2000 site are not likely to be impacted by development due to no pathway, for example where there is no public access to a Natura 2000 site and therefore no likely recreational pressure, this is used to inform the coding.

Where likely significant effects have not been ruled out at the screening stage, it has been considered whether there are any straightforward mitigation measures that could be incorporated into the plan, so that the plan can then be screened again.

Scottish Natural Heritage (2012) Guidance includes the following:

Examples of straightforward possible mitigation measures at this stage are:

a) Deletion of the policy or proposal that may cause the likely significant effect;
(b) Changing the nature or type of a potentially damaging proposal;
(c) Reduction in the scale of the potentially damaging provision,
(d) Relocation or alteration of the spatial distribution of the potentially damaging provision;
(e) Phasing or timing of a proposal so that its possible effects can be adequately managed over time;
(f) Programming a proposal so that it is dependent on key infrastructure provision or upgrading, such as water supply or waste water treatment, being in place before it could proceed;
(g) Requiring buffer zones to be put in place.

The objective should be to eliminate any likelihood of significant effects at the screening stage, so making an 'Appropriate Assessment' unnecessary. Where mitigation is of a complex nature, those allocations should be taken on to the Appropriate Assessment stage, with such mitigation tested then.

2.2 Natura 2000 sites

Data on the Natura 2000 sites, including qualifying features were taken from the Joint Nature Conservation Committee website (www.jncc.gov.uk); data on the component SSSIs, primarily the condition assessment, were taken from the Natural England website (www.naturalengland.org.uk).

The Natura 2000 Sites considered in this HRA (SAMDev) Report are listed below. Those sites within Shropshire are shown in bold:

1. Berwyn SPA
2. Berwyn and South Clwyd Mountain SAC
3. **Brown Moss SAC**
4. Cannock Chase SAC
5. Downton Gorge SAC
6. Elenydd SAC Rhos Goch SAC
7. **Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC**
8. Granllyn SAC
9. Johnstown newt sites SAC
10. Mottey Meadows SAC
11. **Midland Meres & Mosses Ramsar Phase 1**
12. **Midland Meres & Mosses Ramsar Phase 2**
13. Montgomery Canal SAC
14. Rhos Goch SAC
15. **River Clun SAC**
16. River Dee & Bala Lake SAC
17. River Severn SPA/Ramsar
18. River Wye SAC
19. Tanat & Vrynwy Bat Sites SAC

20. The Stiperstones & the Hollies SAC
21. West Midlands Mosses SAC (Clarepool Moss SSSI)

The SSSI's within the Midland Meres and Mosses Ramsar Phases 1 and 2 which are included in this assessment are listed and described in Appendix 1.

The conservation objectives used to assess the implications of the plan for these sites are contained within Appendix 1.

2.3 Identifying Potential Effect Pathways

A precautionary approach has been used in this HRA report to screening allocations in or out of the HRA process. The initial screening process for the Shropshire Core Strategy in 2009 used a 15km buffer to scope out impacts. Development within the River Clun catchment, however, was an **exception** to this, with all allocations within the watershed upstream of the SAC **not screened out.**

Now that allocation sites have been put forward, this report now considers the various potential effect pathways in more detail.

2.3.1 Air pollution

In the 2010 Shropshire Core Strategy HRA, Table 1 set out issues affecting conservation objectives by site. Below is an updated extract.

Table 1: Air pollution potential effects pathways

Environmental change	Natura 2000 Site vulnerable to impact	Issues for further consideration
Local deposition of air pollutants caused by traffic emissions changing the plant species composition of vulnerable vegetation etc	Montgomery Canal SAC, Midland Meres and Mosses Ramsar Phase 1 & 2, River Dee & Bala Lake SAC, River Clun SAC, Tanat Bat SAC, West Midland Mosses SAC are within 200m of A roads.	Those parts of sites within 200m of a major road may be at risk from increased acidification and nitrogen deposition causing changes in terrestrial plant communities for which the sites have been designated. This problem is worse at sites which already have acid soils and have little buffering capacity. Predicting whether traffic levels will increase and then establishing whether this will translate into increased levels of deposition on a site is difficult.
Diffuse air pollution	Berwyn & South Clwyd Mountains SAC, Downton Gorge SAC, Elenydd SAC, Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC, Rhos Goch SAC, The Stiperstones and the Hollies SAC, West Midland Meres and	A number of sites are currently over their critical loads for acid and nitrogen deposition. Any further increase in background levels of diffuse air pollution could have cumulative effects and exacerbate an adverse situation. Measures need to be explored for reducing air emissions in the region to stabilise background levels of air pollution

	Mosses SAC, Midland Meres and Mosses Ramsar Phase 1 & 2	

Local air pollution

Environment Agency (2013) scoping criteria for examining air impacts as used in their permitting process scopes out consideration of all Natura 2000 sites situated more than 10km from the source of emissions for all but the largest point-source emitters (e.g. smelting works or major power stations).

The Highways Agency guidelines on Habitats Regulation Assessment within *The Design Manual for Roads and Bridges Vol 11* states that deposition of air pollutants associated with transport only needs to be considered within 200m of a road. As part of this HRA assessment, those Natura 2000 sites that are within 200m of a major road have been identified in Table 1. This information has been used to assess whether traffic increases associated with a specific development or settlement could result in significant impacts on a Natura 2000 site due to increased traffic emissions.

Diffuse air pollution

Appendix 8 of the 2010 Shropshire Core Strategy HRA gave 'critical load' data on air pollution for all the Natura 2000 sites. It was clear from this that many sites are receiving pollutants which exceed their critical loads. In these cases any additional pollutants would be important.

Development can also contribute cumulatively to an overall change in background air quality across an entire region (although individual developments and plans are – with the exception of large point sources such as power stations – likely to make very small individual contributions). There are no large point sources proposed through SAMDev.

It is considered reasonable to conclude that it must be the responsibility of higher-tier plans to set a policy framework for addressing the cumulative diffuse pan-authority air quality impacts, partly because such impacts stem from the overall quantum of development within a region (over which individual authorities have little control), and since this issue can only practically be addressed at the highest pan-authority level. The Shropshire Core Strategy has set the overall quantum of development in Shropshire and the HRA for this document has considered this. Diffuse air quality issues will not therefore be considered further within this HRA

2.3.2 Hydrological impacts

Again, based on Table 1 of the February 2010 Shropshire Core Strategy HRA, various impacts relating to water are presented in Table 2:

Table 2: Hydrological potential effect pathways

Environmental change	Natura 2000 Site potentially affected	Issues for further consideration
Water quality effects from direct increase in run-off from hard standing and pollution from overloading water treatment infrastructure	Brown Moss SAC, Downton Gorge SAC, Montgomery Canal SAC,Midland Meres and Mosses Ramsar Phase 1 & 2, River Clun SAC, River Dee SAC, West Midland Mosses SAC	Capacity of existing wastewater infrastructure to deal with additional homes needs to be considered, especially during flood events. Some sites require local / specific management solutions. However scope for SUDS should be considered for upstream housing and other developments
Pollution during flood events and problems resulting from raised or diverted water tables	River Clun SAC, Midland Meres and Mosses Ramsar Phase 1 & 2	Some of the constituent sites in the Midland Meres and Mosses Ramsar Phase 1 & 2 suffer from water logging as a result of diverted or raised water tables. Species within the River Clun SAC are vulnerable to short term increased pollution/ sedimentation resulting from flash flooding
Concentration of pollutants or contaminants due to reduced/ low flow	River Clun SAC, River Dee & Bala Lake SAC, River Wye SAC, Midland Meres and Mosses Ramsar Phase 1 & 2	Species within the River Clun SAC and River Wye SAC are reliant on a clean, cool, stable flow of water.
Water abstraction resulting in lowered water tables / levels	Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC, River Clun SAC, River Dee & Bala Lake SAC, West Midland Mosses SAC, Midlands Meres and Mosses Ramsar Phase 1 & 2	Increased abstraction arising from housing and economic development could impact on a range of Natura 2000 sites.
Increased silt runoff from development & roads	Brown Moss SAC, Montgomery Canal SAC,Midland Meres and Mosses Ramsar Phase 1 & 2, River Clun SAC, River Dee SAC, West Midland Mosses SAC	Species within the River Clun SAC and River Wye SAC are reliant on a clean, cool, stable flow of water.
Water quality impacts through boat use of Shropshire Union Canal*	Midland Meres and Mosses Ramsar (Cole Mere)	There is a link between the canal and Cole Mere which is suspected as impacting water quality of the Ramsar site (Environment Agency)

*Added 2014

The surface water catchments of most of the Midland Meres and Mosses Ramsar sites have been mapped by Natural England and this information has been used in the screening process. According to Atkins (2012), consideration of water level data suggests that all of the meres and their respective groundwater catchments are perched above the deep regional groundwater system. The meres are therefore more strongly influenced by the functioning and character of the local aquifer systems of recent, post-glacial origin rather than conditions in the regional aquifer. As a result they are likely to strongly reflect activities in the landscape local to them and may be susceptible to land use changes in their respective catchments. Atkins concluded that **in most cases the surface water catchment can be broadly taken as the groundwater catchment.**

Section 5.1.1 provides details of the hydrological vulnerability of the River Clun SAC in relation to the freshwater pearl mussel.

For this HRA the Environment Agency provided informal comments on the vulnerabilities of certain sites to impacts including abstraction and groundwater level changes (email 5.2.14). Information contained within the Shropshire Online Water Cycle Study (the draft and the emerging final version) on water resources, water quality and wastewater treatment has informed the screening. It is not possible to use a standard set buffer distance for hydrological impacts as it depends on whether there is hydrological continuity.

Abstractions require consent from the Environment Agency or Natural Resources Wales and these are assessed in line with the Habitats Regulations. The Water Framework Directive is the first line of defence for groundwater, and will drive action on point source pollution as well as the widespread pollutants such as nitrate.

Existing Council policies already require development to avoid adverse impacts on water quality and levels. Policy CS18 Sustainable Water Management of the Core Strategy states that *Developments will integrate measures for sustainable water management to reduce flood risk, avoid an adverse impact on water quality and quantity within Shropshire, including groundwater resources* and sets out detailed requirements of developments. Furthermore, Shropshire Council Sustainable Design (Part 1) SPD 2011 provides detailed guidance to developers on avoiding impacts on water quality and levels through water efficiency and SUDs schemes. As part of planning applications, detailed information necessary to assess impacts on Natura 2000 sites such as groundwater flow direction and levels, any proposed abstraction and so forth will be required from the applicant.

This HRA considers water pathways in detail for individual sites in Section 5.

2.3.3 Recreational effects

The Natura 2000 sites have been screened for their vulnerability to impacts from increases in public recreation. The Plan proposes residential development in line with the Core Strategy which will result in an increase in population in many settlements. The allocation for one site at Ellesmere includes touring caravans and log cabins (Policy S8.1c) may have scope for an increase in visitors to nearby Natura 2000 sites. Nationally, most of the research carried out on the impacts of recreation has been carried out on SPA sites with bird interest. Cannock Chase SAC, designated for its heathland interest, has also been studied.

Information on public access and the presence of public footpaths has been collected and summarised below.

The following Natura 2000 sites are all or in part open to public access:

Aqualate Mere Ramsar (241ha)
Berwyn SPA (24,000 ha)
Berwyn and South Clwyd Mountains SAC (27,000ha)
Brown Moss Ramsar (31ha)
Cole Mere Ramsar (48ha)
Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses Ramsar (948ha)
Montgomery Canal SAC
River Dee & Bala Lake SAC
River Wye SAC
Stiperstones and Hollies SAC (601ha)

The following sites have public footpaths adjacent to them, but there is no official public access.

Bomere, Shomere and Betton Pools
Fenemere Ramsar
Marton Pool Ramsar
Oss Mere Ramsar
Quoisley Mere
White Mere Ramsar

Private only fishing, angling, boating or watersports takes place at the following sites:

Berrington Pool Ramsar
Bomere, Shomere and Betton Pools
Crosemere Ramsar
White Mere Ramsar

It has been assumed that sites which the public cannot access will not be directly affected by increases in visitor numbers. A number of the meres are used for private angling and other watersports, however the assumption has been made that demand for private fishing and watersports at these Natura 2000 Sites will not measurably increase as a result of the Plan.

Natural England's Accessible Natural Greenspace Guidance has been used in estimating how far people are likely to travel to natural green spaces. The research which fed into development of this guidance found that larger sites attracted visits from further away and also that a walking distance of approximately 5 minutes from home was defined as a threshold above which daily park visits decreased significantly.

The so called ANGSt, Natural Englands Accessible Natural Greenspace Standard, recommends that everyone should have an accessible natural greenspace:

- of at least 2 hectares in size, no more than 300 metres (5 minutes walk) from home;
- at least one accessible 20 hectare site within two kilometres of home;
- one accessible 100 hectare site within five kilometres of home; and
- one accessible 500 hectare site within ten kilometres of home;

The background research from which this standard was developed suggested that for sites of the following sizes, people were prepared to travel the following distances to accessible natural greenspace of differing sizes:

- At least 2ha in size, no more than 300m (5 minute walk)
- At least 20 ha in size, no more than 2km
- At least 100ha in size, no more than 5km
- At least 500ha in size, no more than 10km

The largest Natura 2000 sites under consideration in this HRA are Berwyn and South Clwyd Mountains SAC (27,000ha), Berwyn SPA (24,000ha), Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC at 928ha and Stiperstones and Hollies SAC at 601ha.

From the small sample of visitors to the **Stiperstones** in the recent Shropshire Hills and Ludlow Visitor Survey 2013, it was apparent that over 90% of visitors had travelled from outside the local postcode areas, demonstrating this site's wide appeal. The type of in-depth visitor surveys necessary to define a 'zone of influence' for these sites has not been carried out. Based on research for Cannock Case SAC (White et al 2009), which is used for mountain biking, it is considered reasonable to discount significant recreational impacts beyond 12km from both the Stiperstones and Hollies SAC and the Berwyn mountains.

Mountain biking is not an issue at Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC, but due to the size of the site, an informal 10km 'zone of influence' has been applied in screening allocations. Natural England are trialling a visitor survey of the site in 2014, the results of which will assist in determining the draw of this site and can be used to refine the 'zone of influence'.

For the remaining Natura 2000 sites within Shropshire, all of which are below 70ha in size, recreational impacts have been generally discounted for allocation sites beyond 5km based on the ANGSt research.

Allocations have not been screened out at this stage where large scale residential development (over 100 dwellings) is proposed within 5km of a Natura 2000 site with public access and has features sensitive to disturbance from recreation. The cumulative impact of residential developments has also been considered.

Table 3: Recreational potential effect pathways

Environmental change	**Natura 2000 Site potentially affected**	**Issues for further consideration**
Induced development (i.e. need for increased infrastructure on a designated site to deal with an increase in visitor pressure) and land use change in or around site.	Berwyn & South Clwyd Mountains SAC, Downton Gorge SAC, Elenydd SAC, Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC, Rhos Goch SAC, The Stiperstones and the Hollies SAC, West Midland Meres and Mosses SAC, Midland Meres and Mosses Ramsar Phase 1 & 2.	Sites depend on supporting habitat outside protected area boundary. Given the complexity of wetland sites in and around Shropshire there is potential for impacts relating to land use change around the designated sites as well as directly adjacent or within the designated areas. Increased recreational pressure can lead to need for greater facilities and infrastructure on designated sites.
Disturbance or damage / erosion caused by recreational/ amenity use.	Aqualate Mere Ramsar Berwyn SPA, Brown Moss SAC, Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC, Granllyn SAC, Johnstown Newt Sites SAC Midlands Meres and Mosses Ramsar Phase 1 & 2, Montgomery Canal SAC, River Wye SAC, The Stiperstones & The Hollies SAC.	These sites are currently adversely affected to a degree by recreational pressure and are at risk from an increase in the number of households and improved physical accessibility in the region. The pathways by which recreational pressure impacts each site needs to be examined to understand the mechanisms by which further risk can be avoided. Risks include trampling, erosion, introduced species, fishing, boat use etc.
Potential recreational impacts for sites not screened out		
Trampling and erosion	The Stiperstones & The Hollies SAC, Midlands Meres and Mosses Ramsar Phase 1 & 2, Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC	Trampling and erosion are affected by the paths on sites, controls on access such as permits and the accessibility of habitats. These effects are generally more intense around car parks. Soil compaction can result.
Introduced species	Montgomery Canal SAC, Brown Moss SAC, Midlands	Sites with aquatic plant interest can be affected by

	Meres and Mosses Ramsar Phase 1 & 2	accidential introduction of invasive plants which then compete.
Fishing and boat use	Midlands Meres and Mosses Ramsar Phase 1 & 2,	Many of the Meres and Mosses Ramsar sites are used for private fishing, angling, boating or watersports. The level of use can directly impact on aquatic plant and invertebrate interest.
Eutrophication from dog faeces	Midlands Meres and Mosses Ramsar Phase 1 & 2, Brown Moss SAC, Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC.	May affect sites with naturally low soil fertility and possibly wash into waterbodies.
Swimming by people and dogs	Midlands Meres and Mosses Ramsar Phase 1 & 2, Brown Moss SAC	There could be direct damage to aquatic plant interest
Interference with grazing and other management	Midlands Meres and Mosses Ramsar Phase 1 & 2, Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC.	Grazing is crucial to the favourable condition of many sites. There may be conflict between visitors, their dogs and livestock unless carefully managed.

2.3.4 Open Space policy and standards in relation to recreational impacts

The existing and proposed policy within Shropshire on provision on open space within new developments is relevant to consideration of the potential to generate recreational pressure on European sites.

Adopted Core Strategy Policy CS6 Sustainable Design and Development Principles requires development to achieve local standards for the provision and quality of open space, sport and recreational facilities. The Explanation goes on to state:

“New developments can make a positive contribution to the level of open spaces in our towns and villages and the connecting links between open spaces. Standards for the provision of open space are set out in the Shropshire Open Space, Sport and Recreation study and new development will be expected to achieve at least a minimum level of this standard, but exploring opportunities for additional provision where appropriate and making provision for future maintenance. Where it can be shown that on-site provision is not appropriate the developer will be expected to make a contribution to provision off-site. Further details of the contributions required are set out under Policy CS9.”

The standard set out in the draft Open Space Sport and Recreation Study - PMP (2009) referred to for natural and semi-natural open spaces are:

2ha per 1000 population – to be within 10 minutes' walk time (480m).

The adopted policy CS9 provides a mechanism for requiring contributions to local infrastructure.
CS9 : Infrastructure Contributions
Development that provides additional dwellings or employment premises will help deliver more sustainable communities by making contributions to local infrastructure in proportion to its scale and the sustainability of its location, in the following order of priority:
1 Critical infrastructure that is necessary to ensure adequate provision of essential utilities, facilities, water management and safe access for the development including that identified in the LDF Implementation Plan;
2 Priority infrastructure, as identified in the LDF Implementation Plan, including contributions from residential developments towards affordable housing as required to meet Policy CS11 Type and Affordability of Housing;
3 Key infrastructure as identified in the LDF Implementation Plan.

Within the SAMDev Plan, Development Management Policy MD2 on Sustainable Design will be applied to all developments. This requires adequate open space of at least 30 sqm per person that meets local needs in terms of function and quality and contributes to wider policy objectives such as surface water drainage and the provision and enhancement of semi natural landscape features. It also ensures that ongoing needs for access to manage open space have been provided and arrangements are in place for it to be adequately maintained in perpetuity. Section 5.3.1 summarised Proposed Changes to MD2.

Place Plans for each settlement and surrounding area set out the detail of open space and other infrastructure provision and how this will be funded (e.g. by developer contributions).

2.4 Limitations

Visitor Surveys for Natura 2000 sites were sourced, where available, for use in screening sites for likely recreational pressure from residential development in Shropshire but many sites have only had limited visitor surveys carried out to date.

The River Clun Nutrient Management Plan final version was not available at the time of drafting this report

Site vulnerabilities for most of the sites forming the Midland Meres and Mosses Ramsar sites were not available.

3 Development Management Policy screening

3.1 Policy screening

Each development management policy in the SAMDev Plan is given a code in Appendix 2 relating to potential significant impacts on Natura 2000 sites. Where a policy is not location specific and sites have been allocated through SAMDev, the assessment of likely significant effect, including consideration of in-combination effects, is carried out in section 4 onwards of this report.

For those policies given an A or B code it can be confidently concluded that there is no likely significant effect on any Natura 2000 Sites and that no full Appropriate Assessment of this policy will be required. It can also be concluded that these policies will not have any in-combination effect with any other policy in the SAMDev Plan or within Shropshire's Core Strategy or any other plan or project which would lead to a likely significant effect on a Natura 2000 Site. Appendix 4 sets out these plans considered 'in-combination'.

Those policies given a C code have the potential to have a significant effect on Natura 2000 Site(s) depending on the locations and methods used in implementing them.

3.2 Conclusion of the HRA of SAMDev Draft Development Management Policies

Nine of the SAMDev Draft Development Management Policies have been screened out of the Habitat Regulation Assessment process and do not require further consideration.

Ten of the SAMDev Development Management Policies were screened as Code C i.e. have potential to result in likely significant effects and therefore subject to further consideration and mitigation as appropriate.

HRA of development management policies MD5 a and b minerals is covered in the Minerals Allocations HRA, which can be found at Appendix 6 of this report. One allocated site (Wood Lane North Extension) could not be screened out and is subject to assessment of impacts on the integrity on two Natura 2000 sites. Policies MD5 and 17 require detailed information and analysis of water movements and stringent mitigation management plans to avoid any adverse impacts on the Natura 2000 sites.

The Habitat Regulation Assessment of policies MD1, 3, 4, 8, 9 and 11 is covered in the HRA of the SAMDev Plan Settlement Polices in Section 4 onwards of this report.

Policies MD14 and 15 deal with waste and landfill sites, however the Plan does not allocate any sites for these uses. Policy MD17 relates to the operation of mineral sites, which will include unallocated mineral sites. The HRA of any proposals that come forward under these policies will, if necessary, be undertaken at the planning application stage.

4. Summary of findings of Stage 1: Screening

4.1 Stage 1: Screening result by Natura 2000 site

Appendix 1 identifies the sensitivities of the Natura 2000 sites to impacts from development and provides more detail on the potential pathways as described in section 2.3.

4.1.1 Reasons for screening out specific sites

Aqualate Mere Ramsar and National Nature Reserve (NNR) in Staffordshire is leased and managed by Natural England and has access via public footpath and bird hide, otherwise by permit holders only. Recreation pressures are considered to be adequately controlled and Shropshire allocations (closest being 9km away) are not considered likely to result in a noticeable increase in visitor numbers.

Informal advice from Natural England in 2013 recommended that **Cannock Chase SAC** in Staffordshire should be considered in this HRA. Cannock Chase SAC is vulnerable to recreational pressure and its 'Zone of Influence' has been determined to be 12km (White et al 2009). The closest allocated site in Shropshire is approximately 20 km from Cannock Chase SAC and therefore it has been judged reasonable to scope this site out from this HRA on the basis that residents of the allocated new housing sites in Shropshire are most unlikely to travel this distance for recreation when there are similar sites closer.

In 2009 the Countryside Council for Wales (CCW) requested that **Elenydd SAC and Rhos Goch SAC** be included in the HRA of the Core Strategy, since they are particularly sensitive to air pollution. These two sites are thought to be impacted by air pollution from the West Midlands. Only a very low level of residential development is proposed in the south west part of Shropshire, which is over 40km away from these Natura 2000 sites. The upland habitats in the Berwyn and South Clwyd Mountain SAC are sensitive to acidification. The closest employment allocations (in Oswestry) are 15km to the east of the SAC.

No development classed as large point-source emitters are allocated and therefore, using Environment Agency (2013) scoping criteria, due to the distance and the prevailing wind direction, which is west to east, it is considered that proposed developments within Shropshire will **not** have a likely significant effect on the integrity of **Berwyn and South Clwyd Mountain SAC**, **Elenydd SAC and Rhos Goch SAC** through a deterioration in air quality.

The Powys Unitary Development Plan HRA 2007 notes the potential for local tourist pressure and damage by recreational vehicles to cause erosion problems at the **Berwyn SPA** and **Berwyn and South Clwyd Mountains SAC**. This is being addressed by visitor management and Powys UDP policies. The main settlements close to these sites are within Wales. Oswestry is the closest settlement of any size within Shropshire and this is over 14km from the Berwyn Mountains.

Granllyn SAC and Johnstown newt sites SAC are designated for their separate great crested newt populations. Although a number of allocations are within 9km of the Johnstown newt sites SAC (and over 15km from Granllyn SAC), great crested newts are likely to range up to only 500m from breeding ponds. There is therefore no chance of a likely significant impact on these great crested newt SACs.

Mottey Meadows SAC in Staffordshire was scoped out of the 2009/2010 Core Strategy HRA. Maintenance of this lowland meadow site is dependent on traditional management, hay cutting followed by grazing, and the site is owned and managed by Natural England. The site is vulnerable to nutrient run off from surrounding farm land and this issue is being addressed through the site management plan. The site is also dependant on high ground and surface water levels since the habitat depends on a high water table in autumn and winter. It is considered unlikely that the SAMDev Plan will have any additional, adverse or in combination effect on Mottey Meadows SAC since plans in Shropshire will not alter site management nor change the management of farm land surrounding the site. Shropshire plans are also considered unlikely to have any effect on the ground or surface water levels on the site since the vast majority of Shropshire falls within the River Severn Catchment while Mottey Meadows SAC does not fall within the catchment of the River Severn.

Informal advice from Natural England in 2013 recommended that the **River Severn SAC/SPA/Ramsar** should be considered in this HRA. The **River Severn** flows through Shropshire but the designated section of this river is approximately 70km as the crow flies from the closest allocated site. It is not possible to quantify the impact of proposals in Shropshire on the European site at such a distance. Within Shropshire the River Severn is a County Wildlife Site and local impacts on its wildlife and water quality have been considered fully in the assessment of SAMDev allocations. The Outline Water Cycle Study for Shropshire concluded that a new discharge consent at Monkmoor Waste Water Treatment Works can be set to ensure that the River Severn will meet the Water Framework Directive downstream. This is considered sufficient safeguard to prevent significant impacts over 70km downstream.

The tributaries of the River Wye do not extend into Shropshire. The allocations closest to the **River Wye SAC** are within the River Teme catchment which does not link to the Wye. This SAC has therefore been scoped out from further assessment.

Component SSSI's of the Midland Meres and Mosses Ramsar sites have been screened out for recreational effects where there is no public access and for hydrological impacts where there are no allocations within the mapped surface water catchments.

The following Natura 2000 sites within the scope of the screening assessment are not negatively affected by the SAMDev Plan.

Table 3: Natura 2000 sites screened out

Natura 2000 site	**Reason for screening out**
Berwyn SPA	No likely significant effect on birds of prey at the site
Berwyn and South Clwyd Mountain SAC	Outside of 'zone of influence' for recreational impacts
Cannock Chase SAC	Outside of 'zone of influence' for recreational impacts
Downton Gorge SAC	No pathway by which allocations would be likely to result in air or water pollution
Elenydd SAC and Rhos Goch SAC	No air pollution or other impacts likely to reach these SACs
Fens Pools SAC (Dudley)	No pathways
Granllyn SAC	Great crested newt population will not be affected by development 15km away
Johnstown newt sites SAC	Great crested newt population will not be affected by development 9km away
Midland Meres and Mosses Ramsar Phase 1	See below for reason by each component SSSI
Mottey Meadows SAC	2009 Shropshire Core Strategy Screening Report (section 3) screens out this site as no impact on land management at or around site and is outside of River Severn catchment.
River Severn SPA/Ramsar	Safeguards through EA discharge consents means that Shropshire allocations (around 70km upstream of site) will not have a likely significant effect
River Wye SAC	No tributaries within Shropshire therefore no impact pathway
Tanat and Vrynwy Bat SAC	Horseshoe bats not known to use any of the allocated sites for feeding/foraging/hibernation. Bat surveys will be required at planning application stage and HRA done then if needed.
Component SSSI's within Midland Meres and Mosses Ramsar Phase 2	
Aqualate Mere (Staffs)	No pathway for hydrological effects.

	Recreational impacts discounted
Berrington Pool	No allocations in surface water catchment, no public access
Bomere, Shomere & Betton Pools	On perched water table so no hydrological links and no public access
Brown Heath Moss	No hydrological links and no public access
Clarepool Moss (West Midland Mosses SAC)	No hydrological links to allocated sites and no public access
Cop Mere (Staffs)	No hydrological links and no public access
Hanmer Mere (Wales)	Public access but no allocations within 5km. No hydrological links
Hencott Pool	No hydrological links and no public access
Llyn Bedydd (Wales)	No hydrological links and no public access
Marton Pool, Chirbury	No hydrological links and no public access
Morton Pool and Pasture	No hydrological links and no public access
Oss Mere	No hydrological links and no public access
Quoisley Mere (Staffs)	No hydrological links and no public access
Sweat Mere and Crose Mere	No hydrological links and no public access

4.1.2 Natura 2000 sites not screened out at the Stage 1:screening stage

There are pathways for impacts for the remaining Natura 2000 sites listed below. A summary of the potential impacts from the Plan proposals are in brackets:

Montgomery Canal SAC (water quality impacts)
River Clun SAC (water quality and hydrological impacts)
River Dee & Bala Lake SAC (water quality and hydrological impacts)
The Stiperstones & the Hollies SAC (recreational impacts)
West Midlands Mosses SAC – Brown Moss SAC/Ramsar (recreational impacts)

Midland Meres & Mosses Ramsar Phase 1 (some constituent sites only)

- Brown Moss SAC/Ramsar (recreational impacts)
- Cole Mere Ramsar (hydrological and recreational impacts)
- Fenemere Ramsar (hydrological impacts)
- White Mere (see minerals HRA in Appendix 6)

Midland Meres & Mosses Ramsar Phase 2 (one site)

- Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC/Ramsar (recreational impacts)

Each component unit of the International Sites that are not scoped-out are subject to further assessment in Section 5.

4.2 'Screening out' of Potential Allocation Settlements from the HRA Process

Any Settlement Area with allocated sites, or individual site allocations where no potential effect pathway has been identified by which a Natura 2000 site might be adversely impacted, have been 'screened out' of the HRA process at this stage. It can be concluded that for these sites, **the allocation of residential or employment development would not have a likely significant effect on the integrity of any Natura 2000 Site.**

The following settlements/sites have been **screened out** due to there being no potential effect pathway by which a residential or employment development could potentially impact upon any Natura 2000 Designated Site:

Settlement Policy/Place Plan	**Settlement/Site**
S1 Albrighton	Albrighton
S2.2(ii) Bishops Castle	Chirbury
S3 Bridgnorth	All settlements
S4 Broseley	Broseley
S5.1 Church Stretton	Site CSTR019 only
S5.1b Church Stretton	ELR070
S6 Cleobury Mortimer	All settlements
S7 Craven Arms	Craven Arms
S8.1b Ellesmere	Ellesmere employment
S8.2(ii) Ellesmere	Dudleston Heath
S8.2(iv) Ellesmere	Tetchill
S8.2(v) Ellesmere	Welsh Frankton
S9 Highley	All settlements
S10 Ludlow	All settlements
S13 Much Wenlock	All settlements
S11 Market Drayton	All settlements
S14 Much Wenlock	Much Wenlock
S14.2(i) Oswestry	Gobowen
S14.2(vii) Oswestry	Kinnerley
S14.2(ii) Oswestry	Knockin
S14.2(vii) Oswestry	Measbrook
S14.1 Oswestry	Oswestry town
S14.2(ix) Oswestry	Park Hall
S14.2(vi) Oswestry	Whittington
S15 Shifnal	Shifnal
S16.2(iii) Shrewsbury	Bomere Heath
S16.2(vii) Shrewsbury	Condover
S16.2(viii) Shrewsbury	Dorrington
S16.2(x) Shrewsbury	Hanwood
S16.2(iv) Shrewsbury	Nesscliffe
S16.2(xiv) Shrewsbury	Uffington

Note: Sites in Much Wenlock will be allocated through a Neighbourhood Plan. The Neighbourhood Plan area has been screened out due to no pathways to Natura 2000 sites.

4.3 Allocation Settlements/sites which cannot be 'Screened Out' of the HRA Process at Stage 1

These are the allocation settlements/sites for Shropshire which cannot be 'screened out' of the HRA process at Stage 1 and either require counter-acting measures and then re-screening or need to go forward to Appropriate Assessment.

The potential effect pathways identified relate to existing environmental links, increased recreational pressure, water abstraction, waste water outputs and drainage. They relate to the Natura 2000 sites that could not be screened out and which are described in Section 2.3.

Place Plan	Settlement	Policy
Bishops Castle	Bishops Caste	S2.1
Bishops Castle	Bucknell	S2.2(i)
Bishops Castle	Clun	S2.2(iii)
Bishops Castle	Lydbury North	S2.2(iv)
Bishops Castle	Community Clusters	S2.2
Craven Arms	Community Clusters	S7.2
Ellesmere	All residential	S8.1a
Ellesmere	Ellesmere leisure	S8.1c
Minsterley/Pontesbury	Minsterley & Pontesbury	S12
Oswestry	Llanymynech	S14.2(iii)
Oswestry	St Martins	S14.2(v)
Oswestry	Weston Rhyn	S14.2(xi)
Shrewsbury	Baschurch	S16.2
Wem	Wem	S17.1
Whitchurch	All residential	S18.1

5. Appropriate Assessment

5.1 Natura 2000 sites requiring further consideration

A more detailed consideration of impacts on the integrity of the Natura 2000 sites that have not been screened out in section 5.4.1 with regard to the site's structure and function and its conservation objectives is presented below:

Watercourses

- River Clun SAC
- River Dee & Bala Lake SAC
- Montgomery Canal SAC

Upland habitats

- The Stiperstones & the Hollies SAC

Meres and Mosses

Midland Meres & Mosses Ramsar Phase 1:

- Brown Moss SAC
- Cole Mere
- Fenemere
- White Mere

Midland Meres & Mosses Ramsar Phase 2:

- Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC

5.1.1 Settlements in the River Clun Catchment

The following settlements in the Bishops Castle Place Plan (Policy S2) are within the catchment of the River Clun SAC and shown in Appendix 3.

- Bishops Castle
- Bucknell
- Clun
- Lydbury North and Brockton

The following Community Clusters are within the catchment of the River Clun SAC:

- Bishops Castle Place Plan: Clunbury and Clungunford (including Abcot, Hopton Heath, Beckjay, Shelderton and Twitchen)

- Craven Arms Place Plan and Settlement Policies S7: Aston on Clun (and Broome, Beambridge, Round Oak, Hopesay, Long Meadow End and Rowton.)

Although the river is important for a wide range of more common wildlife such as otters, salmon and trout, the sole feature for which the River Clun SAC is notified is the presence of the extremely rare Freshwater Pearl Mussel (*Margaritifera margaritifera*).

The SAC is within Unit 6 of the River Teme SSSI, which was assessed at March 2014 as being in unfavourable declining condition for a number of reasons including high levels of silt and nutrients (particularly ortho-phosphate and nitrogen), which affect the health of the pearl mussel population. A review of the monitoring data from the Environment Agency for the River Clun (2000-2011), shows that although there has been an improvement the ortho-phosphate (P) concentration, it is higher than is required for a recruiting pearl mussel population and in most of the Clun, including within the SAC, it is higher than that required to maintain adult mussels. Any additional phosphate, nitrogen (N) and sediment entering the SAC is likely to make its condition worse. It is vital that new development contributes positively alongside wider land management measures, since waste water from houses and businesses releases P into the catchment (up to 35% of the total, the remaining P coming largely from farming activities), whether via the mains and sewage treatment works, or from cesspits, septic tanks or package treatment plants.

Natural England (NE) and the Environment Agency (EA), aware of the problems caused, have jointly commissioned a Nutrient Management Plan (NMP) to document all sources of P, N and sediment in the catchment, identify what information still needs to be gathered and to outline pollution reduction measures that might be employed in future. An interim guidance note for development in the Clun Catchment, supported by both NE and EA is currently being followed for planning applications, until the NMP has been completed (projected to be by April 2014). Under the interim guidance note, certain single or small numbers of dwellings are obtaining permission, but only after a full Habitats Regulations Assessment has been completed and passed in each case. (See guidance note attached as Appendix 3).

Additional population growth in settlements allocated in the SAMDev Plan is estimated to increase the current catchment population by 575 persons (258 dwellings) or c. 8%, up to 2026. Additional growth in employment land is estimated to cover 4.07ha and increase the current catchment flows by 22,000m^3 per year. Information gathered for the Nutrient Management Plan suggests that the population growth resulting from the site allocations is likely to lead to a future increase in phosphate in the river of 8%. This is equivalent to 0.003 mg /l P increase and can be translated into 15% of the 2019 (0.02 mg/l P) target and 30% of 2027 target (0.01 mg/l P). However, as limits on the phosphate content of some kitchen detergents are brought in in 2015, some or all of the effects of growth in the catchment may be offset.

The counteracting/mitigation measures are set out in Section 5.3.2.

5.1.2 River Dee and Bala Lake SAC

As set out in the 2010 Shropshire Core Strategy HRA, all aquatic features of the River Dee and Bala Lake SAC require suitable flow conditions to maintain favourable status. The Dee is already affected by falling groundwater levels and this may be affected by increased abstraction levels, threats to water quality from direct and diffuse pollution, eutrophication and siltation. According to the Environment Agency (2009), the poor Water Framework Directive status of sections of the River Dee is due to historic coal and metal mining activities, with point sources and nitrates causing pollution. Significant effects could stem from water supply/ quality issues, the pathways are unclear.

Part of the northernmost section of Shropshire falls within the catchment of the River Dee. Residential allocations at Weston Rhyn (40 dwellings) and part of site STM0029 at St Martins (80 dwellings) fall within the Upper Dee catchment and are around 1km from the river. Whitchurch falls within the Middle Dee catchment but is 12km away from the river itself.

Water is abstracted from the River Dee by water companies to supply homes. The Environment Agency and Natural Resources Wales licence abstractions and can place special conditions on any new licences granted to safeguard the conservation interest of the River Dee and other Natura 2000 sites. SAMDev allocations do not override these controls on abstractions. The main groundwater resources of the Dee are contained in the sandstone rock beneath the Middle and Lower reaches of the river. HRA has been completed for the Welsh Water (2012) Final Water Resources Management Plan and did not find a likely significant effect in relation to the River Dee.

Core Strategy Policy CS18 on Sustainable Water Management requires new development to protect water quality. All major developments are required to submit a Surface Water Management Statement/Plan. Both Policy CS18 and the Shropshire Council Surface Water Management: Interim guidance for Developers dated June 2011 encourages use of SUDS schemes and a Supplementary Planning Document on Water Management is proposed later in 2014. In addition new development is required to meet minimum water efficiency requirements. All these policy measures together are considered sufficient to prevent an impact on the integrity of the River Dee and Bala lake SAC, which can therefore be screened out.

5.1.3 Montgomery Canal SAC

The SAC section of the Montgomery Canal is only within Wales. The designation is because it supports the largest, most extensive population of floating water plantain (*Luronium natans*) in lowland Britain.

Floating water-plantain is vulnerable to enrichment through agricultural or domestic nutrient inputs and herbicide run-off from the towpath could be a problem. Increasing boat traffic would detrimentally affect the species through damage and increasing turbidity. Invasive species and introduction of certain fish could also damage aquatic plant populations. More detail is contained within the 2010 Shropshire Core Strategy HRA report.

Potential impacts from the housing development identified in the HRA on the floating water plantain interest in the SAC are increased recreational pressure and abstraction from and discharges to the canal.

The allocated housing sites at Llanymynech within the Oswestry Settlement Strategy S14.2 are less than 250m from the Montgomery Canal SAC boundary. The canal is water filled adjacent to the housing allocations and there are no barriers between this and the Wales section containing floating water plantain.

The allocations at Llanymynech are for 35 dwellings on LLAN009 (Land north of Playing Fields) and 32 dwellings on LLAN001 (former railway land). The first site is immediately adjacent to the canal towpath. To avoid impacts on water quality it will be important that no run-off is discharged from the developments into the canal. The estimated population of Llanymynech and Pant parish in the 2011 Census was 2,100. The 161 person increase in population proposed through SAMDev (estimated at 67 dwellings multiplied by 2.4 persons per dwelling) would result in a 6.7% increase in the population of the parish, but this modest population increase is not considered likely to result in any detrimental effect on the plant species from pedestrian traffic.

Boat traffic on the section of canal at Llanymynech is relatively low because it is currently not connected to the rest of the inland waterway network, such as the busy Llangollen Canal to the north. There are plans to restore further sections of the Montgomery Canal within England and to include the towpath on long distance walking routes. Such initiatives would have a greater impact on the SAC interest feature than the housing allocations proposed and require HRA themselves. Therefore the only impacts likely from the Plan are discharges or abstraction.

Due to the nearness of allocations to the Montgomery Canal SAC and the existence of a pathway (the canal), revisions were made to the Final Plan (see Section 5.3.5) to require mitigation measures to remove harm which could arise from hydrological impacts. The Montgomery Canal Management Plan (2005) should be consulted in carrying out an HRA.

5.1.4 Stiperstones and Hollies SAC

Of the Natura 2000 Sites under consideration, the Stiperstones and Hollies SAC probably has the greatest recreational ‘draw’ for Shropshire residents. The Council has therefore assessed the potential for increased recreational pressure to:

a) Occur as a result of the SAMDev allocations
b) Have a significant effect on the favourable conservation status of the interest features or affect the sites integrity. The qualifying features are European dry heath and sessile oak woodland.

The size of residential allocations and their distance from the site have been factored in. In Section 2.4.3 the reasons for using a 12km screening distance

are described. The actual travelling distance to the Stiperstones and alternative recreational sites such as the Long Mynd and Wenlock Edge are considered in the detailed screening. Church Stretton (Settlement Policy S5), for example, is adjacent to the Long Mynd and the distance from the Stiperstones means that residents would be unlikely to use the Stiperstones SAC for regular recreation, such as dog walking.

Natural England do not mention recreational impacts in the condition assessment for the site (website accessed 6.3.14). The South Shropshire AONB Management Plan (Jan 2014 update) promotes environmentally sound leisure and recreation, with an overall strategy of encouraging dispersal of access (planned with care), while ensuring high standards of management at well used sites and the retention of quieter areas. The Management Plan does not highlight particular problems from visitors. It is concluded that existing plans and mechanisms are sufficient to mitigate for the increase in visitor numbers at the Stiperstones and Hollies SAC that could result from the SAMDev allocations.

As a result the allocations in the Church Stretton (S7) and Minsterley/Pontesbury (S12) Place Plans, and the Stiperstones and Hollies SAC, can be **screened out** from further assessment.

5.1.5 Meres and Mosses Ramsar sites

Midland Meres & Mosses Ramsar Phase 1:

- Brown Moss
- Cole Mere
- Fenemere
- White Mere

Midland Meres & Mosses Ramsar Phase 2:

- Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC/Ramsar

5.1.5.1 Midland Meres & Mosses Ramsar Phase 1: Brown Moss SAC/Ramsar

Brown Moss is a 32ha Shropshire Council owned site with a car park and footpaths, located 2km south east of Whitchurch. The designated feature of the SAC is **floating water-plantain** (*Luronium natans*). The Management Plan gives the latest record of the species at this site as 2006. Annual surveys take place for the species and it is known to appear after absences if management is favourable. Under the Ramsar criteria the designated features are lowland raised bog, lowland fen and eutrophic lakes (*lemna minor and persicaria amphibian* communities).

Brown Moss hydrology

Development close to the site could potentially lead to lower water quality and increased pollution from surface water run-off. Brown Moss SAC is primarily

fed by rainfall, which maintains a small, perched water table above a clay layer. Groundwater is most likely below this clay layer. The report by ESI (2012) states that there was no mechanism by which construction of Whitchurch bypass could have affected water levels at Brown Moss. Allocations within Whitchurch are all inside the bypass and outside the surface water catchment of Brown Moss and therefore it is considered none could impact on the SAC interest features.

Brown Moss recreational impacts

The Shropshire Council Brown Moss Management Plan 2007 to 2012 and draft update 2014 - 18 states that the site is popular for quiet recreation such as walking, bird watching, dog walking and feeding the wildfowl. It is often visited by botanists, and students studying a range of wetland related subjects. It is often used by people parking up in the car parks and roadside in the evening. Occasionally horse riders have been spotted and local youths have been known to ride motorbikes around the site. The site is Common Land and a public footpath comes through the site. There is a network of unsurfaced paths and tracks and boardwalks around pool 6.

Luronium natans and other aquatic plants could be sensitive to increased visitor pressure if direct disturbance to the plants occurred or the risk of non-native and/or invasive plant introductions occurs. The invasive non-native plant *crassula helmsii* has appeared in the 'drop down zone' of the mere in recent years and is a risk to the floating water-plantain and other aquatic plants.

The Council has no current data on visitor numbers or trends. The Management Plan contains a project to carry out visitor counts and Shropshire Council Outdoor Recreation Service carries out a rolling programme of visitor surveys of all the sites it owns. A visitor survey and observational study is being carried out by the Council in summer 2014 to gain this information.

Earlier consideration of recreational impacts in Section 2.3.3 concluded that visitors would be likely to travel up to 5km to sites below 100ha in size, such as Brown Moss. Sites for some 733 dwellings are allocated in Whitchurch with a further 100 dwellings in Community Clusters in the rural area. Within this 5km 'zone of influence' the estimated increase in dwellings as a result of the Plan housing allocations is 15.7%, with windfall sites added in combination.. It is concluded that there is current insufficient evidence to rule out the potential for visits to Brown Moss SAC to increase from this scale of housing allocations or that the integrity of the Natura 2000 site is not vulnerable to recreational impacts.

5.1.5.3 Midland Meres & Mosses Ramsar Phase 1: Cole Mere, Fenemere and White Mere

Cole Mere, Fenemere and White Mere have not been screened out due to the potential for hydrological impacts from site allocations and in the case of Cole Mere only, recreational impacts.

Cole Mere Hydrology

As noted at 2.2.2, according to Atkins (2012) in most cases the surface water catchment of the Meres and Mosses Ramsar sites can be broadly taken as the groundwater catchment. The Environment Agency undertook a desktop Water Framework Directive Waterbody Review of Cole Mere in 2012. The evidence showed that Cole Mere was eutrophic, although the macrophytes were 'good'. Data was inadequate to determine trends and the report recommended further investigations and apportioning the input from the canal. This should form the basis of a catchment management plan.

The designated feature at Cole Mere is **least water-lily** (*Nuphar pumila*). This plant could be vulnerable to nutrient increases. These could be caused by the canal overflow and large numbers of water birds. The site is close to a landfill site which may encourage gulls to the area. Boating and angling could also have a direct impact as could dog and human swimming. The Natural England condition assessment carried out in 2014 found the waterbody as 'unfavourable no change' with the comment that "Site fails on lack of characteristic species and water chemistry. Population of *Nuphar pumila* still present".

There are no housing or employment allocations within the surface water catchment of **Cole Mere**, with the closest allocation 2.8km away at Ellesmere. Wood Lane minerals site is within the surface water catchment and covered in the HRA of minerals sites, which contains details of the hydrology of Cole Mere. There is an inflow from the Shropshire Union Canal to Cole Mere, which could contribute to eutrophication (through phosphate and nitrogen) of the lake. The marina proposals at Ellesmere in Policy S8.1c allocation ELL003b do have potential therefore to impact on the water quality of Cole Mere through the canal pathway, however there is uncertainty (Environment Agency 2012) over the extent to which the canal water quality influences Cole Mere and further research is required.

Through the Mineral Allocation HRA in Appendix 6, a detailed assessment of potential impacts from the Wood Lane North Extension (Policy MD5a) on the site is carried out. This concludes that the safeguards in Policies MD5, MD12 and MD17, to be applied at the planning application stage, are sufficient to ascertain that development wil not adversely affect the integrity of Cole Mere.

Cole Mere Recreation

Cole Mere (54ha) is dedicated open access land except for the sailing club boathouse and dinghy park. It is owned and managed by Shropshire Council. A 2009 visitor survey had 25 responses, which found that 77% of respondents had a Shropshire postcode (the site is close to the Staffordshire border) and

52% and 40% listed walking and walking the dog respectively as the reason for their visit. The Management Plan for the site states that recreational activities should be limited so as not to impact on the quality of water and aquatic vegetation. Dogs and people entering the water is one of the possible impacts on the designated features of Cole Mere. The Management Plan also includes visitor surveys, which the Council propose to undertake in 2014. When quantified data is available on the extent and impacts of recreation on the designated features at Cole Mere, this will allow for a more accurate assessment of the need for mitigation on-site.

Ellesmere (the undesignated waterbody) is adjacent to the settlement of Ellesmere and is a very popular public recreation site with facilities. The nearby presence of Ellesmere and the Wood Lane Nature Reserve, managed by Shropshire Wildlife Trust are also likely to reduce recreational pressure on nearby Natura 2000 meres, including Cole Mere.

As for Brown Moss, it can be concluded that visitors are likely to travel up to 5km to Cole Mere. The estimated increase in dwellings in this 5km 'zone of influence' through Plan allocations is 5.7%, together with windfall sites. The site allocation for 250 dwellings and leisure/tourism development under Policy S8.1c at Ellesmere cannot be screened out and therefore **counter-acting measures** to prevent any impact on Cole Mere are set out in section 5.3.2.

White Mere Hydrology

Like Brown Moss, for **White Mere** internal sources have been identified as the most significant risk to water quality. It has long standing high phosphorus concentrations. It is on a perched water table with no surface water connections to any allocated sites. There is no official public access to White Mere but private fishing takes place. There are no housing or employment allocations within the surface water catchment of White Mere. The closest is a housing allocation at Ellesmere, which is 1.6km away.

Through the Mineral Allocation HRA in Appendix 6, a detailed assessment of potential impacts from the Wood Lane North Extension (Policy MD5a) on the site is carried out. This concludes that the safeguards in Policies MD5, MD12 and MD17, to be applied at the planning application stage, are sufficient to ascertain that development will not adversely affect the integrity of White Mere.

Fenemere Hydrology

Diffuse agricultural pollution is the most significant water quality risk to **Fenemere**. As for other North Shropshire meres, the ground water catchment can be broadly taken to be the same as for surface water. According to Atkins 2012, the most significant process influencing the water balance of Fenemere is stream inflows from its catchment. Stream inflows accounted for close to half the annual inflows to Fenemere. Groundwater contributions were small in comparison, although a significant proportion of

the streamflow generated is likely to be shallow groundwater derived based on the underlying geology.

The Environment Agency have commented informally (email 7.2.14) that "*Future applications for licenses to abstract groundwater from the sand and gravel aquifer within 3km of Fenemere must show that there will be no impact on water levels within the SSSI. No new abstraction licenses should be granted that allow abstraction of surface water from within the surface water catchment to Fenemere. "* The allocation of housing sites in Baschurch does not override the requirement to carry out HRA for abstraction licences if these were to be required.

The EA also stated that *"Development at Baschurch is unlikely to have an effect on the water quality of Fenemere since surface water drains away from the site via War Brook which is a tributary of the River Perry.*

There is one allocated housing site within the Natural England mapped Fenemere surface water catchment at **Baschurch BA0035** under Policy S16.2. Examining maps of the surface water flows in detail confirms this site does not have a link to the surface water drainage into Fenemere.

5.1.5.2 Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC/Ramsar

The interest features of this SAC, which is also part of the Midland Meres and Mosses Ramsar Phase 2 site, are Active and Degraded Raised Bogs, with high water levels necessary to maintain these interest features.

Hydrology

Until recently, drainage of the site occurred through large scale commercial peat extraction. There are no allocations within or close to the surface water catchment for the site. In line with the Atkins report (2012) conclusion that in most cases the surface water catchment can be broadly taken as the groundwater catchment, hydrological impacts from allocations on this site have been screened out.

Recreation

As a large (948ha) site, a 10km buffer has been used in assessing likely significant recreational effects from housing developments. The following settlements are within 10km of Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC: Ellesmere, Tetchill, Cockshutt, Wem, Prees, Tilstock and Whitchurch. Further assessment of the potential for recreational impacts to result from residential development at these settlements is required.

The SAC is split between England and Wales. Part of Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses are open to public access and accessible via a number of car parks. Trails have been developed but access off the trails is currently by permit through Natural England, who has a

National Nature Reserve office nearby. The ditches throughout the site and the Llangollen Canal restrict access also. At present the SAC is not subject to 'open access' under the CROW Act, however in the next few years the English section may become so (pers comm Natural England). Natural England National Nature Reserve staff are concerned by current impacts of dogs on birds, such as curlew, one of the SSSI designated features (but not for the International designations) and the potential for visitor numbers to increase as a result of nearby housing development. However the 2010 condition assessment does not list recreational impacts as resulting in a decline, rather inadequate scrub control and grazing.

At present the controls on visitor access are considered sufficient to prevent impacts on the SAC/Ramsar designated features from the current visitor numbers.The February 2010 Management Plan is currently under review and an up to date plan is expected later in 2014 (pers comm). Natural England began a pilot visitor survey for the site earlier in 2014.

The housing development proposed within 10km of the SAC and Ramsar site, particularly at Whitchurch, Ellesmere and Wem, are estimated to result in a 9.3 % increase in dwelling numbers in the 10km zone. Changes in the access situation and any predicted recreational impact identified in the updated Site Management Plan will be regularly reviewed during the life of the Plan (to 2026). Section 5.3 sets out the mitigation proposed to be built into the Ellesmere, Wem and Whitchurch Place Plans, the Settlement Policies, MD2 and MD12, which can be put into force as the need arises.

5.2 In-combination effects

Any element of the plan that was screened out alone as having minor residual effects should also be screened for the likelihood of significant effects in-combination arising from other elements of the same plan, or from any other plans or projects.

The potential for in-combination effects between allocations within the SAMDev Plan has been assessed. The potential for recreational pressure to result from residential allocations is one such in-combination effect. The Council has therefore considered the total residential allocations that could affect Natura 2000 sites with public access. This has been applied in the Whitchurch area when considering recreational impacts on Brown Moss, for example. Here, small housing allocations on their own would be unlikely to generate a significant effect but in combination the total number of houses could. Such examples are coded as D1:

D1	The option, policy or proposal alone would not be likely to have significant effects but if its effects are combined with the effects of other policies or proposals **provided for or coordinated by** the plan (internally) the **cumulative** effects would be likely to be significant.

Appendix 7 of the Shropshire Core Strategy HRA (2010) provided a list of potential in-combination effects and other plans and policies which could result in in-combination effects. This has been updated through scrutiny of other plans and policies since 2010 and listed in Appendix 2. Most Local Development Plans in surrounding areas are not yet at a site allocation stage. If the effects of any plans or policies, which when combined with those in the SAMDev Plan would result in a likely significant effect, these would be classed as D2:

D2	Options, policies or proposals that alone would not be likely to have significant effects but if their effects are **combined with the effects of other plans or projects**, and possible the effects of other projects provided for in the plan as well, the combined effects would be likely to be significant.

It has been concluded that there are no likely in-combination effects resulting from current plans outside of Shropshire.

5.3 Applying mitigation measures to avoid impacts on site integrity

Where this HRA has concluded that there are pathways for impacts on the integrity of the Natura 2000, proposed changes to policies have been recommended. These relate to applications within the River Clun catchment, certain other housing allocations and the leisure/tourism allocation at Ellesmere.

As the HRA has been ongoing during the Plan preparation, the need for mitigation has been incorporated already into the March 2014 draft SAMDev HRA. Following Natural England's comments on the consultation, further changes have been recommended to these settlement policies, as well as MD2 and MD12, which will be set out in a Statement of Common Ground with Natural England.

5.3.1 Mitigation within Development Management policies

MD2: Sustainable Design – summary of recommended changes

In response to Natural England's comments, proposed changes to the wording of MD2 is recommended to cover situations where a potential adverse effect on the integrity of a Natura 2000 site due to recreational impacts is identified. Mitigation to remove such impacts may include an increase in the amount of open space provided by a residential development over and above the 30sqm per person with a significant proportion of this being semi-natural. Additional mitigation measures may include developer contributions in line with Policy MD12.

MD12: The Natural Environment – summary of recommended changes

The Council now recommends that the wording of Policy MD12 is amended to require a project-level HRA for all proposals where a likely significant effect on a Natura 2000 site is identified by the Council. This is because developments outside of allocated sites may have an adverse effect on the integrity of Natura 2000 sites. Individual allocations in the Plan which require mitigation measures to prevent adverse effects on integrity are included in the relevant plan policies for specific sites. Permission will be refused where a HRA indicates an adverse effect on the integrity of a designated site which cannot be avoided or fully mitigated.

Where mitigation can remove an adverse effect, including that identified by the HRA for the Plan or the Minerals HRA, measures will be required in accordance with; CS6, CS8; CS9; CS17; CS18; MD2; remedial actions identified in the management plan for the designated site and the priorities in the Place Plans, where appropriate.

The proposed changes to MD12 state that plan and project-level mitigation measures may include; phasing development to allow time for infrastructure improvements to be put in place; increasing the amount of semi-natural open

space to provide more informal recreation opportunities in accordance with Policy MD2 and/or developer contributions towards remedial actions such as measures identified in the designated site's management plan or the priorities in the Place Plan; water management measures as set out in the Local Flood Risk Management Strategy; and implementing the highest standards of design required by MD2 .

5.3.2 River Clun SAC mitigation in the Bishops Castle and Craven Arms Place Plans

This section should be cross referenced with Section 5.1.1. Under the River Clun Nutrient Management Plan (NMP), a number of potential measures are being considered which will reduce the nutrient loading of the River Clun. These include adding phosphate stripping to the sewage treatment works that do not currently have it, diverting treated effluent from Bishop's Castle and Bucknell Sewage Treatment Works out of the Clun catchment, encouraging mitigating land management practices and installing SUDs features for roads and developments. Improvements to the water treatment infrastructure are planned to be included within the AMP round (PR14) which starts in 2015 and concludes at the end of 2019.

Hence, although small developments may pass their Habitats Regulation Assessments now, the housing and employment allocations will have to be phased in line with infrastructure improvements and reductions in nutrient input from farming and other sources. Once the NMP has been published, revised guidance for developers will be developed in partnership with NE and EA.

Whilst an Outline Water Cycle Study was prepared as part of the evidence base for the Core Strategy, this has been updated as part of the evidence base for SAMDev. As policy measures have already been introduced around water efficiency and flood risk, the update focuses on assessing the impact of proposed development on wastewater infrastructure. This includes capacity assessments of the sewerage network, sewage treatment works and the environmental capacity of the watercourses the treatment works discharge into.

Development Management Policy 'MD8 Infrastructure provision' supports applications for new infrastructure including water management. It also states that new development should only take place where there is sufficient existing infrastructure capacity or where the development includes measures to address a specific capacity shortfall which it has created or which is identified in the LDF Implementation Plan and Place Plans. Where a critical infrastructure shortfall is identified, appropriate phasing will be considered in order to make development acceptable.

This is further supported by Development Management Policy MD2 'Sustainable Design' which requires all new development to demonstrate there is sufficient existing infrastructure capacity, in accordance with MD8,

and should wherever possible actively seek opportunities to help alleviate infrastructure constraints, as identified in Place Plans, through appropriate design.

Development Management Policy MD2 also includes specific requirements for new developments to incorporate sustainable drainage techniques, as an integral part of design and apply the requirements of the SuDS handbook as set out in the Local Flood Risk Management Strategy. This builds on the adopted Core Strategy Policy CS18 'Sustainable Water Management' which states that:

Developments will integrate measures for sustainable water management to reduce flood risk, avoid an adverse impact on water quality and quantity within Shropshire, including groundwater resources, and provide opportunities to enhance biodiversity, health and recreation by ensuring that: (amongst other items):

- *All developments, including changes to existing buildings, include appropriate sustainable drainage systems (SUDS) to manage surface water. All developments should aim to achieve a reduction in the existing runoff rate, but must not result in an increase in runoff;*
- *Any major development, demonstrates that there is adequate water infrastructure in place to serve the development;*
- *New development enhances and protects water quality, including Shropshire's groundwater resources;*
- *New development, including changes to existing buildings, incorporate water efficiency measures, in accordance with the sustainability checklist in Policy CS6, to meet the water efficiency objectives within the Shropshire Water Cycle Study to protect water resources and reduce pressure on wastewater treatment infrastructure.*

Within the Explanation to CS18 it states that:
"Where water quality could be compromised by the development strategy proposed, Shropshire Council will work with the Environment Agency and its partners to explore opportunities to create additional environmental capacity, through actions to deliver its River Basin Management Plans. This includes supporting agri-environment schemes to control diffuse pollution and contribute to Shropshire's environmental network, in accordance with Policy CS17. Opportunities to achieve additional benefits will also be sought, in terms of improving wetland habitats and biodiversity through river restoration or enhancement as part of a development.

Under SAMDev Plan Settlement Policy 2 (Bishops Castle and Community Hubs and Clusters) and Settlement Policy 7 (Craven Arms), a phased approach to bringing forward allocations is proposed, linked to the findings of the River Clun Nutrient Management Plan, whilst protecting the River Clun SAC. Severn Trent Water have confirmed that they are proposing to upgrade the Clun water treatment works starting in 2015 (AMP6) to reduce phosphate discharges. These policies stress that mitigation measures will be required to remove hydrological and water quality impacts on the integrity of the River

Clun SAC in accordance with Policy MD12. Shropshire Council has sufficient potential allocations outside of the Clun catchment to satisfy the housing and employment requirements for the plan period and, should it be impossible to deliver the proposed allocations within the Clun catchment, it would not affect the deliverability of the plan as a whole.

In conclusion, the combination of these policies will mean that there will be no adverse effects on the integrity of the River Clun SAC arising from the policies in the SAMDev document.

5.3.3 Ellesmere Place Plan and Settlement Policy S8

The settlement of Ellesmere, together with Cockshutt, Tetchill, Wood Frankton and the Wood Lane minerals site, are within 5km of the following SSSI's which are part of the Midland Meres and Mosses RAMSAR Phases 1 and 2: White Mere, Cole Mere, Clarepool Moss, Brown Heath Moss, Sweat Mere and Crose Mere. Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses are within 10km of Ellesmere. Map 1 illustrates these sites in relation to Ellesmere.

Through the HRA it has been determined that Natura 2000 sites with open public access are vulnerable to impacts from increased recreational pressure. For Ellesmere these sites are **Cole Mere and Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses.**

The following Natura 2000 sites are vulnerable to changes in water levels and quality that could result from development in the Ellesmere Place Plan area: **Cole Mere and White Mere**.

As a result of Natural England's comments on this policy, it is recommended that policy wording changes to Policies S8.1, 8.2, and 8.3 are made to require mitigation measures to remove the adverse effects of development on Natura 2000 sites in accordance with Policy MD12. The explanation must identify recreational and water quality impacts as identified in this HRA. The recommended policy wordings will be agreed in a Statement of Common Ground with Natural England.
Mitigation measures may be through provision of sufficient alternative semi-natural public open space in accordance with Policy MD2 on Sustainable Design) and/or contributions to visitor management measures at the RAMSAR sites in line with adopted Core Strategy Policies CS8, CS9, CS17 and any management or action plan for the designated site as well as the priorities set out in the Place Plans.

5.3.4 Shrewsbury Place Plan

Baschurch Community Hub (Settlement Policy S16.2)

Policy S16.2 states that an HRA will be required for site BA035 at Baschurch within the surface water catchment of Fenemere and as part of these, details of any abstractions and drainage will need to be submitted by the applicants.

These detailed matters are most appropriately dealt with at the planning application stage. With the requirement for mitigation spelt out in Policy **S16.2(i) there is considered to be sufficient safeguard to state no likely significant effect on any Natura 2000 site from allocation in Baschurch.**

5.3.5 Oswestry Place Plan

Llanymynech and Settlement Policy S14.2

Policy S14.2 sets out that the potential for impacts on the integrity of the Montgomery Canal SAC exists from development within Llanymynech and that mitigation measures will be required for any hydrological impacts in line with Policy MD12. Section 4.1.3 gives the justification for this.

Natural England did not comment on this policy.

5.3.6 Wem Place Plan
Wem

Wem is within 7km of Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC/Ramsar site and therefore new residential development may generate additional recreational pressure on the site (alone or in-combination). Section 5.1.5.2 explains the reasoning for this conclusion. Allocations in Shawbury are more than 10km from Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC/Ramsar and have been screened out for impacts.

As a result of Natural England's comments on this policy, recommended policy wording changes to Policy S17 will be made to require mitigation measures to remove the adverse effects of development on Natura 2000 sites in accordance with Policy MD12. The explanation will identify recreational impacts identified in this HRA. The recommended policy wordings will be agreed in the Statement of Common Ground with Natural England.

Mitigation measures may be through provision of sufficient alternative semi-natural public open space in accordance with Policy MD2 on Sustainable Design) and/or contributions to visitor management measures at the RAMSAR sites in line with adopted Core Strategy Policies CS8, CS9, CS17 and any management or action plan for the designated site as well as the priorities set out in the Place Plans.

5.3.7 Whitchurch Place Plan
Whitchurch

Map 2 illustrates Natura 2000 Sites in relation to Whitchurch Place Plan allocations. None of the allocations are within the surface water catchment of Oss Mere or Brown Moss SAC or other Natura 2000 sites. No Natura 2000 sites are considered likely to experience hydrological impacts from the allocations in the Whitchurch Place Plan.

Whitchurch is within 2km of Brown Moss SAC. The additional dwellings proposed at Whitchurch, Tilstock, Ash Parva and Prees Heath (i.e. within 5km) may act in combination to result in a cumulative impact from recreation on Brown Moss SAC. Section 5.1.5.1 sets out the evidence on recreational impacts.

As a result of Natural England's comments on this policy, recommended policy wording changes to Policies S18.1 and 18.2 will be made to require mitigation measures to remove the adverse effects of development on Natura 2000 sites in accordance with Policy MD12. The explanation will identify recreational impacts as identified in this HRA. The recommended policy wordings will be agreed in the Memorandum of Understanding with Natural England.

Mitigation measures may be through provision of sufficient alternative semi-natural public open space in accordance with Policy MD2 on Sustainable Design) and/or contributions to visitor management measures at the RAMSAR sites in line with adopted Core Strategy Policies CS8, CS9, CS17 and any management or action plan for the designated site as well as the priorities set out in the Place Plans.

5.3.8 Summary

In summary, the SAMDev plan includes mechanisms for plan and project-level mitigation measures, which may include;

- Requiring mitigation measures to remove any adverse effect on integrity under Proposed Changes to Policy MD12;
- phasing development in the River Clun Catchment to allow time for infrastructure improvements to be put in place;
- increasing the amount of semi-natural open space to provide alternative informal recreation opportunities in line with Policy MD2;
- developer contributions towards remedial actions identified in the management or action plan for the designated site or in the Place Plan for the area, such as visitor management measures;
- water management measures in the SuDS handbook as set out in the Local Flood Risk Management Strategy
- implementing the highest standards of design as set out in the Sustainable Design SPD.

This HRA has identified sites which may be vulnerable to recreational impacts and in proximity to major residential development. These are three sites in North Shropshire. Although a pathway for impacts has been identified, the actual threat to designated features from recreation has not been quantified or raised by Natural England at the time of writing.

The Council and Natural England are undertaking visitor surveys in summer 2014. The Council will work with Natural England to determine what site

specific mitigation measures are appropriate in the light of the findings of this further research. If deemed necessary a Strategic Mitigation Plan will be developed and applied through the mechanisms set out in Core Strategy Policies CS8, CS9, CS17, Development Management Policies MD2 and MD12, the priorities in the Place Plans and updates of the Natura 2000 Site Management Plans. However the Plan and existing adopted policies provide the necessary mechanisms for achieving the necessary mitigation.

5.4 Findings of the HRA Assessment of Mineral Allocations

Appendix 6 contains the HRA of the Minerals Allocations. Out of the three mineral allocations considered in the Shropshire Council Habitats Regulations Assessment of Mineral Allocations for the plan period 2012 – 2026 Report (March 2014) it can be concluded that two will have no likely significant impact on any Natura 2000 site.

For the remaining mineral allocation effect pathways have been identified by which sand and gravel extraction might have the potential to impact upon Natura 2000 sites. Project specific, detailed mitigation measures and further hydrological investigations will be required and these have been discussed in the above document. Policies are in place in the SAMDev Plan to ensure that permission will not be granted unless details of mitigation measures to remove any adverse effect on Natura 2000 sites are submitted.

At the planning application stage the Wood Lane North extension (Ellesmere) will need to be subject to a full Appropriate Assessment under the Habitats Regulations Assessment process set out within the Conservation of Species and Habitats Regulations 2010 and to formal consultation with Natural England.

5. Conclusions

Screening Determination

With the counter-acting and mitigation measures within the Plan as set out in this HRA and the Statement of Common Ground with Natural England and the adopted Shropshire Core Strategy policies, the Council is confident that all Development Management policies and allocated sites will not have an impact on the integrity on any Natura 2000 Designated Site.

Appendix 5 gives the screening results for all Settlement Policies and site allocations and includes some additional sites not taken forward into the Final Plan.

This assessment uses existing information and is at a higher level than would be required for planning application proposals. A consequence is that it identifies more sites as being likely to have impacts on a Natura 2000 site, than subsequent assessments will, when details of specific proposals are known. It, therefore, represents a precautionary approach.

The main points to be drawn from the assessment are considered to be that:-

- None of the sites are within a Natura 2000 Wildlife Site, therefore, none of them would result in direct loss of habitat within one;
- Where it seems likely that development of a proposed site could affect a Natura 2000 Site counteracting measures within policies are been adopted
- The mitigation measures that could be required, to counteract the effects, would commonly be requirements of planning permissions, or of Environment Agency permits, for the developments that are proposed.
- No reasonable scientific doubt remains as to the absence of likely significant effects arising from the implementation of the SAMDev Plan.

Formal allocation within the Site Allocations and Management of Development DPD does not reflect a commitment from Shropshire Council to grant planning permission when a planning application is subsequently made. The National Planning Policy Framework paragraph 119 states that “the presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined.”

If it should not prove possible for the developer to show, to the satisfaction of Shropshire Council, Natural England and Natural Resources Wales and beyond reasonable scientific doubt, that the proposed development would not impact on the integrity of any Natura 2000 Designated Site then Shropshire Council would refuse to grant planning permission.

6. Consultation

Formal consultations were carried out on the Shropshire Core Strategy HRA. Natural England and Natural Resources Wales were consulted on this HRA report on the 20th February 2014. Natural England and the Environment Agency provided informal comments by email but no formal comments were submitted.

However Natural England and the Environment Agency provided consultation responses on the SAMDev Plan pre-submission draft in April 2014. Natural England's comments in relation to this HRA are summarised below:

MD5: Sites for sand and gravel working – Wood Lane North. Wording changes required to SAMDev Plan to reflect HRA.

S2 Bishop's Castle Area and S7.2(i) Aston on Clun and other settlements in Craven Arms area.

Consider Policy S2 is insufficiently detailed and therefore not effective. On these grounds they question its compliance with the Habitats Regulations. Policy steer on phasing needs to be stronger. If this level of detail cannot be included due to the stage of the Nutrient Management Plan work then SAMDev must set out when this information will become available and how it will be integrated into the plan.

For Policy S7.2(i) recommend further detail on what types of mitigation might be required and the phasing of development, which will improve compliance with the Habitats Regulations and assist developers. As above, SamDev must set out when information wil become available.

For S8 Ellesmere Area and S18 Whitchurch Area
Advise that HRA is most appropriately undertaken at the Plan stage. It will be necessary to assess the predicted increases in visitor numbers and their significance. If impacts are found to be significant then it is possible that a strategic solution required such as a country park and/or contribution to visitor management. The effectiveness of these mitigation options cannot be assessed until the scale and significance of increases in visitor number is understood.

They suggest greenspace may need to be above 30square metre baseline given the exceptional circumstance of needing to mitigate on Ramsar sites. It may be more appropriate and cost effective to consider the on-site mitigation techniques in further details.

S17 Wem Area
The wording changes in this HRA should be incorporated into the SAMDev plan.

7. References

The following documents have informed this report:

Article 6(3) and (4) of the European Communities (1992) Council Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora (*the Habitats Directive*)

Atkins for Natural England (September 2012) Implementing Diffuse Water Pollution Action Plans for Selected SSSIs of North Shropshire

David Tyldesley and Associates for Countryside Council for Wales. (2012) Draft Guidance for Plan Making Authorities in Wales, The Appraisal of Plans Under the Habitats Regulations for Countryside Council for Wales CCW Bangor

Defra (December 2012) *The Habitats and Wild Birds Directives in England and its seas. Core guidance for developers, regulators & land/marine managers* draft for public consultation

Department for Communities and Local Government (2012) *The National Planning Policy Framework*

Department for Communities and Local Government (DCLG, 2006): *Planning for the Protection of European Sites: Appropriate Assessment (Draft)*.

Environment Agency*, Water Framework Directive, Waterbody Review, Cole Mere*. (December 2012)

Environment Agency (2009) *River Basin Management Plan: Dee River Basin District*

Environment Agency (2013) H1 Air Emissions Consultation

European Commission (2001) *Assessment of plans and projects significantly affecting Natura 2000 sites*

Highways Agency*. The Design Manual for Roads and Bridges Vol 11*

Montgomery Canal Partnership (2005) *Montgomery Canal: A Conservation Management Strategy*

Natural England *HRA Guidance Note* (September 2011) – internal document and not published

Natural England (2010) '*Nature Nearby' Accessible Natural Greenspace Guidance*

Natural England, *Baysil Fen & Cole Mere End Carr, Shropshire*. (October 2010) produced by Ecology-first.

Natural England (2010) *Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SSSI & Fenn's, Whixall & Bettisfield Mosses NNR Management Plan*

Natural England (2014) *Brown Moss Conservation Objectives and definitions of Favourable Condition for designated features of interest (unpublished draft)*

Natural England comments on Site Allocations and Management of Development (SAMDev) Plan letter dated 28th April 2014

ODPM Circular 06/2005: (Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System)

Powys Council (2007) Unitary Development Plan Habitats Regulation Assessment

Scottish Natural Heritage (August 2012) *Habitats Regulation Appraisal of Plans*

Shropshire Hills AONB (2013) *Shropshire Hills and Ludlow Visitor Survey*
Shropshire Council Local Development Framework *Adopted Core Strategy* March 2011
Shropshire Council *South Shropshire AONB Management Plan 2014-19 final draft*
Shropshire Council *Brown Moss Management Plan 2007 – 2012 and 2014 – 2018 draft*
Shropshire Council *Cole Mere Management Plan 2008-2013*
Shropshire Council *Development within the River Clun Catchment* Interim Guidance Note 12, 2013
Shropshire Council (2010) *Outline Water Cycle Study Final Report*
Shropshire Council (2014*) Water Cycle Evidence for Shropshire Local Plan*

The Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") (SI No. 2010/490).

Therivel, R. (2009) 'Appropriate assessment of plans in England', Environmental Impact Assessment Review 29(4), pp. 261-272

White, J, Liley, D. & Underhill-Day, J. (2009). Cannock Chase Visitor Impact Mitigation Strategy. Footprint Ecology.

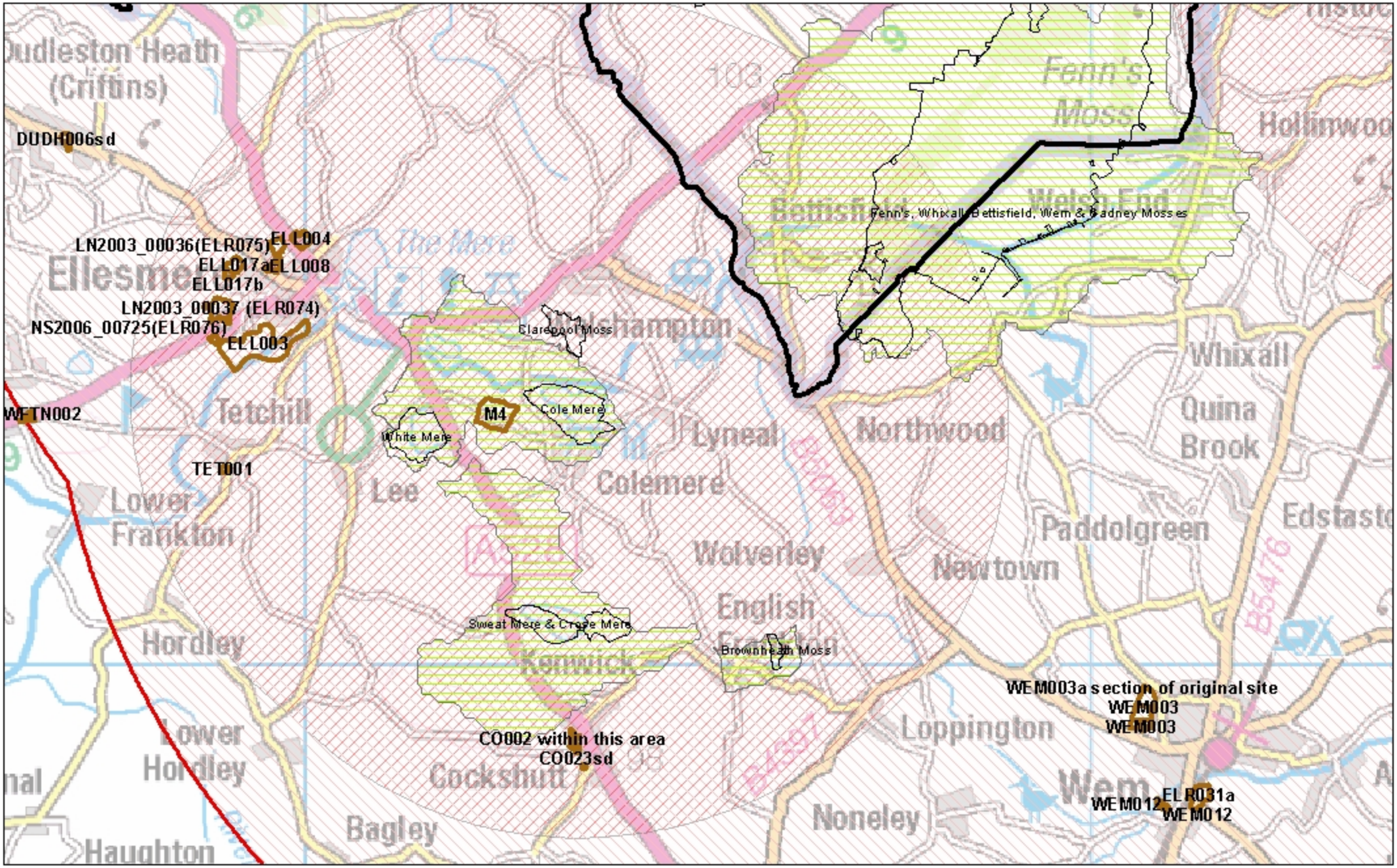
Previous Shropshire HRA documents

- Core Strategy Development Plan Document: Habitats Regulation Assessment, Screening Report (March 2009)
- Core Strategy Development Plan Document: Habitats Regulation Assessment, Stage 2 Report (February 2010)

- *Draft* Mineral Allocations for the plan period 2012-2026 HRA Stage 3 Report (Specific Sites) June 2011
- *Draft* Stage 3 Habitats Regulation Assessment Reports of potential allocations was prepared in October 2011 for the Site Allocations and Management of Development DPD
- SAMDev Draft Development Management Policies HRA January 2013
- SamDEv Pre-Submission Draft Habitats Regulation Assessment (draft March 2014)
- Habitats Regulations Assessment of Mineral Allocations for the plan period 2012 – 2026 Report (draft March 2014)

Abbreviations and definitions

EA Environment Agency
HRA Habitats Regulations Assessment
Natura 2000 Site – the Europe wide network of SPA's and SAC's
Ramsar – a site listed as a wetland of international importance under the provision of the Ramsar Convention. A Ramsar site is not a 'European site' as a matter of law but is given the same protection as SPA's and SAC's.
SAC Special Area of Conservation designated under the EC Habitats Directive.
SAMDev Site Allocations & Management of Development Plan
SPA Special Protection Area classified in accordance with Article 4 of the EC Birds Directive (1979)
SPD Supplementary Planning Document



Shropshire Council

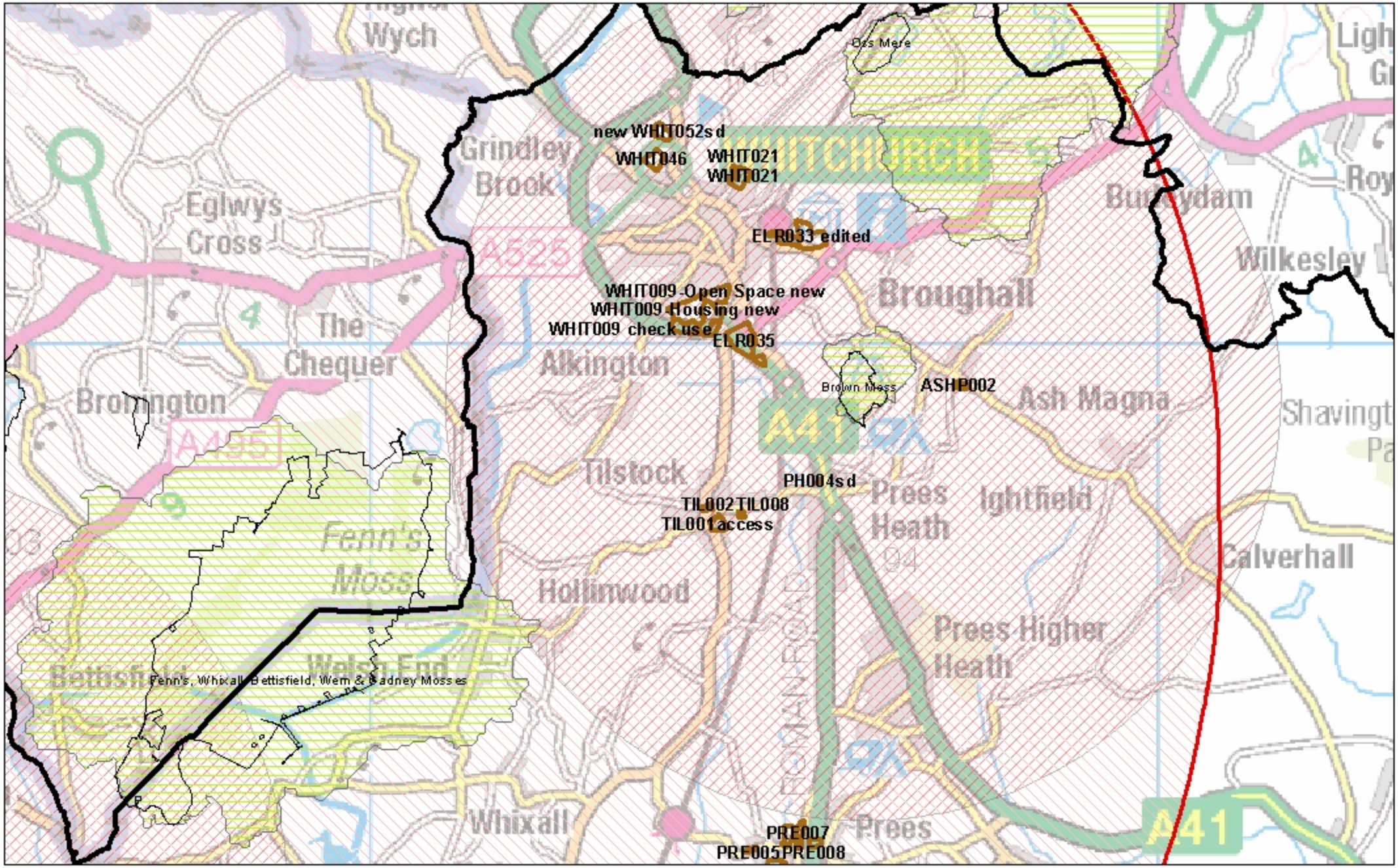
Map of species data at 100m or better resolution, & designated sites. Produced by Alison Slade

Development Services
The Shirehall, Abbey Foregate
Shrewsbury, Shropshire, SY2 6ND

Map 1 Ellesmere

Legend

- RAMSAR Sites Surface Water Catchment
- Brown Moss and Colemere SSSI 5km buffer
- Fenn's and Whixall SAC 10km buffer
- Site Allocations



Shropshire Council

Map of species data at 100m or better resolution, & designated sites.
Produced by Alison Slade

Development Services
The Shirehall, Abbey Foregate
Shrewsbury, Shropshire, SY2 6ND

Map 2 Whitchurch

Legend

- RAMSAR Sites Surface Water Catchment
- Brown Moss and Colemere SSSI 5km buffer
- Fenn's and Whixall SAC 10km buffer
- Site Allocations

Appendix 1: Natura 2000 Sites considered in this report

Site Name	County
Berwyn SPA	Wales
Berwyn and South Clwyd Mountain SAC	Wales
Brown Moss SAC	Shropshire
Cannock Chase SAC	Staffordshire
Downton Gorge SAC	Herefordshire
Elenydd SAC and Rhos Goch SAC	Wales
Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC	Shropshire / Wrexham
Granllyn SAC	Wales
Fens Pools SAC	Dudley
Johnstown newt sites SAC	Wales
Midland Meres & Mosses Ramsar – Phase 1	Shropshire / Clwyd / Cheshire / Staffordshire
Midland Meres & Mosses Ramsar – Phase 2	Shropshire / Clwyd / Cheshire / Staffordshire
Montomery Canal SAC	Powys
Mottey Meadows SAC	Staffordshire
Rhos Goch SAC	Powys
River Clun SAC	Herefordshire
River Dee & Bala Lake SAC	Shropshire / Cheshire / Denbighshire / Gwynedd / Flintshire / Wrexham
River Severn SAC/SPA/Ramsar	Gloucestershire/Avon
River Wye SAC	Monmouthshire / Gloucestershire / Herefordshire / Powys
Tanat & Vrynwy Bat Sites SAC	Denbighshire / Powys
The Stiperstones & the Hollies SAC	Shropshire
West Midlands Mosses SAC	Shropshire / Cheshire / Staffordshire

Site Tables for Natura 2000 Sites

The following tables provide detailed information on selected Natura 2000 Site within a 10km buffer of housing and employment allocations including: site name, location, conservation objectives (where known), site vulnerabilities and reasons for designation.

Information has been sourced from the Joint Nature Conservation Committee (JNCC) website, Natural England (NE) and Natural Resources Wales websites and through direct enquiries.

Table 1: Brown Moss

Site Name: Brown Moss SAC, SJ561394, Shropshire, England.
Site Description: Brown Moss (32.02ha) is a series of pools set in heathland and woodland. The site is of special importance for the marsh, swamp and fen communities associated with the pools which occupy hollows in the sand and gravel substrate.
Conservation Objectives for SAC: Avoid the deterioration of the woodland and pools of *Luronium natans*, and the significant disturbance of those *Luronium natans*, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of *Luronium natans*; The structure and function (including typical species) of former heathland, now largely woodland with shallow pools and habitat of *Luronium natans*; The supporting processes on which pools of *Luronium natans* rely; The populations of *Luronium natans*; The distribution of *Luronium natans* within the site.
Definition of Favourable Condition for Brown Moss SSSI: Subject to natural change, to maintain, in favourable condition, the habitat for the internationally important population of Floating Water Plantain (*Luronium natans*), with

Site Name: Brown Moss SAC, SJ561394, Shropshire, England.	
particular reference to the standing open water. (Maintenance implies restoration if the feature is not currently in favourable condition).	
Site Vulnerability: Colonisation by trees is being addressed but continues to be of concern due to the shading, nutrient and hydrological effects on the open water and heathland. The presence of *Crassula helmsii* is a threat to *Luronium natans* and various control mechanisms are being explored.	
Reason for Designation	**Environmental Conditions Needed to Support Site Integrity**
Annex II Species that are a primary reason for selection of site: Floating Water Plantain *Luronium natans.*	Sensitive to tree colonisation. Shading, nutrient and hydrological impacts on open water & heathland. Threat from changes in grazing regime.

(Defra website shows form still valid)

Table 2: Downton Gorge

Site Name: Downton Gorge SAC, SO443743, Herefordshire, England.
Site Description: Downton Gorge (69.3ha) lies on a stretch of the River Teme, it is an example of ancient semi-natural woodland with steep ravines and dingles occurring in side valleys. The site includes several nationally scarce types of woodland and is important for a range of species including ferns.
Conservation Objectives for SAC: Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore:

Site Name: Downton Gorge SAC, SO443743, Herefordshire, England.	
□ The extent and distribution of qualifying natural habitats and habitats of qualifying species; □ The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; □ The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; □ The populations of qualifying species; □ The distribution of qualifying species within the site. Qualifying features H9180. *Tilio-Acerion* forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes	
Definition of Favourable Condition for Downton Gorge SSSI: To maintain, in favourable condition, the *Tilio-Acerion* ravine forest. (Maintenance implies restoration if the feature is not currently in favourable condition).	
Site Vulnerability: The site is potentially vulnerable to the effects of air- and water-borne pollution, particularly in respect of its significant lichenological interest. However these effects are not related to the management of the site.	
Reason for Designation	**Environmental Conditions Needed to Support Site Integrity**
Annex I Habitats that are a primary reason for selection of site: *Tilio-Acerion* forests of slopes, screes and ravines.	Monitoring and control of air and water borne pollution.

Table 3: Fenn`s, Whixall, Bettisfield, Wem and Cadney Mosses

Site Name: Fenn`s, Whixall, Bettisfield, Wem and Cadney Mosses SAC, SJ487364, Shropshire / Wrexham, England / Wales.
Site Description: Fenn`s, Whixall, Bettisfield, Wem and Cadney Mosses (949.2ha) together form an outstanding example of lowland raised mire. The site as a whole supports a wide range of characteristic acid peat bog vegetation including

Site Name: Fenn`s, Whixall, Bettisfield, Wem and Cadney Mosses SAC, SJ487364, Shropshire / Wrexham, England / Wales.
thirteen species of *Sphagnum* moss, which represent successional stages in the development of a raised mire.
Conservation Objectives for SAC: Avoid the deterioration of the active raised bogs and the degraded raised bogs still capable of natural regeneration; degraded raised bog, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of active raised bogs and the degraded raised bogs still capable of natural regeneration; degraded raised bog; The structure and function (including typical species) of active raised bogs and the degraded raised bogs still capable of natural regeneration; degraded raised bog; The supporting processes on active raised bogs and the degraded raised bogs still capable of natural regeneration; degraded raised bog, rely;
Definition of Favourable Condition for Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SSSI: To maintain, in favourable condition, the active raised bogs and degraded raised bogs still capable of natural regeneration on the site.
Site Vulnerability: The lowland raised mire is dependent upon high water levels and a continuation of active peat-forming processes. Much of the site is subject to mineral planning consents for peat extractions which are currently being reviewed. The site has a history of peat-cutting and until recently, part of the site has been subject to large-scale commercial extraction, involving drainage over much of the peat body. Afforestation and agricultural improvement on marginal areas of the peat body have accelerated the lowering of water levels, resulting in encroachment by scrub and a decline in the extent of peat-forming communities. A greater part of the site is now owned, leased or managed under agreement by conservation organisations. Within these

Site Name: Fenn`s, Whixall, Bettisfield, Wem and Cadney Mosses SAC, SJ487364, Shropshire / Wrexham, England / Wales.	
areas, mire rehabilitation management is taking place under the guidance of a management plan. It is intended to seek to increase the areas under positive conservation management by implementation of the joint Countryside Council for Wales/English Nature acquisition strategy.	
Reason for Designation	**Environmental Conditions Needed to Support Site Integrity**
Annex I Habitats that are a primary reason for selection of site: Active raised bog.	Maintenance of high water levels.
Annex I Habitats present as a qualifying feature but not a primary reason for selection of site: Degraded raised bogs still capable of natural regeneration.	Sensitive to afforestation and changing agricultural practices.

Table 4: Montgomery Canal

Site Name: Montgomery Canal SAC, SJ220058, Powys, Wales
Site Description: The Montgomery Canal is a partially restored but largely unused waterway. It runs for approximately 36 kilometres from near berbechan (three kilometres north-east of Newtown) to the English border at Llanymynech. It also has a small number of linked off-line reserves (kept as small individual management units); these were created to protect examples of the habitats and species found in the canal when restoration of the canal was started in the 1970s. It supports the largest, most extensive population of floating water-plantain *Luronium natans* in lowland Britain. This is a semi-natural population, having colonised from drift material or seed but needing periodic human disturbance for continued growth; in this respect the canal is a substitute for the species' former slow-moving, mesotrophic river niche, which has been largely destroyed in lowland Britain.

Site Name: Montgomery Canal SAC, SJ220058, Powys, Wales
The floating water-plantain is just one of a number of species of submerged, floating and marginal plant species that make up the canal habitat SSSI feature. This habitat is distributed along the entire length of the canal within the SSSI; the interest and quality varies from species-poor to species rich, depending a number of factors, including water depth and management frequency.
Conservation Objectives for SAC: The vision for this feature is to maintain the extent and distribution of *L. natans* within the Montgomery Canal at favourable conservation status, where all of the following conditions are satisfied: 1. The *L. natans* population in favourable condition will reflect the natural carrying capacity of the canal habitat and will be limited principally by species ability to spread or be relocated (vegetative or otherwise), the suitability of the rooting medium and competition between species as part of habitat succession. 2. Recreation pressure, principally through boat movements and fisheries management, will not significantly affect the maintenance of the species, or its ability to disperse throughout the canal network and any associated off-line reserves. 3. The ecological status of the water environment, including elements of water quality and physical habitat quality, will be sufficient to support the population of *L. natans* in favourable condition. 4. All factors affecting the achievement of the above conditions are under control.
Site Vulnerability: Enrichment through agricultural or domestic nutrient inputs is a likely threat as this could affect the populations of floating water-plantain. Several sections of canal currently suffer from lack of management. CCW will liase with owners and occupiers to achieve an appropriately scaled and timed management. To ensure that bank protection and other engineering works are undertaken in a sensitive manner, CCW will liase with competent and relevant authorities to agree on appropriate methods and practices. For example, the mowing of terrestrial and marginal vegetation would not harm aquatic plants but herbicide run-off from the towpath could be a problem. The effects of boat traffic on populations of floating water-plantain are uncertain and are being investigated by British Waterways. It is certain that the species will be detrimentally affected above a certain point as the actions of propeller/wash will detach floating leaves and create turbidity which will reduce light transfer to submerged leaves. The population of floating water-plantain is vulnerable to colonisation by aggressive species which can have an impact on

Site Name: Montgomery Canal SAC, SJ220058, Powys, Wales	
the canal's ecology, through blanket coverage of the canal channel and increased nutrient input because of a large leaf biomass. The introduction of certain fish species could also damage aquatic plant populations.	
Reason for Designation	**Environmental Conditions Needed to Support Site Integrity**
Annex II species that are a primary reason for selection of this site: Floating Water Plantain *Luronium natans.*	Dredging to prevent siltation. Maintenance of water quality.

Table 5: River Clun

Site Name: River Clun SAC, SO393754, Herefordshire, Shropshire, England.
Site Description: River Clun (14.93ha) supports a significant population of Freshwater Pearl Mussel *Margaritifera margaritifera.*
Conservation Objectives for SAC: Avoid the deterioration of the freshwater river containing *Margaritifera margaritifera;*, and the significant disturbance of those *Margaritifera margaritifera;*, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: □ The extent and distribution of *Margaritifera margaritifera*; □ The structure and function (including typical species) of freshwater river and habitat of *Margaritifera margaritifera;* □ The supporting processes on which rivers of *Margaritifera margaritifera* rely; □ The populations of *Margaritifera margaritifera;* □ The distribution of *Margaritifera margaritifera* within the site.

Site Name: River Clun SAC, SO393754, Herefordshire, Shropshire, England.	
Definition of Favourable Condition for River Teme SSSI which contains the River Clun SAC: To maintain, in favourable condition, the habitats for the population of Pearl Mussel (*Margaritifera margaritifera)*. (Maintenance implies restoration if the feature is not currently in favourable condition).	
Site Vulnerability: *Margaritifera margaritifera* is dependent on low sediment and nitrate levels, fast flows of cool water and clean gravels. It is also relies on the presence of trout for part of its breeding cycle. Intensification of agriculture across the catchment is a significant threat to the long-term survival of the isolated population at this site i.e. enhanced sedimentation through poor agricultural practice leading to smothering of adult and juvenile mussels; eutrophication of waters through fertiliser run-off from adjacent land. In addition upstream domestic sewage treatment works are believed to give a significant nutrient loading. Recent increase in the occurrence of alder disease also poses a risk through loss of shading bankside tree cover. Some of these issues will be addressed by revised authorisation, Review of Consents /AMP 4 processes. Sustainable agricultural management is being promoted via production of Whole Farm Plans, Environmentally Sensitive Area Agreements and Countryside Stewardship Agreements for landowners within the catchment.	
Reason for Designation	**Environmental Conditions Needed to Support Site Integrity**
Annex II Species that are a primary reason for selection of site: Freshwater pearl mussel *Margaritifera margaritifera*	Maintain good water quality (limit pollution and sedimentation, particularly from agricultural run off). Maintain salmonid populations. Maintain riparian vegetation.

Table 6: River Dee and Bala Lake (England)

Site Name: River Dee and Bala Lake SAC, SJ423503, Cheshire / Denbighshire / Gwynedd / Shropshire / Flintshire / Wrexham, England / Wales.
Site Description: River Dee and Bala Lake (1308.92) is an important example in England of water courses of plain to montane levels with *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation. It supports populations of Sea Lamprey and Floating Water Plantain which are important in England and significant populations of several fish species and otter *Lutra lutra*.
Conservation Objectives for SAC: Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: □ The extent and distribution of qualifying natural habitats and habitats of qualifying species; □ The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; □ The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; □ The populations of qualifying species; □ The distribution of qualifying species within the site. **Qualifying Features:** H3260. Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation; Rivers with floating vegetation often dominated by water-crowfoot S1095*. Petromyzon marinus*; Sea lamprey S1096*. Lampetra planeri*; Brook lamprey S1099*. Lampetra fluviatilis*; River lamprey S1106*. Salmo salar*; Atlantic salmon S1163*. Cottus gobio*; Bullhead S1355*. Lutra lutra*; Otter S1831*. Luronium natans*; Floating water-plantain

Site Name: River Dee and Bala Lake SAC, SJ423503, Cheshire / Denbighshire / Gwynedd / Shropshire / Flintshire / Wrexham, England / Wales.

Definition of Favourable Condition for River Dee and Bala Lake SSSI: Maintain in a favourable condition the water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho- Batrachion* vegetation. Maintain, in favourable condition, habitats for the populations of Atlantic salmon, bullhead, brook lamprey, river lamprey, sea lamprey, otter and floating water-plantain.

Site Vulnerability: The habitats and species for which the site is designated are dependent on the maintenance of good water quality and suitable flow conditions. Fish species require suitable in-stream habitat and an unobstructed migration route. Otters also require suitable terrestrial habitat to provide cover and adequate populations of prey species.

The site and its features are threatened by practices which have an adverse effect on the quality, quantity and pattern of water flows. In particular the following may threaten riverine ecosystems: inappropriate flow regulation; excessive abstraction (for industry, agriculture and domestic purposes); threats to water quality from direct and diffuse pollution; eutrophication and siltation. Degradation of riparian habitats due to engineering works, agricultural practices and invasive plant species may also have an adverse effect. The Atlantic salmon population is threatened by excessive exploitation by high sea, estuarine and recreational fisheries. Introduction of non-indigenous species could also threaten both fish and plant species.

These issues are being addressed by a variety of statutory bodies that are in a position to overcome these threats through regulatory powers and partnerships with landowners, industry and other interested parties.

Reason for Designation	**Environmental Conditions Needed to Support Site Integrity**
Annex I Habitats that are a primary reason for selection of site: Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation.	Maintenance of water quality. Maintenance of flow. Resist degradation of riparian habitats.
Annex II Species that are a primary reason for selection of site: Atlantic salmon *Salmo salar,* Floating Water	Control salmon exploitation at sea. Resist invasive species.

Site Name: River Dee and Bala Lake SAC, SJ423503, Cheshire / Denbighshire / Gwynedd / Shropshire / Flintshire / Wrexham, England / Wales.	
Plantain *Luronium natans.*	
Annex II Species present as a qualifying feature but not a primary reason for selection of site: Sea lamprey *Petromyzon marinus,* Brook lamprey *Lampetra planeri,* River lamprey *Lampetra fluviatilis,* Bullhead *Cottus gobio,* Otter *Lutra lutra.*	Avoid excessive water extraction (industry, domestic, agriculture).

Table 7: River Dee and Bala Lake (Wales)

Site Name: River Dee and Bala Lake SAC, SH887311 to SJ287710, Cheshire / Denbighshire/ Gwynedd/ Shropshire/ Flintshire/ Wrexham, England/ Wales.
Site Description: The source of the River Dee lies within the Snowdonia National Park and its catchment contains a wide spectrum of landscapes from high mountains around Bala, steep-sided wooded valleys, near Llangollen, to the rich agricultural plains of Cheshire and north Shropshire and the vast mudflats of the estuary. The course and topography of the River Dee and its tributaries were strongly influenced and modified during the last Ice Age. The underlying geology of the Dee ranges from impermeable Cambrian and Ordovician shales in the west, through Silurian to Carboniferous Limestone outcrop at Llangollen to Coal Measures and thick boulder clay overlying the Triassic sandstones of the Lower Dee valley. The site extends from the western extremity of Llyn Tegid taking in the entire lake and its banks to its outfall into the River Dee. It then takes in the river and its banks downstream to where it joins the Dee Estuary SSSI. A number of the Dee's tributaries are also included, these being the Ceiriog, Meloch, Tryweryn, and Mynach. In its swifter upper reaches, the Dee flows through the broad valley near Corwen, and the spectacular Vale of Llangollen before entering the Cheshire plain at Erbistock where it meanders northwards through the Cheshire plain to Chester.

Site Name: River Dee and Bala Lake SAC, SH887311 to SJ287710, Cheshire / Denbighshire/ Gwynedd/ Shropshire/ Flintshire/ Wrexham, England/ Wales.

Llyn Tegid, the Tryweryn and the Dee form part of the River Dee Regulation System. The flow of water is controlled by Environment Agency Wales (EAW), primarily in order to minimise flooding and for the transportation of water to abstraction points down stream. The level of control is such that the Dee itself is said to be the most regulated river in Europe.

Parts of the Rivers Dee and Ceiriog lie within both Wales and England. They have therefore been notified as two separate SSSIs – the Afon Dyfrdwy (River Dee) SSSI in Wales and the River Dee (England) SSSI in England. However, the features for which the SSSIs are notified, in particular migratory fish, depend upon the whole river ecosystem.

Conservation Objectives for SAC:

Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho- Batrachion* vegetation

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. The extent of this feature within its potential range in this SAC should be stable or increasing
2. The extent of the sub-communities that are represented within this feature should be stable or increasing.
3. The conservation status of the feature's typical species should be favourable.
4. All known, controllable factors, affecting the achievement of these conditions are under control (many factors may be unknown or beyond human control).

Atlantic Salmon The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. The SAC feature populations will be stable or increasing over the long term.
2. The natural range of the features in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future.
3. There will be no reduction in the area or quality of habitat for the feature populations in the SAC on a long-term basis
4. All known, controllable factors, affecting the achievement of these conditions are under control (many factors may be unknown or beyond human control).

Site Name: River Dee and Bala Lake SAC, SH887311 to SJ287710, Cheshire / Denbighshire/ Gwynedd/ Shropshire/ Flintshire/ Wrexham, England/ Wales.

Floating Water Plantain The vision for this feature is for it be in favourable conservation status, where all of the following conditions are satisfied:
1. There will be no contraction of the current *L. natans* extent and distribution, and the populations will be viable throughout their current distribution & will be able to maintain themselves on a long-term basis. Each *L. natans* population must be able to complete sexual and/or vegetative reproduction successfully.
2. The lake will have sufficient habitat to support existing *L. natans* populations within their current distribution and for future expansion.
3. All factors affecting the achievement of these conditions are under control.

Sea Lamprey, River Lamprey, Brook Lamprey The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:
1. The SAC feature populations will be stable or increasing over the long term.
2. The natural range of the features in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future.
3. There will be no reduction in the area or quality of habitat for the feature populations in the SAC on a long-term basis
4. All factors affecting the achievement of these conditions are under control.

Bullhead The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:
1. The SAC feature populations will be stable or increasing over the long term.
2. The natural range of the features in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future.
3. There will be no reduction in the area or quality of habitat for the feature populations in the SAC on a long-term basis
4. All factors affecting the achievement of these conditions are under control

European Otter The vision for this feature is for it to be in a favourable conservation status.

Site Name: River Dee and Bala Lake SAC, SH887311 to SJ287710, Cheshire / Denbighshire/ Gwynedd/ Shropshire/ Flintshire/ Wrexham, England/ Wales.
The lake and aquatic /emergent vegetation and Lake fen/swamp inc. wet woodland 1. The total extent of the lake area, including lake fen and swamp shall be maintained as indicated on map in Annex 1**,** this includes some 10 ha of swamp/fen in total; of which at least 6 ha is attributable to NVC S11 *Carex vesicaria* swamp community. 2. The abundance and distribution of rare aquatic and emergent species will be maintained or increased and continue to be self-sustaining. 3. The abundance and distribution of typical species of aquatic /emergent species will be common and continue to be self-sustaining. 4. The distribution fen / swamp and wet woodland shall be as indicated on map in Annex 1, or more extensive. 5. The fen and swamp layers comprises locally native species, see Tables 2 for the relevant species for each vegetation community. The abundance of typical species of each fen and swamp type will be common. 6. The abundance and distribution of uncommon / rare plants occurring within each fen and swamp vegetation community will be maintained or increased and continue to be self-sustaining. 7. Invasive non-native species such as rhododendron, Japanese knotweed, Canadian pondweed and Himalayan balsam will not be present. This condition is considered under “factors”. 8. Water quality in the lake should be of a standard that will ensure it reaches at Good Ecological Status or better as defined by the Water Framework Directive, and that the River Dee at Llandderfel Bridge reaches its targets of Biological GQA class A and chemical quality standard of RE1. Eutrophication of the lake from diffuse and point source pollution will be under control and incidences of blue/green algal blooms will have stopped. The nutrient levels in the lake will be much lower and similar to the levels inferred from the diatom assemblages for the lake prior to 1925. 9. All factors affecting the achievement of these conditions are under control.
Site Vulnerability: The habitats and species for which the site is designated are dependent on the maintenance of good water quality and suitable flow conditions. Fish species require suitable in-stream habitat and an unobstructed migration route. Otters also require suitable terrestrial habitat to provide cover and adequate populations of prey species. The site and its features are threatened by practices which have an adverse effect on the quality, quantity and pattern of water flows. In particular the following may threaten riverine ecosystems: inappropriate flow regulation; excessive abstraction (for industry, agriculture and domestic purposes); threats to water quality from direct and diffuse pollution;

Site Name: River Dee and Bala Lake SAC, SH887311 to SJ287710, Cheshire / Denbighshire/ Gwynedd/ Shropshire/ Flintshire/ Wrexham, England/ Wales.	
eutrophication and siltation. Degradation of riparian habitats due to engineering works, agricultural practices and invasive plant species may also have an adverse effect. The Atlantic salmon population is threatened by excessive exploitation by high sea, estuarine and recreational fisheries. Introduction of non-indigenous species could also threaten both fish and plant species. These issues are being addressed by a variety of statutory bodies that are in a position to overcome these threats through regulatory powers and partnerships with landowners, industry and other interested parties.	
Reason for Designation	**Environmental Conditions Needed to Support Site Integrity**
Annex I Habitats that are a primary reason for selection of site: Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation	Maintenance of water quality. Maintenance of flow. Resist degradation of riparian habitats.
Annex II Species that are a primary reason for selection of site: Atlantic salmon *Salmo salar,* Floating Water Plantain *Luronium natans.*	Control salmon exploitation at sea. Resist invasive species.
Annex II Species present as a qualifying feature but not a primary reason for selection of site: Sea lamprey *Petromyzon marinus,* Brook lamprey *Lampetra planeri,* River lamprey *Lampetra fluviatilis,* Bullhead *Cottus gobio,* Otter *Lutra lutra.*	Avoid excessive water extraction (industry, domestic, agriculture).

Table 9: Tanat & Vrynwy Bat Sites

Site Name: Tanat & Vrynwy Bat Sites SAC, SJ171152, SJ177181, SJ164236, SJ187234, SJ109237, SJ048258, Powys, Wales.
Site Description: The site consists of six separate SSSI divided into ten management units, all situated within the northeastern part of ontgomeryshire. The greatest distance between any two sites is less than 20 kilometres. Two of the SSSI contain buildings that house maternity roosts (Bryngwyn and Hendre), whilst the other four are disused mines containing hibernation roosts. Five of the sites (the exception being Bryngwyn) also contain a small amount of associated habitat, in the form of broadleaved woodland or hedgerows. Other roosts of both types are known both within this locality and further south within Montgomeryshire. It is not known how the different sites relate to one another in terms of the seasonal movements of the bats, and so no judgement can be made as to whether they support one meta-population or several smaller populations. The numbers of bats at all the sites varies significantly from year to year, but at the time of writing Hendre contained the largest number of breeding bats (2nd largest in Montgomeryshire, in top ten in Wales) and Allt-y-Main Mine the largest hibernating group (2nd largest in Montgomeryshire, probably in top twelve in Wales). The overall population, as judged by annual counts, has shown an increase in recent years, consistent with the national trend, and the SAC is thought to support at least 4% of the UK population of this species. Numbers have not been increasing at all of the individual sites however. Bryngwyn suffered a major reduction for unknown reasons in between 1999 and 2003, from which it appears to be slowly recovering. Garth-eryr suddenly lost virtually all its bats between 1997 and 2002 (reasons again unknown), and yet the nearest maternity roost (Hendre) has increased its numbers. It appears that either the Hendre bats are now hibernating elsewhere, or the Garth-eryr bats were from an unknown maternity roost that may since been lost.
Conservation Objectives for SAC: There is only one feature for the site, and so the vision for this feature is the same as that for the site (please refer to section 1). It is required that the feature be in a favourable conservation status, where all of the conditions set out in the Performance Indicators table (below) are satisfied, and all factors affecting the achievement of these conditions are under control. The two maternity roosts contain a minimum of 300 adult Lesser Horseshoe Bats in total every year, with at least 200 at Hendre Cottage and at least 100 at Bryngwyn Hall Stables and Coach House. The buildings are maintained in a suitable condition for use by the bats, to ensure that the roofs are in good repair, not heavily shaded by surrounding trees, and the

<table>
<tr><td colspan="2">Site Name: Tanat & Vrynwy Bat Sites SAC, SJ171152, SJ177181, SJ164236, SJ187234, SJ109237, SJ048258, Powys, Wales.</td></tr>
<tr><td colspan="2">roof space is undisturbed (except in emergencies).

Access for the bats to and from the buildings and roof spaces is unhindered and flight paths along surrounding hedgerows and woodland edges are protected. All other factors that affect the species are under control.

The four hibernation roosts contain a minimum of 200 Lesser Horseshoe Bats in total every year, with at least 50 in each of Allt-y-main Mine and Penygarnedd Mine; and evidence of continued use of West Llangynog Slate Mine and Garth-eryr. All four sites are maintained in a suitable condition for use by the bats, by ensuring that they remain undisturbed (except for monitoring purposes), and that the entrance is free from obstruction. The extent, quality and connectivity of broadleaved woodland habitat is also maintained and may be enhanced if possible. All other factors that affect the species are under control.</td></tr>
<tr><td colspan="2">Site Vulnerability: Full protection of bat species depends upon no disturbance to both summer (breeding) and winter (hibernating) roosts and continuity of invertebrate food supply by appropriate traditional land management, for example, maintenance of continuous hedgerows.

The winter roosts (hibernacula) are not vulnerable as all mine entrances are now securely grilled and the underground workings are considered to be stable. The bats which use two of the four mines may be vulnerable because the associated breeding roosts are not known. The two known breeding roosts are potentially vulnerable to accidental fire, and casual or deliberate human disturbance, for example blocking of entrances. All roost sites are the subject of a programme of monitoring visits to check site integrity and count the numbers of bats. The quality of surrounding feeding habitats is maintained through land management agreements with owners/occupiers.</td></tr>
<tr><td>Reason for Designation</td><td>Environmental Conditions Needed to Support Site Integrity</td></tr>
<tr><td>Annex I species that are a primary reason for selection of this site: Lesser Horseshoe Bat Rhinolophus hipposideros.</td><td>Identification of unknown summer roost sites
Ongoing protection of know summer roost sites</td></tr>
</table>

Table 10: The Stiperstones and the Hollies

Site Name: The Stiperstones and the Hollies SAC, SJ375006, Shropshire, England.
Site Description: The Stiperstones and the Hollies (601.46ha) represents a Nationally important area of dry heath and also hosts a significant presence of sessile oak woodlands with *Ilex* and *Blechnum.*
Conservation Objectives for SAC: Subject to natural change, to maintain in favourable condition the dry heath communities with particular reference to the internationally important heathland communities (H8: *Calluna vulgaris-ulex hallii* heath, H10: *Calluna vulgaris – Eric cinerea* heath, H12: *Calluna vulgaris – Vaccinium myrtillus* heath, H18: *Vaccinium myrtillus – Deschampsia flexuosa* heath). Avoid the deterioration of the European dry heaths and the old sessile oak woods with *Ilex* and *Blechnum*; (Western acidic oak woodland), ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.   The extent and distribution of European dry heaths and Western acidic oak woodland with *Ilex* and *Blechnum*; The structure and function (including typical species) of European dry heaths and Western acidic oak woodland with *Ilex* and *Blechnum*; The supporting processes on which European dry heaths and Western acidic oak woodland with *Ilex* and *Blechnum* rely;
Site Vulnerability: The heathland is dependent on the continuation of traditional heather moorland management with rotational burning or cutting supplemented by light grazing. In the recent past, lack of management on parts of the site has resulted in scrub encroachment, and on other parts high stocking levels has caused overgrazing and a deterioration of the heathland interest. These issues are being addressed by an effective management programme on that part of the site which is managed as a National Nature Reserve and, on land in private ownership, by management agreements and ESA payments. The sessile oak woods have been traditionally managed either as high forest or as oak coppice. Neglect and grazing of coppiced woods in the past has led to deterioration in the woodland interest. Traditional management of these woods has

Site Name: The Stiperstones and the Hollies SAC, SJ375006, Shropshire, England.	
been reinstated by effective management of the National Nature Reserve and by agreement of a site management statement with woodlands in private ownership.	
Reason for Designation	**Environmental Conditions Needed to Support Site Integrity**
Annex I Habitats that are a primary reason for selection of site: European dry heaths.	Control of afforestation. Control of grazing pressure.
Annex I Habitats present as a qualifying feature but not a primary reason for selection of site: Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles.	Maintain appropriate woodland management.

Table 11: West Midland Mosses – only site in Shropshire is Cop Mere

Site Name: West Midland Mosses SAC, SK026282, Cheshire / Shropshire / Staffordshire, England.
Site Description: West Midland Mosses (184.18ha) is a collection of sites which between them represent nationally important dystrophic water bodies, transition mires and quaking bogs.
Conservation Objectives for SAC: Avoid the deterioration of the natural dystrophic lakes and ponds and transition mires and quaking bogs, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: □ The extent and distribution of natural dystrophic lakes and ponds and transition mires and quaking bogs; □ The structure and function (including typical species) of natural dystrophic lakes and ponds and transition mires and quaking bogs; □ The supporting processes on which natural dystrophic lakes and ponds and transition mires and quaking bogs rely;

Site Name: West Midland Mosses SAC, SK026282, Cheshire / Shropshire / Staffordshire, England.	
Site Vulnerability: Colonisation of open schwingmoors or *Sphagnum* lawns and rafts in the West Midland Mosses by birch and pine is controlled by works under Management Agreement or by National Nature Reserve management. Several sources of nutrient enrichment, including atmospheric deposition of nutrients, pose a potential threat at these sites.	
Reason for Designation	**Environmental Conditions Needed to Support Site Integrity**
Annex I Habitats that are a primary reason for selection of site: Natural dystrophic lakes and ponds, Transition mires and quaking bogs	Control of afforestation. Control of nutrient input. Control of recreational disturbance.

Table 12: Midland Meres and Mosses (Ramsar Phase 1) – Also see Appendix 5

Site Name: Midland Meres and Mosses (Ramsar phase 1), Shropshire/ Clwyd/ Cheshire/ Staffordshire, England.
Site Description: Phase 1 of the Ramsar designation covers 513.25ha and is entirely co-incident with the following 16 Sites of Special Scientific Interest (SSSI). These are Bagmere, Berrington Pool, Betley Mere, Bomere, Shomere & Betton Pools, Brown Moss, Chartley Moss, Clarepool Moss, Fenemere, Flaxmere, Hatchmere, Marton Pool (Chirbury), Quoisley Mere, Tatton Mere, The Mere (Mere), White Mere and Wynbunbury Moss SSSI's.
Conservation Objectives: Ramsar criterion – peatland. The conservation objectives for the site are to maintain in favourable condition: • the habitat types for which the site is designated.
Site Vulnerability: Invasive species: considered a major impact on this site. Water quality: eutrophication is considered a major impact on this site. Recreational pressure and disturbance: in line with other bog and mire habitats, trampling and erosion are likely to be a significant issue where public access occurs. Water quality: declines in water quality through nutrient enrichment and sediment. Land use in surrounding areas: agricultural practices and urban runoff are likely to affect the scattered sites through nutrient enrichment and sedimentation.

Site Name: Midland Meres and Mosses (Ramsar phase 1), Shropshire/ Clwyd/ Cheshire/ Staffordshire, England.	
Reasons for Designation:	**Environmental Conditions Needed to Support Site Integrity**
Criterion 1a. A particularly good example of a natural or near natural wetland, characteristic of this biogeographical region, The site comprises the full range of habitats from open water to raised bog.	Environmental Conditions needed to support site integrity will need to be considered at the full Appropriate Assessment stage since this range of sites is varied and needs consideration in relation to specific plans and policies.
Criterion 2a. Supports a number of rare species of plans associated with wetlands. The site contains the nationally scarce six-stamened waterwort *Elatine hexandra,* needle spike-rush *Eleocharis acicularis*, cowbane *Cicuta virosa*, marsh fern *Thelypteris palustris* and elongated sedge *Carex elongate.*	
Criterion 2a. Contains an assemblage of invertebrates, including the following rare wetland species. 3 species considered to be endangered in Britain, the caddis fly *Hagenella clathrata*, the fly *Limnophila fasciata* and the spider *Cararita limnaea*. Other wetland Red Data Book species are; the beetles *Lathrobium rufipenne* and *Donacia aquatica*, the flies *Prionocera pubescens* and *Gonomyia abbreviata* and the spider *Sitticus floricola*.	

NB. Of the SSSI in the Ramsar phase 1 designation the following considered in this screening document: Berrington Pool, Brown Moss, Bomere, Shomere & Betton Pools, Clarepool Moss, Fenemere, Marton Pool (Chirbury), White Mere, Quoisley Mere, Wynbunbury Moss.

Table 13: Midland Meres and Mosses (Ramsar Phase 2) – Also see Appendix 5.

<table>
<tr><td colspan="2">Site Name: Midland Meres and Mosses (Ramsar phase 2), Shropshire/ Clwyd/ Cheshire/ Staffordshire, England.</td></tr>
<tr><td colspan="2">Site Description: Phase 2 of the Ramsar sites covers 1740.3ha and is entirely co-incident with the following 19 Sites of Special Scientific Interest (SSSI). These are: Abbots Moss, Aqualate Mere, Black Firs & Cranberry Bog, Brownheath Moss, Chapel Mere, Cole Mere, Cop Mere, Fenn’s, Whixall, Bettisfield, Wem & Cadney Mosses, Hanmer Mere, Hencott Pool, Linmer Moss, Llyn Bedydd, Morton Pool & Pasture, Oak Mere, Oakhanger Moss, Oss Mere, Rostherne Mere, Sweat Mere & Crose Mere and Vicarage Moss.</td></tr>
<tr><td colspan="2">Conservation Objectives:
Ramsar criterion – peatland.
The conservation objectives for the site are to maintain in favourable condition:
• the habitat types for which the site is designated.</td></tr>
<tr><td colspan="2">Site Vulnerability: Invasive species: considered a major impact on this site. Water quality: eutrophication is considered a major impact on this site. Land take for development · Recreational pressure and disturbance: in line with other bog and mire habitats, trampling and erosion are likely to be a significant issue where public access occurs. Water quality: declines in water quality through nutrient enrichment and sediment. Land use in surrounding areas: agricultural practices and urban runoff are likely to affect the scattered sites through nutrient enrichment and sedimentation.</td></tr>
<tr><td>Reason for Designation:</td><td>Environmental Conditions Needed to Support Site Integrity</td></tr>
<tr><td>Criterion 1a. A particularly good example of a natural or near natural wetland, characteristic of this biogeographical region, The site comprises the full range of habitats from open water to raised bog.</td><td>Environmental Conditions needed to support site integrity will need to be considered at the full Appropriate Assessment stage since this range of sites is varied and needs consideration in relation to specific plans and policies.</td></tr>
<tr><td>Criterion 2a. Supports a number of rare plants associated with wetlands, including the nationally scarce cowbane Cicuta virosa, elongated sedge Carex elongate and bog</td><td></td></tr>
</table>

Site Name: Midland Meres and Mosses (Ramsar phase 2), Shropshire/ Clwyd/ Cheshire/ Staffordshire, England.	
rosemary *Andromeda polifolia.* Also present are the nationally scarce bryophytes *Dicranum undulatum, Dircranum affine* and *Sphagnum pulchrum.*	
Criterion 2a. Containing an assemblage of invertebrates, including several rare wetland species. There are 16 species of Red Data Book insect listed for the site including the following endangered species: the moth *Glyphipteryx lathamella*, the caddisfly *Hagenella clathrata* and the sawfly *Trichiosoma vitellinae.*	

NB. Of the SSSI in the Ramsar Phase 2 designation the following are considered in this screening document: Aqualate Mere, Brownheath Moss, Cole Mere, Cop Mere, Fenn's, Whixhall, Bettisfield, Wem & Cadney Mosses. Hanmer Mere, Hencott Pool, Llyn Bedydd, Morton Pool & Pasture, Oss Mere, Sweat Mere & Crose Mere

Appendix 5: Ramsar Midland Meres & Mosses Phase 1 and Phase 2 Site Tables

Ramsar phases split into Ramsar features/SSSI unit from Information on Natura 2000 Sites in the West Midlands, Prepared for Natural England by Treweek Environmental Consultants, 2009.

Phase 1 Sites/Ramsar feature	**Open water**	**Swamp**	**Fen**	**Basin Mire**	**Raised bog**	**Wet pasture**	**Carr**	**Invertebrates**	**Plants**
Clarepool Moss	+			+				dotted footman	
Wybunbury Moss				+		+	+	assemblage *Carorita limnaea*	*Andromeda polifolia Thelypteris palustris*
Brown Moss	+	+	+	+					*Luronium natans*
Berrington Pool	+	+	+						
Betley Mere	+	+	+			+	+		
Bomere, & Shomere Pools	+	+		+			+		*Elatine hexandra* *Thelypteris palustris*
Fenemere	+	+	+			+	+		*Cicuta virosa* *Thelypteris palustris*
Marton Pool	+	+					+		
Quoisley Meres	+	+	+			+	+		*Cicuta virosa* *Thelypteris palustris*
White Mere	+						+		*Carex elongata* *Eleocharis acicularis*
Phase 2 Sites/Ramsar feature	**Open water**	**Swamp**	**Fen**	**Basin Mire**	**Raised bog**	**Wet pasture**	**Carr**	**Invertebrates**	**Plants**
Fenns and Whixall Moss					+		+	assemblage *Hagenella* small pearl-	*Andromeda polifolia* *Dicranum undulatum* *Sphagnum pulchrum*
Aqualate Mere	+	+	+			+	+	assemblage	
Black Firs & Cranberry Bog	+			+			+		*Cicuta virosa*
Brownheath Moss			+				+		*Carex elongata*
Chapel Mere	+	+					+		
Cole Mere	+					+	+		*Carex elongata*
Cop Mere	+	+	+				+		
Hencott Pool							+		*Carex elongata* *Cicuta virosa*
Linmer Moss				+					*Thelypteris palustris*
Morton Pool & Pasture	+	+				+	+		*Thelypteris palustris*
Oss Mere	+	+				+	+		*Cicuta virosa* *Thelypteris palustris*
Sweat Mere & Crose Mere	+	+	+			+	+		*Carex elongata* *Thelypteris palustris*

Natural England is in the process of revising conservation objectives for SSSI units in Shropshire in order to take secondary European Features such as species into account. The tables below include Conservation Objectives where they have been provided by Natural England. The most up to date Conservation objectives for the SSSI units will be sought from Natural England prior to carrying out a full Appropriate Assessment on any lower tier document.

Ramsar Midland Meres & Mosses Phase 1

Site Name: Berrington Pool SSSI, SJ525072, Shropshire, England
Site Description: Berrington Pool (4.69ha) is a small but deep mere in a steep-sided hollow, with water of comparatively low fertility. There is a rich flora of emergent species, including some which are uncommon, notably slender sedge *Carex lasiocarpa* at one of its most southerly localities in Britain. There are extensive beds of white water lily *Nymphaea alba*. Vegetation dominated by water horsetail *Equisetum fluviatile* and bottle sedge *Carex rostrata* is better represented here than at any other Shropshire mere. Other emergent plants include greater reedmace *Typha latifolia*. The aquatic fauna is of interest, especially for dragonflies, of which ten species are known to breed here. The site includes an area of fen at the western end of the pool, with a flora which includes bladder sedge *Carex vesicaria* and, in a ditch, water violet *Hottonia palustris*.
Definition of Favourable Condition for SSSI:
Site Vulnerability: Biological disturbance (trampling / erosion etc) from increased public access and from native and non-native invasive species such as crassula or scrub, lowering of the water table from abstractions or conversely water-logging, eutrophication and siltation from surrounding land use, in particular agricultural run-off and potentially sewage outfalls.

Site Name: Bomere, Shomere & Betton Pools SSSI, SJ504078, Shropshire, England
Site Description: Bomere, Shomere & Betton Pools (59.08ha), as a group, are particularly important for the variety of water chemistry, and hence flora and fauna, which they display. The site also includes a small basin mire, a more extensive area of peat around Shomere and an area of woodland.
Definition of Favourable Condition for SSSI:
Site Vulnerability: Bomere, Shomere and Betton Pools – biological disturbance from (trampling/erosion etc) from increased public access – watersports are already popular at the site and having an impact – as well as from native and non-native invasive species such as crassula, rhododendron and sycamore, fluctuations in the water table from nearby land drainage or abstractions, eutrophication from surrounding land use, in particular agricultural run-off and potentially sewage outfalls.

Site Name: Brown Moss SSSI, SJ562395, Shropshire, England also SAC
Site Description: Brown Moss (31.32ha) differs from the other North Shropshire Mosses in consisting of a series of pools set in an area of heathland and woodland, rather than an expanse of peat. It has been suggested that the site may once have been peat covered, and that peat removal in the past has led to the present condition of the site.
Definition of Favourable Condition for SSSI: Subject to natural change, to maintain, in favourable condition, the habitat for the internationally important population of Floating Water Plantain (*Luronium natans*), with particular reference to the standing open water. (Maintenance implies restoration if the feature is not currently in favourable condition).
Site Vulnerability: Colonisation by trees is being addressed but continues to be of concern due to the shading, nutrient and hydrological effects on the open water and heathland. The presence of *Crassula helmsii* is a threat to *Luronium natans* and various control mechanisms are being explored.

Site Name: Clarepool Moss SSSI, SJ433342, Shropshire, England – part of West Midlands Mosses SAC
Site Description: Clarepool Moss (15.62ha) is a basin mire which has developed, in part at least, as a quaking bog (Schwingmoor). In this respect it is similar to Chartley Moss (Staffordshire) and Wybunbury Moss (Cheshire), but different from the other major sites in North Shropshire.
Qualifying features of West Midland Mosses SAC: H3160. Natural dystrophic lakes and ponds; Acid peat-stained lakes and ponds H7140. Transition mires and quaking bogs; Very wet mires often identified by an unstable `quaking` surface
Site Vulnerability (for SAC): Colonisation of open schwingmoors or *Sphagnum* lawns and rafts in the West Midland Mosses by birch and pine is controlled by works under Management Agreement or by National Nature Reserve management. Several sources of nutrient enrichment, including atmospheric deposition of nutrients, pose a potential threat.

Site Name: Fenemere SSSI, SJ445228, Shropshire, England
Site Description: Fenemere (16.34ha) is a particularly rich and interesting mere with eutrophic water. Fenemere is also important for its rich aquatic invertebrate fauna. There are extensive beds of white and yellow water-lilies *Nymphaea alba* and *Nuphar lutea*,but otherwise the aquatic vegetation is sparse, consisting of horned pondweed *Zannichellia palustris*, fennel-leaved pondweed *Potamogeton pectinatus* and Canadian pondweed *Elodea canadensis*. Reed beds are well developed round the edge and dominated by common reed *Phragmites australis*. Other species present include lesser reedmace *Typha angustifolia*, bulrush *Schoenoplectus lacustris* and bur-reed *Sparganium erectum*. Great duckweed *Lemna polyrhiza*, a scarce plant, occurs in the reed beds. On the western side of the mere there is a broad belt of alder carr, in which tussock sedge *Carex paniculata*, cyperus sedge *C. pseudocyperus* and cowbane *Cicuta virosa* occur. The site includes, to the north and west of the mere, a series of damp pastures which are exceptionally rich botanically. The flora includes marsh orchid *Dactylorhiza incarnata*, bogbean *Menyanthes trifoliata*, marsh arrow-grass *Triglochin palustris* and water dropwort *Oenanthe fistulosa*.
Definition of Favourable Condition for SSSI:
Site Vulnerability:

Site Name: Marton Pool, Chirbury SSSI, SJ296027, Shropshire, England
Site Description: Marton Pool (17.21ha) is a natural lake of moderate fertility, somewhat detached from the main series of Shropshire meres. There are extensive areas of reedswamp and carr. It is among the most valuable of the Shropshire meres for aquatic plants, and the flora includes fan-leaved water crowfoot *Ranunculus circinatus*, blunt-leaved pondweed *Potamogeton obtusifolius* and small pondweed *P. berchtoldii*. Water-lilies, both white, *Nymphaea alba* and yellow, *Nuphar lutea* are present, but not abundant.
Definition of Favourable Condition for SSSI:
Site Vulnerability:

Site Name: Quoisley Mere SSSI, SJ549456, Cheshire, England
Site Description: Quoisley Meres (28.25ha) has been selected to represent a type of mere with nutrient rich open water and well developed fringing habitats. The site also includes areas of damp grassland.
Definition of Favourable Condition for SSSI:
Site Vulnerability:

Site Name: White Mere SSSI, SJ414330, Shropshire, England
Site Description: White Mere (31.97ha) is one of the richest of the North Shropshire meres for aquatic plants, with a flora which includes needle spike-rush *Eleocharis acicularis*, shoreweed *Littorella uniflora*, small pondweed *Potamogeton berchtoldii* and grey club-rush *Schoenoplectus tabernaemontani*.
Definition of Favourable Condition for SSSI:
Site Vulnerability:

Ramsar Midland Meres & Mosses Phase 2

Site Name: Aqualate Mere SSSI, SJ770205, Staffordshire
Site Description: Aqualate Mere (241.00ha) is the largest of the meres with the most extensive reedswamp community. The mere and its surrounds form a complex of open water, fen, grassland and woodland unrivalled in Staffordshire for the variety of natural features of special scientific interest. The esker formation on the north side of the mere is of national geomorphological importance in its own right. The large area and juxtaposition of seminatural habitats supports an outstanding assemblage of beetles, moths and sawflies. The site has nationally important numbers of breeding herons *Ardea cinerea* and passage shoveler *Anas clypeata* and is regionally significant for breeding waders.
Definition of Favourable Condition for SSSI:
Site Vulnerability: Reductions in water levels from ground water and surface water abstractions, eutrophication from raised nitrogen and phosphorous and siltation entering the site via incoming water, largely from the nearby canal, as well as the presence of invasive species, in particular fish.

Site Name: Brownheath Moss SSSI, SJ562395, Shropshire
Site Description: Brownheath Moss (31.32ha) differs from the other North Shropshire Mosses in consisting of a series of pools set in an area of heathland and woodland, rather than an expanse of peat. It has been suggested that the site may once have been peat covered, and that peat removal in the past has led to the present condition of the site.
Definition of Favourable Condition for SSSI:
Site Vulnerability:

Site Name: Cole Mere SSSI, SJ433332, Shropshire
Site Description: Cole Mere is one of the largest of the Shropshire meres, with an almost complete fringe of woodland. There is a comparatively rich flora of aquatic macrophytes, including small pondweed *Potamogeton berchtoldii*, fan-leaved water crowfoot *Ranunculus circinatus* and autumnal water-starwort *Callitriche hermaphroditica*. Lesser yellow water-lily *Nuphar pumila* occurs here at what is probably its only English locality – the main centre of distribution of this species is the Scottish Highlands. Most of the surrounding woodland is of artificial origin but is included in the site since it is of value as a habitat for birds and adds to the diversity of the site. However, near the eastern end there is an area of semi-natural alder carr in which greater spearwort *Ranunculus lingua* and the rare elongated sedge *Carex elongata* occur. At the south-eastern end of the site there is an area of damp, rush-dominated pasture, with characteristic species such as lesser spearwort *Ranunculus flammula* and carnation sedge *Carex panicea*. The aquatic invertebrate fauna of Cole Mere is particularly diverse.
Definition of Favourable Condition for SSSI:
Site Vulnerability:

Site Name: Cop Mere SSSI, SJ802297, Staffordshire
Site Description: Cop Mere (37.8ha) is a shallow lake lying in a hollow in Keuper Marl. In many respects it is an outlier of the series of meres concentrated in North Shropshire and Cheshire. However, it differs from many of the meres in having a distinct inflow and outflow, the River Sow, which enters the mere at the western end and leaves at the eastern end.
Definition of Favourable Condition for SSSI:
Site Vulnerability: Reductions in water levels (possibly from long-term increased abstraction rates from the River Sow), eutrophication and siltation from surrounding agricultural run-off and invasive species, especially encroaching rhododendron scrub.

Site Name: Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SSSI, SJ490365, Shropshire/Clwyd, England/Wales also SAC
Site Description: Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses (948.4ha) together form an outstanding example of a lowland raised mire. The moss complex, which straddles the border between Shropshire, England and Clwyd, Wales, is one of the largest and most southerly raised mires in Britain. The site is highly valued ecologically as an example of mire development occurring under relatively warm and dry conditions and lying at the edge of the British range for this type of habitat.
Definition of Favourable Condition for SSSI: To maintain, in favourable condition, the active raised bogs and degraded raised bogs still capable of natural regeneration on the site.
Site Vulnerability: The lowland raised mire is dependent upon high water levels and a continuation of active peat-forming processes. Much of the site is subject to mineral planning consents for peat extractions which are currently being reviewed. The site has a history of peat-cutting and until recently, part of the site has been subject to large-scale commercial extraction, involving drainage over much of the peat body. Afforestation and agricultural improvement on marginal areas of the peat body have accelerated the lowering of water levels, resulting in encroachment by scrub and a decline in the extent of peat-forming communities. A greater part of the site is now owned, leased or managed under agreement by conservation organisations. Within these areas, mire rehabilitation management is taking place under the guidance of a management plan. It is intended to seek to increase the areas under positive conservation management by implementation of the joint Countryside Council for Wales/English Nature acquisition strategy.

Site Name: Hanmer Mere SSSI (Wales)
Site Description: Naturally eutrophic (nutrient rich) mere, supporting water plants including curled pondweed, horned pondweed, floating beds of yellow water lily, and marginal vegetation including reedmace and branched bur-reed. Another important element of this feature is the semi-natural vegetation types associated with the mere including swamp and mere marginal vegetation, marshy grassland, wet woodland and broad-leaved woodland together with a small stream flowing out of the mere.
Definition of Favourable Condition for SSSI:
Site Vulnerability: Water quality - There is no known inflow for the mere and all it's water either runs off the immediate catchment area or results from rainfall. Nutrient run-off from agricultural land. **Fishery management and angling.** A fish survey undertaken in 1996 indicated that the mere has remarkably low fish stocks with only small numbers of pike, bream and eel present. The mere is currently fished at low intensity by a private angling club and this should continue without any intensification. **Recreational interest** The mere has a history of low usage and minimal disturbance. The present low intensity usage should be maintained. Public access is limited to the public footpath following the eastern side of the mere, and should continue to be confined to areas where appropriate facilities are in place.

Site Name: Hencott Pool SSSI, SJ490160, Shropshire
Site Description: Most of Hencott Pool (11.5ha) is swamp carr on very wet peat dominated by alder *Alnus glutinosa* and common sallow *Salix cinerea* with frequent crack willow *Salix fragilis*. Although there are considerable areas of bare peat beneath the trees, there is a rich flora of fen plants. The site is notable for the size of its population of elongated sedge *Carex elongata*. Other uncommon species include purple smallreed *Calamagrostis canescens*, cyperus sedge *Carex pseudocyperus*, cowbane *Cicuta virosa*, great spearwort *Ranunculus lingua* and fine-leaved water dropwort *Oenanthe aquatica*. There are locally extensive moss carpets of *Calliergon cordifolium*, *C. cuspidatum* and *Sphagnum squarrosum*.
Definition of Favourable Condition for SSSI: Stand loss due to natural processes e.g. in minimum intervention stands is acceptable eg due to wind blow or Phytopthera disease. Stand destruction may occur if the understorey and ground flora are irretrievably damaged even if the canopy remains intact, eg by pollution.

Site Name: Hencott Pool SSSI, SJ490160, Shropshire
As a guideline, loss can be defined as at least 0.5 ha or 0.5% of the stand area, whichever is the smaller. Targets for extent may be modified where a target has been set to increase the extent of other habitat features on the site at the expense of woodland. This site is a former pool and is now entirely scrubbed over with willow and alder carr (Lockton and Whild, 2003). It was in this late stage of succession at notification (Walker, 1984) and the whole site has to be considered as woodland at the moment. Standing water is usually present under the woodland and fen vegetation survives in certain places under the trees and scrub. The site is important as an example of the succession from open water to basin bog to alder car (Walker, 1984), and therefore it would be beneficial to retain and restore some of the other features of interest that demonstrate the transition from open water to alder carr. Therefore some loss in extent of the successional woodland, providing it was restored to open water or open fen vegetation would be acceptable. Although it is too early give estimates of extent for restored vegetation it should be no more than 5.7ha which was the total of fen and open water on the 1881 Edition OS Map. There should be no loss in extent of the area covered by semi natural vegetation.
Site Vulnerability: Eutrophication mainly from surrounding agricultural run-off, lowering of the water table from surrounding activities, invasive species, in particular Canadian geese that graze, trample and enrich the vegetation.

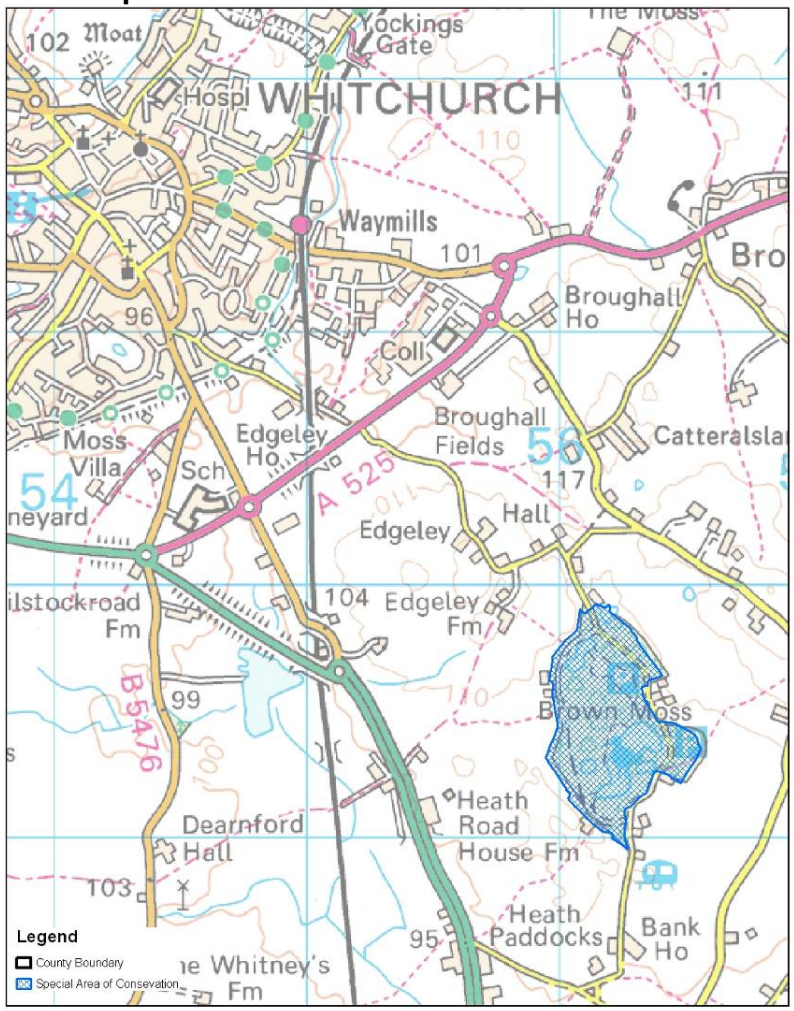
Site Name: Llyn Bedydd SSSI (Wales)
Site Description: The SSSI has two special features. Standing water Llyn Bedydd is a small 'mere' developed in a natural depression (kettle-hole) after the last ice age which covered this area some 20,000 years ago. The lake comprises an area of open water supporting a variety of water plants below, floating on the surface, and rising above the surface of the water, as well as natural bank side vegetation. Wet woodland The wet woodland habitat is an uncommon habitat in Wrexham, and is dominated by alder, willow and other plants and animals tolerant of wet conditions and flooding.
Definition of Favourable Condition for SSSI:
Site Vulnerability: Water quality and pollution, fishery management, woodland

Site Name: Morton Pool & Pasture SSSI, SJ301239, Shropshire, England
Site Description: The chief interest of Morton Pool (3.72ha) is the fen and carr vegetation around it. The dominant species are alder *Alnus glutinosa* and sallow *Salix cinerea* with yellow flag *Iris pseudacorus*, reed canary grass *Phalaris arundinacea* and sedges, including lesser pond sedge *Carex acutiformis* and tussock sedge *Carex paniculata*, in the field layer. Uncommon plant species in this habitat include bird cherry *Prunus padus*, alder buckthorn *Frangula alnus* and marsh fern *Thelypteris thelypteroides*.
Definition of Favourable Condition for SSSI:
Site Vulnerability:

Site Name: Oss Mere SSSI, SJ565438, Shropshire, England
Site Description: Oss Mere (28.32ha) is a shallow mere of moderate fertility, bordered on two sides by reedswamp and alder carr. The site also includes woodland on dry peat and on fringe of damp grassland. Within the mere both white and yellow water lilies *Nymphaea alba* and *Nuphar lutea* occur, but are scarce. Horned pondweed *Zannichellia palustris* is the dominant submerged aquatic plant. The alder carr is particularly rich, and has a flora which includes cyperus sedge *Carex pseudocyperus*, cowbane *Cicuta virosa*, bog violet *Viola palustris*, marsh fern *Thelypteris thelypteroides* and royal fern *Osmunda regalis*, all of which are uncommon in Shropshire.
Definition of Favourable Condition for SSSI: Maintain the Fen, Marsh and Swamp, Broadleaved, mixed and yew woodland and Standing open water in favourable condition
Site Vulnerability:

Site Name: Sweat Mere & Crose Mere SSSI, SJ434304, Shropshire, England
Site Description: Sweat Mere and Crose Mere (38.58ha) are two dissimilar meres constituting a site of exceptional importance. They are the remnants of a once considerably larger wetland complex which included Whattall Moss, which in historic times was an acid peat bog but now is almost entirely affected. The meres and their surrounds form a complex of open water, reedswamp, fen and woodland habitats unrivalled in Shropshire for the variety of natural features of special scientific interest. Both meres have been subject to detailed research and intensive study. In particular the phytoplankton and the pollen stratigraphy of Crose Mere are very well documented.
Definition of Favourable Condition for SSSI:
Site Vulnerability:

Site Maps for Sites

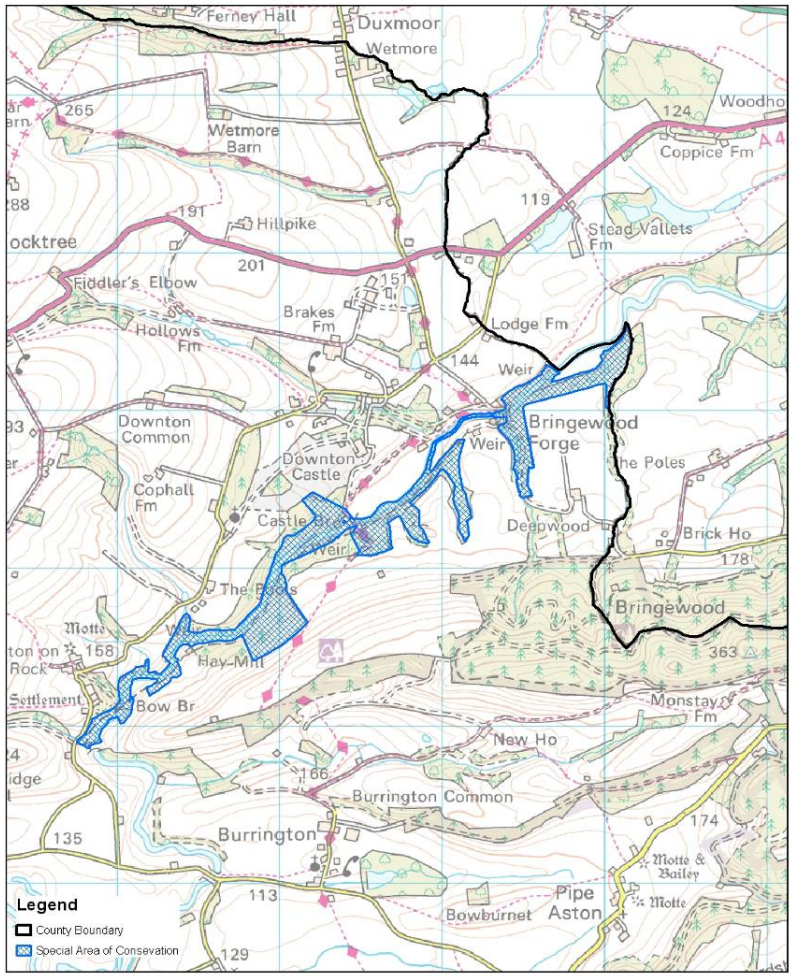


Shropshire Council

Brown Moss Special Area of Conservation (SAC)

Scale 1:10,784

Development Services,
The Shirehall, Abbey Foregate
Shrewsbury, Shropshire, SY2 6ND



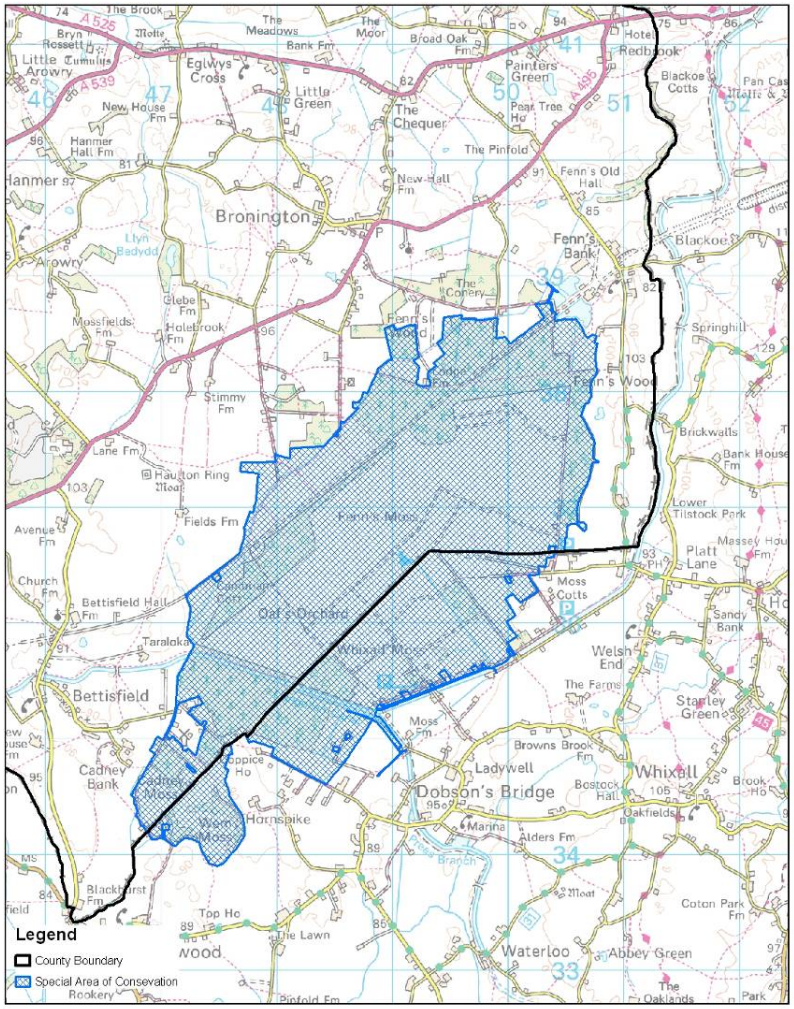
Shropshire Council

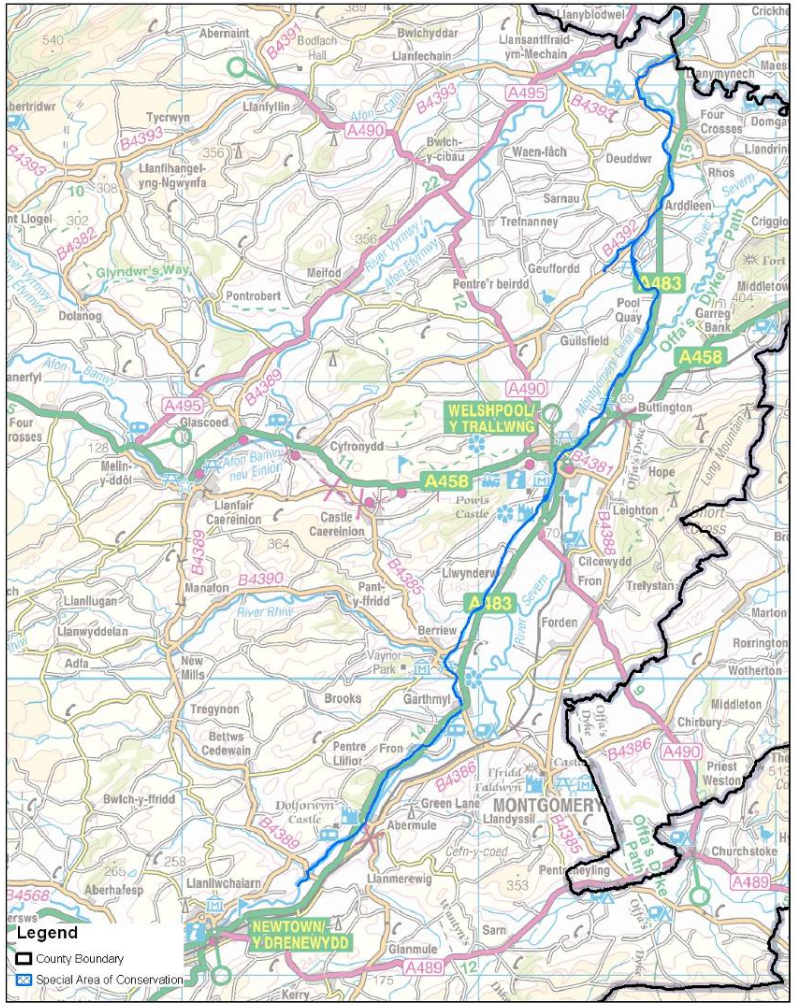
Downton Gorge Special Area of Conservation (SAC)

Scale 1:16,728

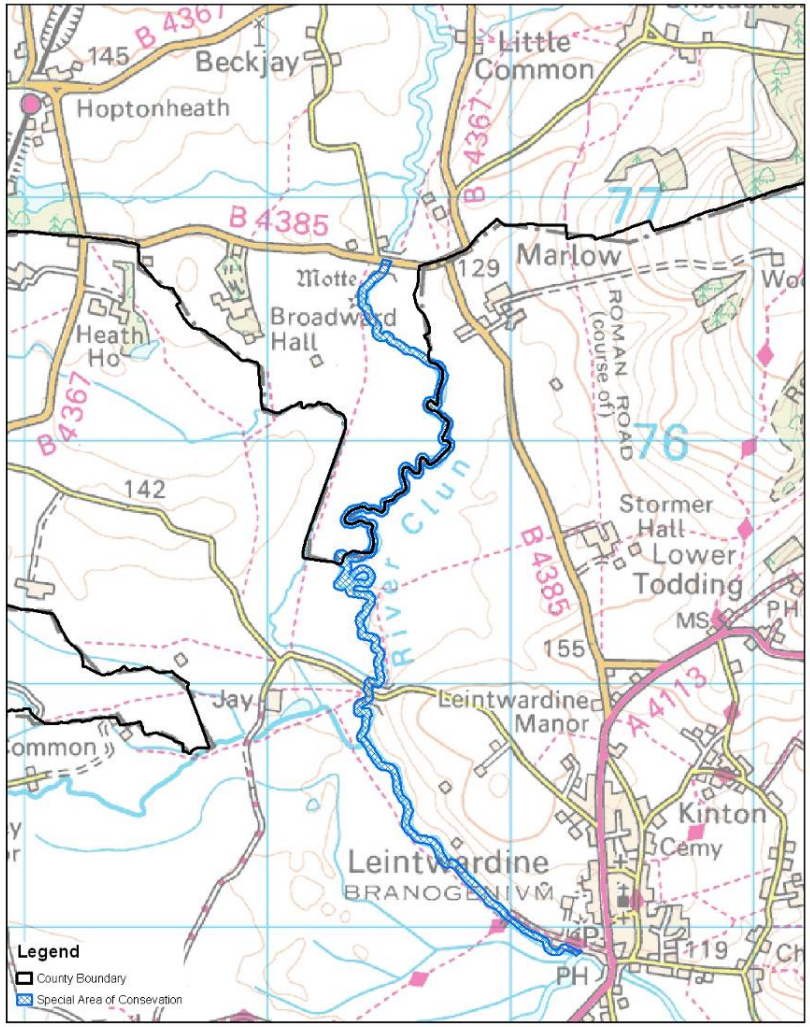
Development Services,
The Shirehall, Abbey Foregate
Shrewsbury, Shropshire, SY2 6ND

Shropshire Council SAMDev Habitats Regulation Assessment
Appendix 1: Natura 2000 sites July 2014





Shropshire Council SAMDev Habitats Regulation Assessment
Appendix 1: Natura 2000 sites July 2014

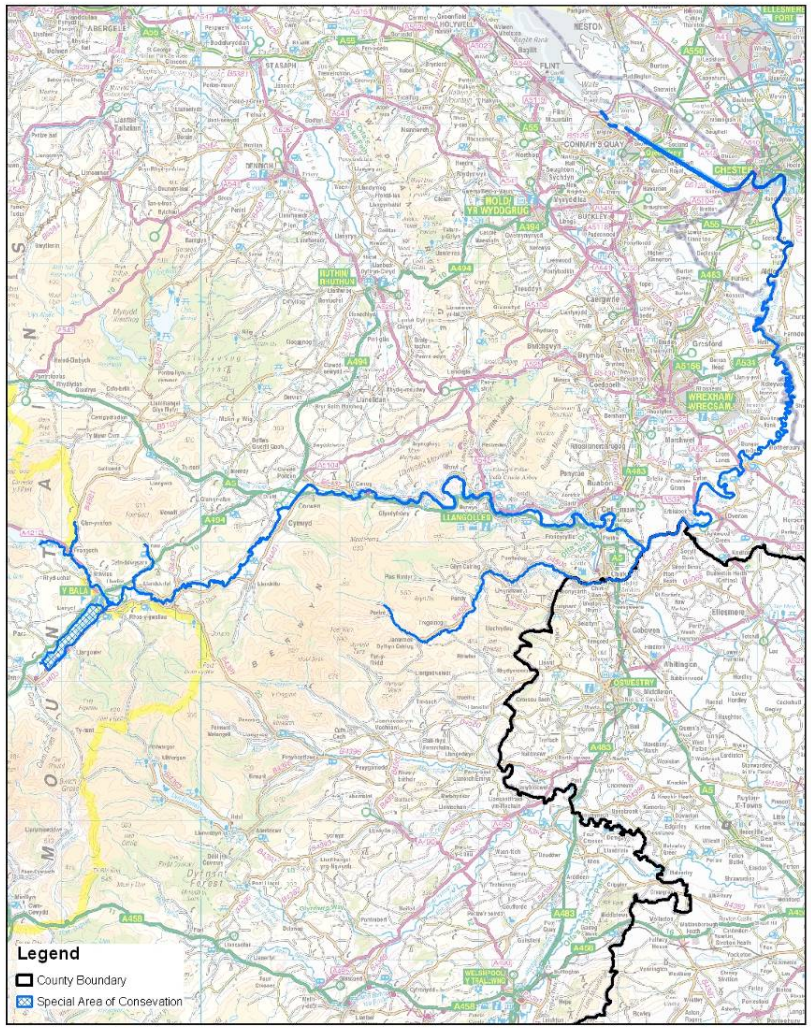


Shropshire Council

River Clun Special Area of Conservation (SAC)

Scale 1:11,420

Development Services,
The Shirehall, Abbey Foregate
Shrewsbury, Shropshire, SY2 6ND



Shropshire Council

River Dee & Bala Lake Special Area of Conservation (SAC) - English & Welsh Sections

Scale 1:200,000

Development Services,
The Shirehall, Abbey Foregate
Shrewsbury, Shropshire, SY2 6ND

Appendix 2: SAMDev Draft Development Management Policies vs. likely significant effects on Natura 2000 Sites

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
MD1: Scale and Distribution of Development	1.Sufficient land will be made available during the plan period including table of housing numbers for various settlements	C4	N/A The strategic approach is about the need and timescale for delivering housing and employment land not exact location or distribution	N/A. The strategy is implemented through the SAMDev Plan – Settlement Policies.	No, HRA of SAMDev Plan Settlement Policies is addressed in section 4 onwards of this document.	CS1 CS2
	2.The Council will support sustainable development in identified settlements	C4	N/A The strategic approach is about the need and timescale for delivering housing and employment land not exact location or distribution	N/A The strategy is implemented through the SAMDev Plan – Settlement Policies.	No, HRA of SAMDev Plan Settlement Policies is addressed in section 4 onwards of this document.	CS2 CS18

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
	3.Additional community hubs and clusters will be identified	A1	N/A	No	N/A	CS4
MD2: Sustainable Design	1.Address community guidance on design	A5	N/A	No	N/A	CS6
	2.Respond positively to and respect locally distinctive places	A5	N/A	No	N/A	CS6
	3.Embrace appropriate contemporary design solutions	A5	N/A	No	N/A	CS6
	4.Incorporate sustainable drainage techniques ~~5. Consider landscape design holistically.~~	A1 ~~A1~~	N/A ~~N/A~~	No ~~No~~	N/A ~~N/A~~	CS6 CS18 ~~CS6~~

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
	5. Consider landscape design holistically	A1	N/A	No	N/A	CS6
	6.Demonstrate sufficient existing green infrastructure capacity	A1	N/A	No	N/A	CS6 CS18
	7. Demonstrate good standards of sustainable design and construction	A1	N/A	No	N/A	CS6 CS18
MD3: Managing Housing Development	1.Deliver settlement housing requirements under S1-S18	C4	N/A – The strategic approach is about the need for housing not the detailed location or distribution	N/A The strategy is implemented through the SAMDev Plan – Settlement Policies. S1 – S18.	No, HRA of SAMDev Plan Settlement Policies is addressed in section 4 onwards of this document.	None. MD 1 above
	2. Renewal of planning consent to be delivered within 3 years	A5	N/A	No	N/A	/

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
	3. Where development would exceed the guideline.	A5	N/A	No	N/A	/
	4. Where settlement requirement unlikely to be met in plan period consider additional sites	A5	N/A	No	N/A	/
MD4: Managing Employment Development	1.Strategic supply of employment land	C4	N/A - The strategic approach is about the need for employment development not the detailed location or distribution	N/A The strategy is implemented through the SAMDev Plan – Settlement Policies. S1 – S18	No, HRA of SAMDev Plan Settlement Policies is addressed in section 4 onwards of this document.	CS14
	2.Alternative use of employment sites	A5	N/A	No	N/A	/
MD5: Sites for Sand and	1.Supply of sand and gravel sites	C4	Yes - The strategic	Not for this policy - The strategy is	See entry for Schedule MD5a of the SAMDev Plan below.	CS20

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
Gravel Working			approach is about the need for sand and gravel development not the detailed location or distribution.	implemented through Schedule MD5a of the SAMDev Plan. (see below) –		
	2.Controlled release of sand and gravel reserves	C4	Yes - The strategic approach is about the need for sand and gravel development not the detailed location or distribution.	Not for this policy - The strategy is implemented through Schedule MD5b of the SAMDev Plan (see below).	See entry for Schedule 5b of the SAMDev Plan below.	CS20
	3.Proposals for mineral working outside of allocated areas	A5	N/A	No	N/A	CS20
Schedule MD5a	Phase 1 Site Allocation – Wood Lane North Extension	C6	Yes	No, avoidance and mitigation measures	Yes – see HRA of Minerals Allocations.	CS20

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
Schedule MD5b	Phase 2 Site Allocations	C6	Yes	No, avoidance and mitigation measures	No – see HRA of Minerals Allocations.	CS20
MD6: Green Belt and Safeguarded Land	1.Green belt development not to conflict with purpose of Green Belt or harm its openness	A2	N/A	No	N/A	CS5
	5. Additional development at RAF Cosford	B	N/A – RAF Cosford is over 14km from the nearest Natura 2000 Designated Site and no likely significant effect has been identified.	No	N/A	CS5
MD7a: Managing Development in the Countryside	1.Development in the countryside	A2/A5	N/A	No	N/A	CS5
	2. Dwellings to house essential rural workers	A5	N/A - The strategic approach is about	No	N/A	/

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
			the need for development not the detailed location or distribution.			
	3Replacement dwellings in the countryside	A5	N/A - The strategic approach is about the need for development not the detailed location or distribution.	No	N/A	/
	4.Use of existing holiday lets as residential dwelling	B	N/A	No	No	/
MD7b	1. Re-use of existing buildings	A3	N/A	No	No	CS5
	2.Replacement of buildings contributing to local distinctiveness.	A3	N/A	No	No	CS5
	3. Applications for agricultural	A5	N/A The strategic approach is about	No	No	CS5

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
	development		the need for development, not the detailed location or distribution.			
MD8: Infrastructure Provision	1.Develoment only where there is sufficient existing infrastructure	C4	N/A - The strategic approach is about the need for development not the detailed location or distribution.	Not at this stage - The strategy is implemented through the SAMDev Plan - Settlement Policies	No, HRA of SAMDev Plan Settlement Policies is addressed in section 4 onwards of this document.	CS8 CS18
	2.Development to safeguard existing operational infrastructure	A5	N/A	No	N/A	CS8
	3.Infrastructure applications to deliver national and locally identified requirements	A5	N/A - The strategic approach is about the need for development not the detailed location or	No	N/A	CS8

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
			distribution.			
	4.Renewable energy infrastructure, other new infrastructure, monitoring and decommissioning	A5	N/A - The strategic approach is about the need for development not the detailed location or distribution.	~~No.~~No.	N/A.	CS8
MD9: Protecting employment areas.	1.Protection of existing employment areas primarily for class B	C4	Yes	N/A The strategy is implemented through the SAMDev Plan – Settlement Polices	No, HRA of SAMDev Plan Settlement Policies is addressed in section 4 onwards of this document.	CS14
	2.Existing employment areas in rural areas	A5	N/A	No	N/A	CS14
	3. Renewal of planning consent for employment	A5	N/A	No	N/A	CS14

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
	uses					
	4.Proportionate protection of safeguarded employment sites	A5	N/A	No	N/A	CS14
	5.Removing the safeguarding of existing sites	A5	N/A	No	N/A	CS14
MD10a: Managing Town Centre Development	1.Strategic, principle and district centres to be supported for retail development	B	N/A - The strategic approach is about the need for development not the detailed location or distribution.	No	The policy is likely to have no significant effect on Natura 2000 Sites as it refers generally to retail provision in settlements with town centres.	CS15
	2.Primary shopping areas	A1	N/A	No	N/A	CS15
	3.Preferred location for main town centre uses in other settlements.	A1	N/A - The strategic approach is about the need for	No	N/A	CS15

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
			development not the detailed location or distribution.			
MD10b	1.Retail impact assessments	A1	N/A	No	N/A	CS15
	2. Proposals which have a significant adverse impact on town centres.	A1	N/A	No	No	CS15
MD11: Tourism Facilities and Visitor Accommodation	1.Tourism, leisure and recreational developments in countryside locations	C4~~A1~~	~~N/A~~ N/A - The strategic approach is about the need for development not the detailed location or distribution.	No	Settlement Policy S8.1c allocates a leisure/tourist development adjacent to a canal at Ellesmere and HRA has been carried out for this allocation. No other tourist developments are allocated in the Plan therefore HRA will take place at the planning application stage if necessary.~~N/A~~	CS5 CS16
	2. Mitigation of visual impact.	A1	N/A	No	No~~N/A~~	~~CS5CS16~~

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
	3. Canalside development	C6~~A1~~	~~N/A~~ Proposed Changes to Policy S8.1c made to mitigate specific impact of one allocation. Otherwise this policy does not specify the detailed location or distribution of tourist development	No	Settlement Policy S8.1c allocates a leisure/tourist development adjacent to a canal at Ellesmere and HRA has been carried out for this allocation. No other tourist developments are allocated in the Plan therefore HRA will take place at the planning application stage if necessary.~~N/A~~	CS5 CS16
	4. New Marinas	C6~~A1~~	Proposed Changes to Policy S8.1c made to mitigate specific impact of one allocation. Otherwise this policy does not specify the detailed location or distribution of	No~~No~~	Settlement Policy S8.1c allocates a leisure/tourist development adjacent to a canal at Ellesmere and HRA has been carried out for this allocation. No other tourist developments are allocated in the Plan therefore HRA will take place at the planning application stage if necessary.~~N/A~~	CS5 CS16~~CS5~~ ~~CS16~~

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
			tourist development~~N/A~~			
	5. Protection of canal lines from conflicting development.	A3	N/A	No	N/A	CS5 CS16
	6. Proposals for new and extended touring caravan and camping sites.	C6~~A3~~	Proposed Changes to Policy S8.1c made to mitigate specific impact of one allocation. Otherwise this policy does not specify the detailed location or distribution of tourist development~~N/A~~	No~~No~~	Settlement Policy S8.1c allocates touring caravans as part of a leisure/tourist development adjacent to a canal at Ellesmere and HRA has been carried out for this allocation. No other tourist developments are allocated in the Plan therefore HRA will take place at the planning application stage if necessary.~~N/A~~	CS16

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SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
	7. Static caravans, chalets and log cabins	C6~~A3~~	Proposed Changes to Policy S8.1c made to mitigate specific impact of one allocation. Otherwise this policy does not specify the detailed location or distribution of tourist development~~N/A~~	No~~No~~	Settlement Policy S8.1c allocates log cabins as part of a leisure/tourist development adjacent to a canal at Ellesmere and HRA has been carried out for this allocation. No other tourist developments are allocated in the Plan therefore HRA will take place at the planning application stage if necessary.~~N/A~~	CS16
	8. Holiday let development.	A3	N/A	No	N/A	CS16
	9. Existing static caravans, chalet and log cabin sites at risk from flooding.	A1	N/A	No	N/A	CS16

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
	10. New sites for visitor accommodation in the Severn Valley.	A3	N/A	No	N/A	CS16
	11. Retaining economic benefit to the visitor economy.	A1	N/A	No	N/A	CS16
MD12: Natural and Historic Environment	1. Developments likely to have an adverse effect on natural or heritage assets or landscape character	A3	N/A	No	N/A	CS17
	2. Proposals with positive benefits for natural and heritage assets and landscape character	A3	N/A	No	N/A	CS17

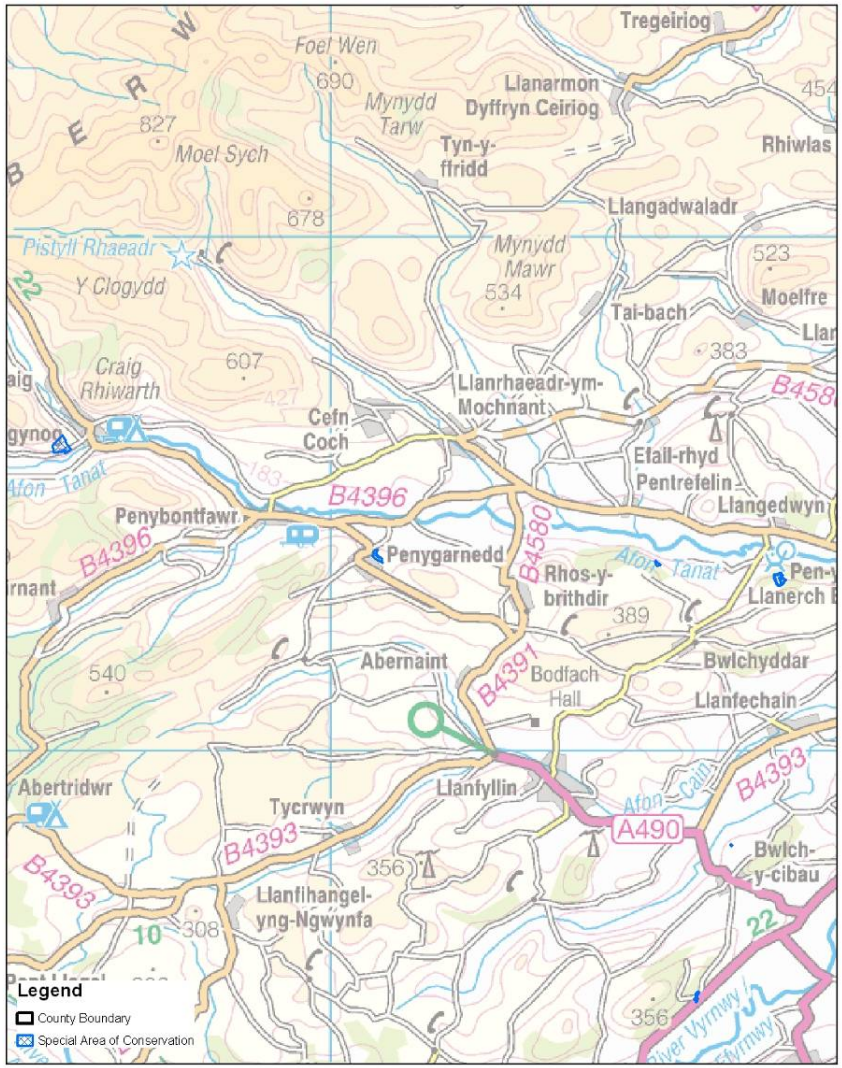
SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
	3. Proposals in NIA's and affecting biodiversity and geodiversity interests at a landscape scale	A3	N/A	No	N/A	CS17
MD13 The Historic Environment	1. Proposals requiring a Heritage Assessment	A1	N/A	No	N/A	CS17
	2. Proposals adversely affecting heritage assets.	A3	N/A	No	N/A	CS17
	3. Encouraging development delivering positive benefits to heritage assets.	A3	N/A	No	N/A	CS17
MD14: Waste Management Facilities	1.Development of waste transfer, recycling and recovery facilities	C6	N/A - The strategic approach is about the need for development not the detailed location or	No	Sites have not been allocated for waste management. HRA will take place at the planning application stage if necessary.	CS19

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
			distribution.			
	2.Specific types of waste management facility	C6	N/A - The strategic approach is about the need for development not the detailed location or distribution.	No	Sites have not been allocated for waste management. HRA will take place at the planning application stage if necessary.	CS19
MD15: Landfill and Landraising Sites	1.Criteria for new or extended landfill or landraising sites	C6	N/A - The strategic approach is about the need for development not the detailed location or distribution.	No	Sites have not been allocated for landfill or land raising. HRA will take place at the planning application stage if necessary.	CS19
	2.Complience within new or extended landfill or landraising sites	A1	N/A	No	N/A	CS19

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
	3.Restoration proposals for new landfill or landraising facilities or extensions of existing facilities	A1	N/A	No.	N/A	CS19
MD16: Mineral Safeguarding	1.Development within mineral safeguarding areas	A1	N/A	No	N/A	CS20
	2.Developments in buffers around identified mineral transport and processing facilities	A1	N/A	No	N/A	CS20
	3.Applications for development within mineral safeguarding areas	A1	N/A	No	N/A	CS20
	4.Granting of planning permission for minerals working within mineral safeguarding areas	A1	N/A	No	N/A	CS20

SAMDev Draft Development Management Policy	Description of Policy	Screening Category	Can the option or policy be changed at the screening stage to avoid likely significant effect?	Is an Appropriate Assessment Required?	Is the HRA decision passed down to another document?	Which Policy within the Shropshire Core Strategy does this SAMDev Plan Draft Policy Link to?
MD17: Managing the Development and Operation of Mineral Sites	1.Criteria under which applications for minerals development will be supported	C6	N/A - The strategic approach is about the need for mineral development not the detailed location or distribution.	No. The strategy is partly implemented through MD5, 5a and 5b above.	The HRA is addressed for MD5, 5a and 5b above. Unallocated sites will be assessed at the planning application stage if necessary.	CS20 CS6 CS18
	2.Details required in mineral working proposals	A1	N/A	No	N/A	CS20
	3.Working of unconventional hydrocarbons	A1	N/A	No	N/A	CS20
	4.Winning and working of coal	A1	N/A	No	N/A	CS20
	5.Duration of planning consents	A1	N/A	No	N/A	CS20
	6.Managing impacts of ancillary development	A1	N/A	No	N/A	CS20

Shropshire Council SAMDev Habitats Regulation Assessment
Appendix 1: Natura 2000 sites July 2014



Shropshire Council

Tanat & Vyrnwy Bat Sites Special Area of Conservation (SAC)

Scale 1:56,305

Development Services,
The Shirehall, Abbey Foregate
Shrewsbury, Shropshire, SY2 6ND

Shropshire Council SAMDev Habitats Regulation Assessment
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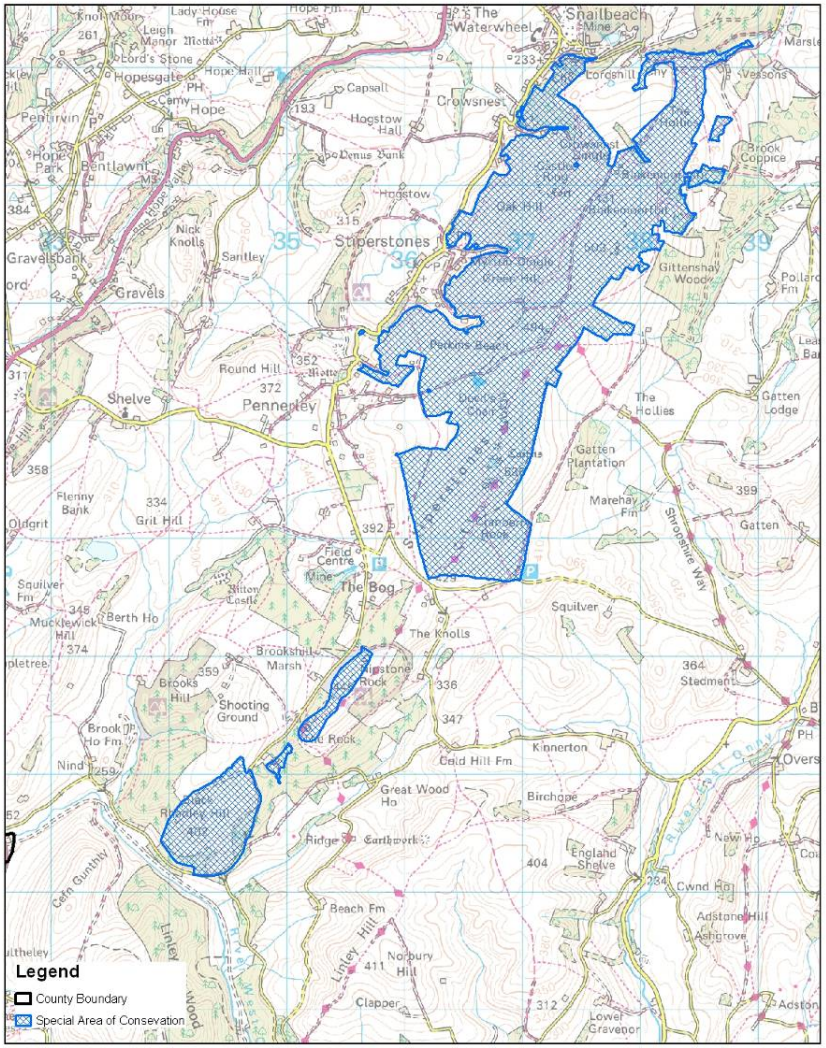
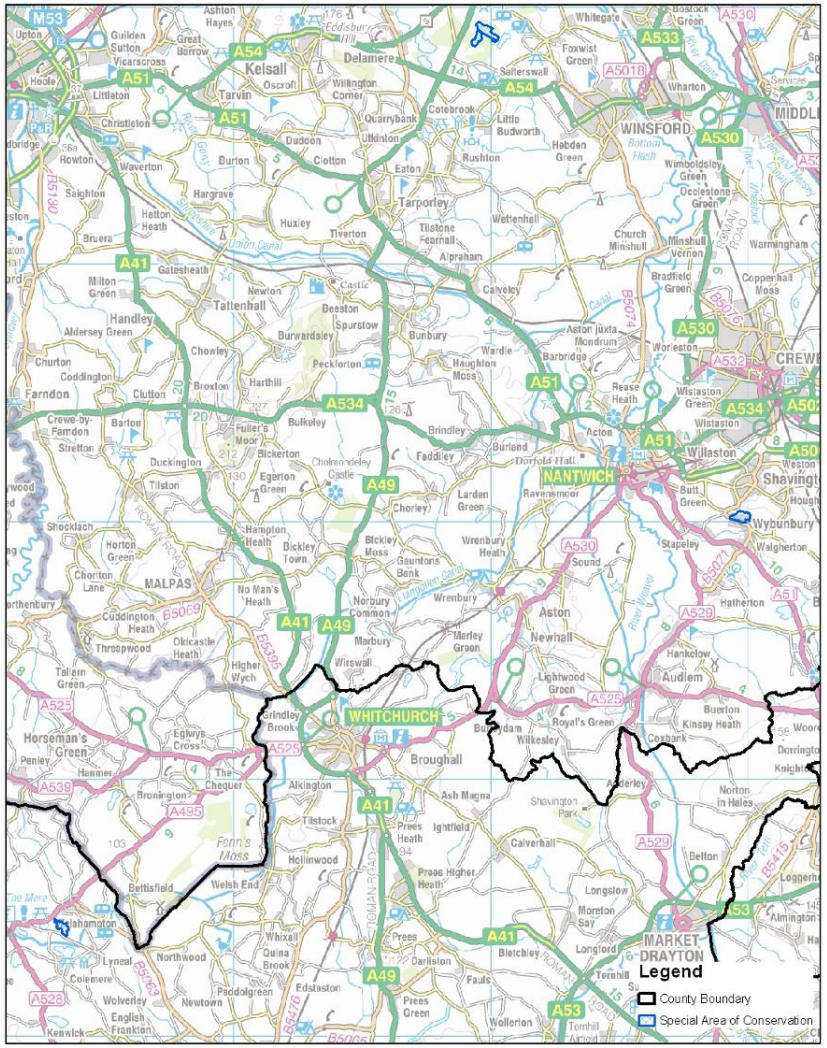


Shropshire Council

The Stiperstones & The Hollies Special Area of Conservation (SAC)

Scale 1:24,104

Development Services,
The Shirehall, Abbey Foregate
Shrewsbury, Shropshire, SY2 6ND

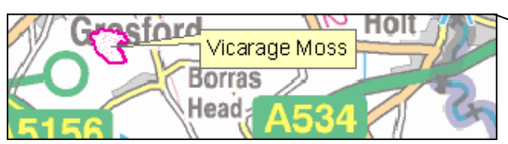


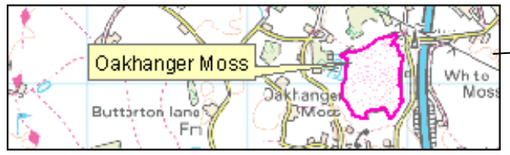
Shropshire Council

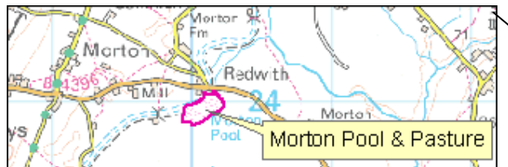
West Midland Mosses Special Area of Conservation (SAC)

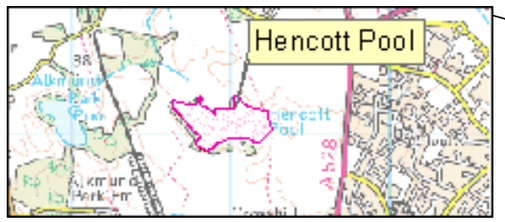
Scale 1:110,269

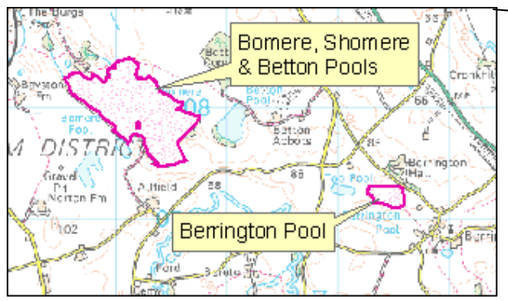
Development Services,
The Shirehall, Abbey Foregate
Shrewsbury, Shropshire, SY2 6ND

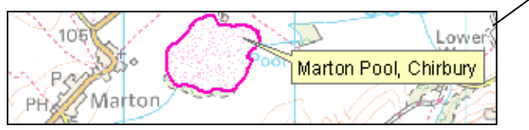


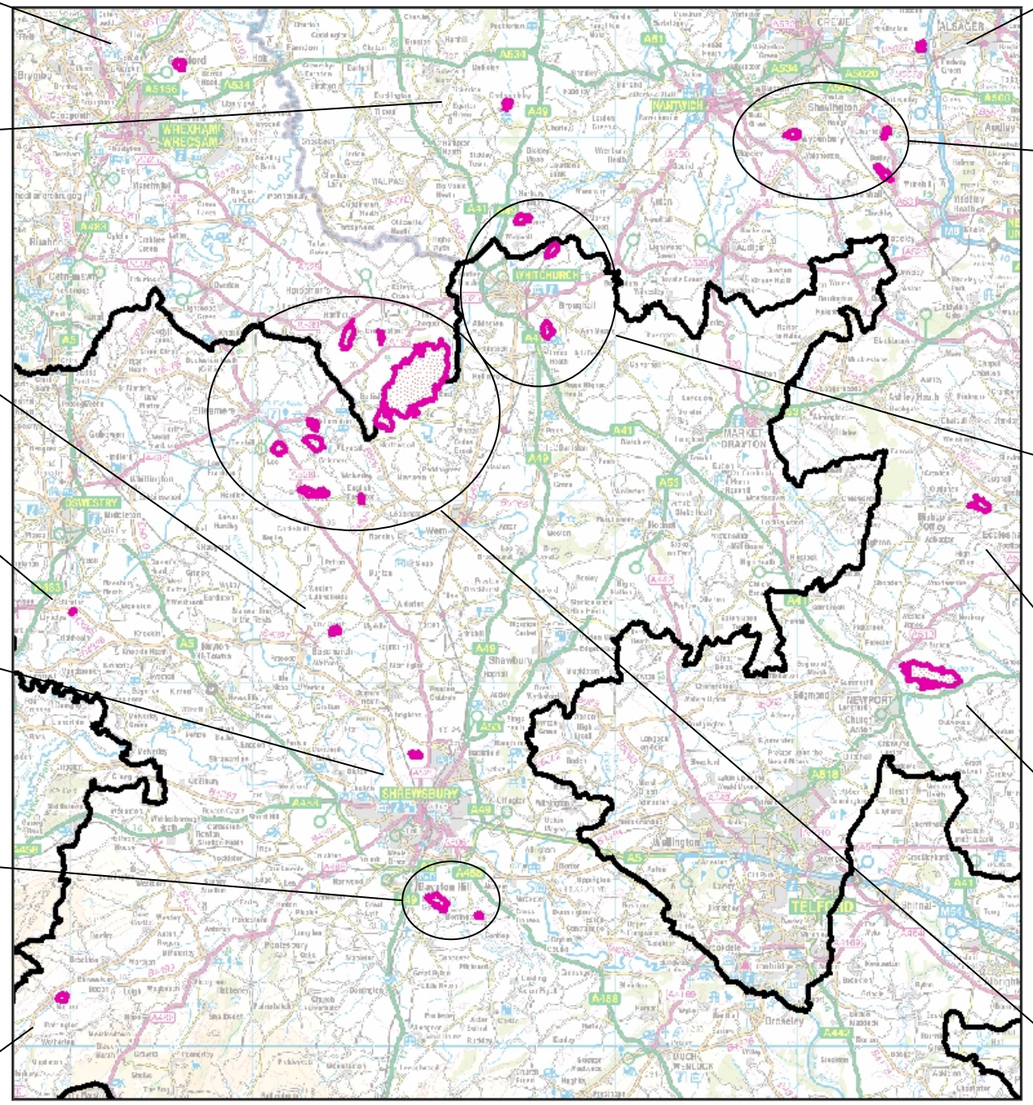


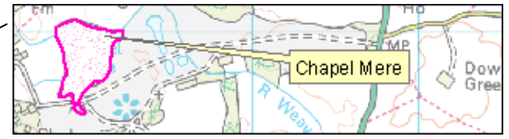


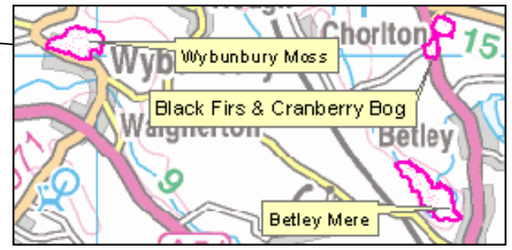


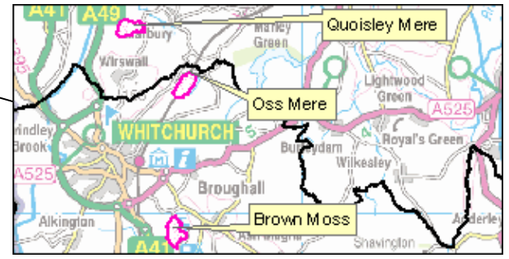


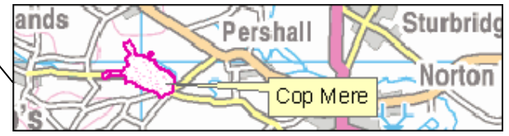


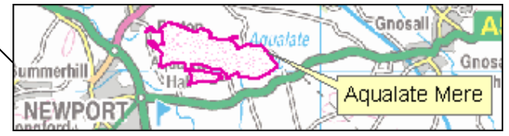


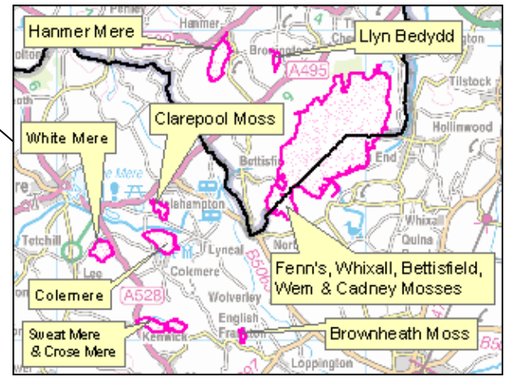












Shropshire Council

Midland Meres & Mosses Ramsar
Phase 1 & Phase 2

Development Services
The Shirehall, Abbey Foregate
Shrewsbury, Shropshire, SY2 6ND

N
W E
S

Scale: 1:268,390

Shropshire Council SAMDev Habitats Regulation Assessment
Appendix 1: Natura 2000 sites July 2014

Development within the River Clun Catchment

September 2013

Contents: **Page:**

1. Introduction

1.1 This document is one of a suite of Guidance Notes which explain the approach and procedures to be followed in order to ensure sufficient survey, protection, mitigation and enhancement where biodiversity may be affected by proposed development.

1.2 In particular, this document explains Shropshire Council's approach to making planning decisions for proposals in the River Clun catchment which has particular sensitivities in terms of water quality.

1.3 Part of the River Clun is a Special Area of Conservation (SAC). SACs are amongst the most important and sensitive sites across the European Union and are afforded the highest levels of protection under the Habitat Regulations. Although the river is important for a wide range of more common wildlife such as otters, salmon and trout, the sole feature for which the River Clun SAC is notified is the presence of the extremely rare freshwater pearl mussel (*Margaritifera margaritifera*).

1.4 The SAC/SSSI is assessed as being in unfavourable condition for a number of reasons including high levels of silt and nutrients, which affect the health of the pearl mussel population. A review of the monitoring data from the Environment Agency for the River Clun (2000-2011), shows that although there has been an improvement the ortho-phosphate (P) concentration, it is higher than is required for a recruiting pearl mussel population and in most of the Clun, including within the SAC, it is higher than that required to maintain adult mussels. Any additional phosphate entering the SAC is likely to make its condition worse. A major source of phosphate is waste water from houses and businesses, whether via the mains and sewage treatment works, or from cesspits, septic tanks or package treatment plants (PTP).

1.5 Under the Conservation of Habitats and Species Regulations 2010 and the European Habitats Directive, the Local Planning Authority, when producing a policy plan or making a planning decision, must consider if there is likely to be a significant effect on a European Protected Site. When deciding this, any other plans or projects which may also be having an effect must be considered as well – the 'in-combination test'. If such an effect is likely, then a more detailed 'Appropriate Assessment' must be carried out and recorded, to determine if the integrity of the site will be adversely affected. If, after revisions and mitigation, the adverse effect cannot be avoided, then planning permission cannot normally be granted.

1.6 The following guidance is provided to help those submitting planning applications in the Clun catchment to decide if their development is likely to have a significant effect on the SAC and the type of information planners will need to determine the application. Submission of the application with all the required information should speed up the planning application process.

1.7 Natural England are statutory consultees on any applications which might affect the SAC. If NE object to an application, and the application cannot be

modified to lift their objection, the LPA would not normally grant planning permission. NE and the EA, aware of the problems caused, have jointly commissioned a Nutrient Management Plan (NMP) to document all sources of P in the catchment, identify what information still needs to be gathered and to outline phosphate reduction measures that might be employed in future. The following information is interim guidance until the NMP has been completed (projected to be by the end of 2013)

2. Categories of development already considered likely to have no Significant effect

2.1 Any development that does not produce waste water

2.2 Any development that does not increase the volume or concentration of waste water

2.3 Any development that provides a betterment in terms of current waste water impacts by either improving existing water quality discharges through reduced load or decreasing volume produced (eg , separation of surface water from dirty water or up-grading of facilities)

2.4 Domestic extensions without significant increase in occupancy or drainage. Most of these developments include up-grading of existing facilities which, with modern design, use water more efficiently

2.5 Provision of a sealed system with the waste transferred outside the Clun catchment. There are no facilities to process tankered waste in the Clun catchment so waste would be not be impacting on the river.

3. Other developments

3.1 **It is important to note that virtually any other development in the catchment either serviced by the mains sewer or by a Package Treatment Plant (PTP) is likely to add some phosphate to the River Clun.**

3.2 Therefore other developments within the catchment currently have to provide more evidence to illustrate the contribution that they will make to the phosphate load in the river. At the moment, with the Nutrient Management Plan in production and with a very tight target for phosphate in the catchment (0.02mg/l) it is difficult to calculate an insignificant load of phosphate to the river (and so support a conclusion of ‘likely to have no significant effect’ when completing the in-combination test).

3.3 Below are a set of additional categories that would extend the acceptable developments between now and the completion of the NMP. Once the NMP has been published, this guidance will be revised and re-circulated.

3.4 Development can be split into two different impacts depending on if they are going to main sewer or not.

4.0 Mains sewer

4.1 There are currently 7 waste water treatment works within the Clun catchment. Only two works have phosphate stripping. Of the remaining 5, they may all be able to have some phosphate stripping added to them at a later date.

4.2 The two largest treatment plants within the catchment, Bishop's Castle and Bucknell, currently have phosphate stripping and in terms of individual houses make the smallest contribution to the phosphate in the river of all works. They both have potential catchment transfer schemes that would remove any impact they have within the catchment. Further if catchment transfer is not possible then both will be able to be fitted with a more rigorous phosphate treatment if required within the next two rounds of the Five Year Asset Management Planning (AMP) process. **Any development of less than 10 houses, serviced by these two treatment works, is considered to be unlikely to have a significant effect on the features of interest as the impact will be picked up by actions identified in the NMP**. In the interim period, development connecting to mains sewer leading to Bucknell or Bishop's Castle sewage treatment works can be put forward for a planning decision. Development of 10 houses or more will still have to show how the contribution to the treatment works will affect the site in the interim between now and completion of any upgrade.

4.3 No more development can be serviced by the Clun treatment works until an extra licence is granted as it has reached its limit for Dry Weather Flow (DWF).

4.4 Clun, Lydbury North, Aston on Clun, Newcastle on Clun and Clunbury sewage treatment works currently have no phosphate stripping; therefore development which would go to these works would contribute the highest phosphate load of anything going to mains sewer. There are potential ways of reducing the phosphate load from these works but this would be subject to inclusion in future AMP rounds and on current trials being successful. **In the interim we must assume that there is the potential for discharges from these works to have a Significant Effect between now and the NMP completion.** Therefore, no development can be approved if proposing to connect to these sewage treatment works.

5.0 Non mains sewer (Package Treatment plants, septic tanks etc)

5.1 This is the area of greatest concern as the impact of Package (Private) Treatment Plants (PTP) is very difficult to calculate, being dependant on treatment type, discharge point, soil chemistry and distance to the nearest water body. Some may discharge directly to a water body where as others will discharge to soak-away. Most of the PTPs on the market are not designed to treat P but concentrate on the solid part of the waste. Discharges for these can be as high as 14mg/l of phosphate, some however, have been designed to treat phosphate and have significantly lower phosphate discharges.

5.2 In general, when a mains sewer is available then this is the preferred option as PTPs are not always maintained. Changes in property ownership can also lead to owners being unaware of the maintenance requirements of their systems. Recent research in the Clun catchment supports the view that a vast majority of the existing PTPs are badly maintained and in many cases ineffectual.

5.3 Some Package Treatment Plants discharging to water course may be acceptable (see below). This is based on size and distance criteria that have been used on other rivers in the region, appropriately scaled to the tighter phosphate target on the River Clun.

Screening criteria for discharge to water course.

Distance upstream from SAC boundary	**Discharge type**
Within site	Requires further assessment
Within 3km	Requires further assessment
Within 10km	All discharges less than $1m^3$/day are regarded as having no likely significant effect. Greater discharges will require further assessment.
Beyond 10km	All discharges less than $5m^3$/day are regarded as having no likely significant effect

Any 'small' discharge to non-mains river (ie: less than $1m^3$) within 3km of the SAC boundary will be assessed on the basis of the dilution factor. Discharges will require further assessment where *the dilution of the mean flow of the discharge by the mean flow of receiving water shows that the concentration will be changed by more than **one percent** of the concentration specified in the conservation objectives).*

(Normal domestic water consumption = 136 litres per head per day. Average house occupancy rate = 2.35 people per house, 136*2.35 = 320 litres per house so equates to approx. 3 houses. Application of higher water design standards could increase the size of the population serviced by a 1m3 discharge- (Numbers from STWater)

5.4 Package Treatment Plants (PTP) or septic tanks that discharge to ground or soakaway may be acceptable. For PTPs that are discharging to ground or soakaways, evidence must be presented to show that phosphate will not enter watercourses. Evidence will need to be provided that:

- the soak away goes to land that is not under drained,

- the land is not considered to be at risk of fertilizer run-off,
- the soil has a low P index,
- the land has a degree of permeability that will ensure the soak-away is effective.

(See list of required information to be submitted with planning applications, Appendix 1)

6.0 Summary of development categories covered by this interim guidance note which can be considered for planning permission.

A. Any development that does not produce waste water
B. Any development that does not increase the volume or concentration of waste water
C. Any development that provides a betterment in terms of current waste water impacts.
D. Domestic extensions without significant increase in occupancy or drainage.
E. Provision of a sealed system with the waste transferred outside the Clun catchment,
F. All development of less than 10 houses that goes to either Bucknell or Bishop's Castle treatment works.
G. Some Package Treatment Plants discharging to water course may be acceptable if they meet the criteria.
H. .All developments where PTP or septic tank discharge can be shown to successfully go to ground

Appendix 1

Information to be supplied with a planning application in the Clun Catchment.

Will the development produce waste water?
If the answer is No then give reasons and no further action is required.

New housing or other accommodation

How many people will be living in the property?
How many bedrooms will be in the property?
Will the development be connected to a mains sewer?
If Yes, which sewage treatment works will waste water be drained to?
If No, how will waste water be treated? (See below).

Modification (e.g. extensions) or demolition and replacement of existing buildings

How many people live in the existing property?
How many bedrooms does the existing property have?
How many people will live in the modified/new building(s)?
How many bedrooms will the modified/new building(s) have in total?
Is the existing building(s) connected to the mains sewer?

If Yes, which sewage treatment works is waste water drained to?

Will this change for the new development and if so, how?

If No, how is waste water treated? Please provide details of the current provision for waste water treatment and the proposed method of treatment (See below for types of information required.)

Sealed Unit, emptied regularly and taken out of catchment.
Provide make, design specification, volume, frequency of emptying, receiving Sewage Treatment Works and evidence that they will accept the waste.

Package Treatment Plant or septic tank
Provide make, design specification, volume and details of discharge with respect to phosphate.
Will the discharge be to water course or ground?

Water course (PTP only)
How many cubic metres will be discharged per day?
What is the exact location of the discharge point on the water course? (Please provide a map.)

Ground

- Please give the name/location and distance away from the discharge point of any watercourses within 500m.
- Has the PTP been designed to treat P and what is the P discharge in milligrammes per litre (mg/l)?
- What is the maintenance regime for the equipment?
- At what distance and location are the nearest land drains (if within 100m)?
- Has the land sufficient permeability to ensure the soak-away is effective (give workings and results of percolation tests as outlined in 'Approved document H, Drainage and Waste Disposal, The Building Regulations 2010, H2.'
- What is the current land use of the area surrounding the drainage field or soakaway – is it:
  - ❖ Permanent pasture (for more than 20 years)
  - ❖ Domestic garden for more than 20 years
  - ❖ Arable, ley or pasture (the latter for less than 20 years),
  - ❖ Other land use – please describe.
- If the land use is arable, ley or other recent grassland, what is the P index of the soil? If you have described a different land use to the above we will let you know if the P index needs to be submitted.
- Does the land have a Nutrient/Manure Management Plan? If so please submit a copy with your application.
- Please complete form FAD1 (see below), providing full calculations, and submit it, together with an accurate, annotated drawing and location plan for the soakaway/drainage field, with the planning application. The drawing should state the make, model and capacity of the proposed package sewage treatment plant.

Foul Drainage Assessment Form (FDA1)

Please note: this form should be used for planning related queries only and cannot be used when applying for a Consent to Discharge.

APPLICANT DETAILS
Name
Address
Telephone No/e-mail

This form should be used in order to establish whether non-mains drainage, either a new system or connection to an existing system, would be acceptable, your answers to the following questions will be taken into consideration. It is important that you provide full and accurate information. Failure to do this will delay the processing of your application.

You must provide evidence that a connection to the public sewer is not feasible. Other than very exceptionally, providing non-mains drainage as part of your Planning or Building Regulation application will not be allowed unless you can prove that a connection to the public sewer is not feasible. Non-mains drainage systems are not considered environmentally acceptable in publicly sewered areas. Please note that the existence of capacity or other operating problems with the public sewer are not valid reason for non-connection where this is reasonable in other respects.

Where connection to the public sewer is feasible, agreements may need to be obtained either from owners of land over which the drainage will run or the owners of the private drain.
Government guidance contained within DETR Circular 03/99/ WO 10/99 'Planning requirements in respect of the use of non-mains sewerage incorporating septic tanks in new development' gives a hierarchy of drainage options that must be considered and discounted in the following order:

1 Connection to the public sewer
2 Package sewage treatment plant (which can be offered to the Sewerage Undertaker for adoption)
3 Septic Tank
4 If none of the above are feasible a cesspool

You must respond to all the following questions, if you wish to submit additional information please do so, marked clearly "Additional Information". **In some cases you will be required to provide a further assessment in accordance with the requirements of DETR Circular 03/99/ WO 10/99 (see Guidance Note 1).**

Mains connection	**YES**	**NO**
Have you provided a written explanation of why connection to the mains sewer is impractical with this form?. *This should include a scaled map showing the nearest mains connection point -* *check with your local sewerage undertaker.*		

Non-mains connection

Please provide a plan with dimensions that clearly shows the location of the whole system in relation to the proposed development and the position of the key elements e.g. septic tank, drainage fields and points of discharge.

1. Existing system	**YES**	**NO**
Do you intend to use an existing non-mains foul drainage system?		
If YES, does the system already have a Consent to Discharge issued by the Environment Agency? *(In the case of a cesspool write N/A) Please provide Consent* *reference number……*		

2. Discharge	**YES**	**NO**
Do you propose to use a cesspool? *If yes go to Q4*		
Do you intend to use a system that discharges solely to watercourse? *(see* *Guidance Note 2)* *If yes go to Q8.*		
Alternatively, will all, or any part of, the discharge go to soakaway*? (see Guidance* *Note 2)* - this would include systems that combine a soakaway with a high level overflow to watercourse? *If yes go to Q3.*		
Have you considered having your system adopted by the sewerage undertaker? *(See*		

Guidance Note 6).		

3. Water abstraction	**YES**	**NO**
Do you receive your water from the public mains supply? *If yes go to Q5*		
If not, where do you get your water supply from?		

4. Cesspools *(For methods other than cesspools write N/A)*	**YES**	**NO**
Have you provided written justification for the use of a cesspool in preference to more sustainable methods of foul drainage disposal? *(see Guidance Note 3)*		

5. Ground Conditions *(For cesspools write N/A)*	**YES**	**NO**
Have you submitted a copy of the percolation test results with this form *(see Guidance Note 4)?* If NO please explain the justification for not undertaking or submitting these tests.		
Is any part of the system in land which is marshy, water logged or subject to flooding?		
Will the soakaway be located on artificially raised, made-up ground or ground likely to be contaminated? *If yes please provide details as additional information.*		
Have you submitted the results of a trial hole at the site to establish that the proposed drainage field will be above any standing groundwater *(see Guidance Note 5)?*		

6. Available Land	**YES**	**NO**
Is the application site plus any available area for a soakaway less than 0.025 hectares ($250m^2$)?		

7. Siting of drainage field/soakaway discharge from a septic tank or package treatment plant or other secondary treatment.. *You may need to make local enquiries to get a full answer to these questions*.	**YES**	**NO**
Will it be at least **10m** from a watercourse, permeable drain or land drain?		
Will it be at least **50m** from any point of abstraction from the ground for a drinking water supply (e.g. well, borehole or spring)? *This includes your own or a neighbour's supply.*		
Are there any drainage fields/soakaways within **50m**? *This includes any foul drainage discharge system (other than the subject of this application) on either your own or a neighbour's property..*		
Will it be at least **15m** from any building?		
Will there be any water supply pipes or underground services within the disposal system, Other than those required by the system? *(For cesspools write N/A)*		
Will there be any access roads, driveways or paved areas within the disposal area? *(For cesspools write N/A)*		

8. Siting of treatment plant, septic tank or cesspool	**YES**	**NO**
Is it at least **7m** from the habitable part of a building?		
Will there be vehicular access for emptying within **30m?**		
Can the plant, tank or cesspool be maintained or emptied without the contents being taken Through a dwelling or place of work?		

9. Expected flow

Please estimate the total flow in litres per day *(see Guidance Note 4).*	

10. Maintenance

How do you propose to maintain the system?

Declaration
I declare that the above information is factually correct.

Name	Signature	Date

GUIDANCE NOTES:

1) This form is for use with ***DETR Circular 03/99 (WO Circular 10/99)*** *'Planning* ***Requirements in Respect of the Use of Non-Mains Sewerage Incorporating Septic Tanks in New Development'*** *(the Circular).* It is intended to help Local Planning Authorities establish basic information about your system and decide whether you need to submit a more detailed site

assessment in accordance with Annex A of the Circular. If a detailed site assessment is requested but not submitted, your planning application might be refused.

2) In addition to Planning Permission and Building Regulation approval y**ou may also require Consent to Discharge from the Environment Agency. Please note that the granting of Planning Permission or Building Regulation approval does not guarantee the granting of a Consent to Discharge. Upon receipt of a correctly filled in application form the Agency will carry out investigations It can take up to 4 months before the Agency is in a position to grant consent or not**.

3) The use of cesspools is an option of last resort as set out in the non-mains drainage hierarchy of preference in DETR Circular 03/99/WO 10/99. This is echoed in the Building Regulations 2000 (approved document part H). The Circular notes at Annex A paragraph 8 that cesspools give rise to environmental, amenity and public health problems as a result of *"frequent overflows due to poor maintenance, irregular emptying, lack of suitable access for emptying and even through inadequate capacity."* In addition to this the requirement for frequent emptying is usually by contractor involving road transport with associated environmental costs. For these reasons, the use of cesspools cannot be considered a long-term foul sewage disposal solution. In view of the environmental risks associated with their use, any proposal to use cesspools must be fully justified to the Local Planning Authority

4) Typical flows

Property	Litres per person per day		Property	Litres per person per day
Domestic	180		Offices	50/100
Hotels, B&Bs	200 (dependant on		Factories	50/100
Restaurants	30-12		Public Houses	12
Campsites	75		Caravans	180
Dayschool	50		Rest Homes	350
Boarding School	200		Hospitals	450

Loadings should be assessed using 'British Water' CoP, Flows and Loads-3. Domestic housing up to 3 bedrooms should have a minimum population of 5P, with 1P for each additional bedroom over 3.

5) You should refer to **DTLR Building Regulations 2000 Section H2 Waste Water Treatment and Cesspools** with regard to the general requirements for construction of non mains sewerage systems. **Sections 1.33 to 1.38** deal with the test requirements for trial holes and percolation tests and for convenience the text of these sections is repeated below:

1.33 A trial hole should be dug to determine the position of the standing ground water table. The trial hole should be a minimum of $1m^2$ in area and 2m deep, or a minimum of 1.5m below the invert of the proposed drainage field pipework. The ground water table should not rise to within 1m of the invert level of the proposed effluent distribution pipes. If the test is carried out in summer, the likely winter groundwater levels should be considered. A percolation test should then be carried out to assess the further suitability of the proposed area.

1.34 Percolation test method – A hole 300mm square should be excavated to a depth of 300mm below the proposed invert level of the effluent distribution pipe. Where deep drains are necessary the hole should conform to this shape at the bottom, but may be enlarged above the 300mm level to enable safe excavation to be carried out. Where deep excavations are necessary a modified test procedure may be adopted using a 300mm earth auger. Bore the test hole vertically to the appropriate depth taking care to remove all loose debris.

1.35 Fill the 300mm square section of the hole to a depth of at least 300mm with water and allow it to seep away overnight.

1.36 Next day, refill the test section with water to a depth of at least 300mm and observe the time, in seconds, for the water to seep away from 75% full to 25% full level (i.e. a depth of 150mm). Divide this time by 150mm. The answer gives the average time in seconds (Vp) required for the water to drop 1mm.

1.37 The test should be carried out at least three times with at least two trial holes. The average figure from the tests should be taken. The test should not be carried out during abnormal weather conditions such as heavy rain, severe frost or drought.

1.38 Drainage field disposal should only be used when percolation tests indicate average values of Vp of between 12 and 100 and the preliminary site assessment report and hole tests have been favourable. This minimum value ensures that untreated effluent cannot percolate too rapidly into groundwater. Where Vp is outside these limits effective treatment is unlikely to take place in a drainage field. However, provided that an alternative form of secondary treatment is provided to treat the effluent from the septic tanks, it may still be possible to discharge the treated effluent to a soakaway.

Further details about drainage fields are contained in **BS6297:2007+A1:2008 'Code of practice for the design and installation of drainage fields for use in wastewater treatment'**.

6) Developers may requisition a sewer from the Sewerage Undertaker to connect their development to the public sewer. Should this not be feasible on the grounds of cost and practicability, on site treatment in the form of package plants and their associated sewers (If constructed to an acceptable standard) can be offered to the sewerage undertaker for adoption. This approach is in support of advice from the Government described in DETR Circular 3/99 and WO 10/99. Developers are urged to discuss their requirements with the Sewerage Undertaker at the earliest possible opportunity.

7) Glossary

Package treatment plant

A package treatment plant is a system which offers varying degrees of biological sewage treatment and involves the production of an effluent which will be disposed of to ground via a soakaway or direct to a watercourse. There are many varieties of package plant but all involve settling the solids before and/or after a biological treatment stage and all use electricity. Package treatment plants usually treat sewage to a higher standard than septic tanks but are vulnerable in the event of power failures. This may make their use inappropriate in some circumstances e.g. holiday accommodation where occupation and maintenance are irregular.

Septic tank

A septic tank is a two or three chamber system, which retains sewage from a property for sufficient time to allow the solids to form into sludge at the base of the tank, where it is partially broken down. The

remaining liquid in the tank then drains from the tank by means of an outlet pipe.

Effluent from a septic tank is normally disposed of by soakage into the ground, provided that the

disposal does not generate a pollution risk to surface waters or groundwater resources (underground

water). The most commonly used form of soakaway is a subsurface irrigation area, comprising a

herringbone pattern of land drains laid in shallow, shingle filled trenches. The soakaway drains should

be located at as shallow a depth as possible, usually within 1 metre of the ground surface

Cesspool

A cesspool is a covered watertight tank used for receiving and storing sewage and has no outlet. It relies

on road transport for the removal of raw sewage and is therefore the least sustainable option for

sewage disposal. Because of this, a cesspool is best regarded as a temporary measure pending a more satisfactory solution, such as the provision of mains drainage. It is essential that a cesspool is, and remains, impervious to the ingress of groundwater or surface water and has no leaks.


Shropshire Council
Clun Catchment
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Ordnance Survey 100049049
MONTGOMERY
BISHOP'S CASTLE
CRAVEN ARMS
KNIGHTON
PRESTEIGNE
Offa's Dyke Path
THE LONG MYND

Plan	Description	Possible in-combination effects?	
Telford and Wrekin Council, Adopted Core Strategy DPD 2007	Growth focuses on Telford and Newport, nearest village identified for growth is High Ercall, at 10 km from Hencott Pool. No effect pathways identified. New Shaping Places Local Plan will contain site allocations up to 2031. Site Allocations not finalised and Draft Plan submission due 2015 -2016. http://www.telford.gov.uk/downloads/file/5407/local_development_scheme_2013	No in-combination effects.	
Hereford Core Strategy	Pre-submission publication due Winter 2014. First focus on Hereford then Leominster for growth. 165000 houses in total. 148ha of employment land over the plan period 2011-2031 Leominster 2300 new homes and 10ha of employment land. Leominster is c. 15 km south from Downton Gorge SAC but with no hydrological connection. https://www.herefordshire.gov.uk/planning-and-building-control/planning-policy/core-strategy	No in-combination effects.	
Malvern Hills District Council	Now covered by the South Worcestershire Development Plan.	N/A	
Wrexham Unitary Development Plan 1996 - 2011	Withdrawn 2012.	N/A	
Wrexham Local Development Plan 2 (LDP2) 2013 to 2028	Currently at Issues and Options stage.	No in-combination effects. Site allocations not yet identified.	

Newcastle-under-Lyme and Stoke-on-Trent Core Spatial Strategy 2006-2026	No Shropshire site allocations with effect pathways. Only 2 designated Ramsar sites, Betley Mere and Black Firs and Cranberry Bog – both over 15km away from Shropshire Border. Majority of growth to east of Newcastle plan area. Area adjacent to Shropshire classed as rural. http://www.newcastle-staffs.gov.uk/Documents/Regeneration%20and%20Planning/Core%20Strategy%20Final%20Version%20-%2028th%20October.pdf	No in-combination effects.	
Newcastle Borough Council Site Allocations and Policies Local Plan.	Cannot find this document – suspect not published yet. See above. http://www.newcastle-staffs.gov.uk/planning_content.asp?id=SXE542-A7809BF7&cat=1363	No in-combination effects.	
South Worcestershire Development Plan	Site allocations identified and plan submitted but final hearing not taken place. Allocation at Tenbury Wells, outside 10km buffer zones for sites considered in Shropshire SAMDev HRA and no effect pathways. Downton Gorge nearest Natura 2000 site which is 15km downstream. http://www.swdevelopmentplan.org/?page_id=52	No in-combination effects.	
Worcestershire Emerging Minerals Local Plan	Now at second stage of consultation. No site allocations yet.	No in-combination effects.	
Worcestershire Adopted Minerals Local Plan	No allocations within 10km of Shropshire screened in sites and no effect pathways identified. http://www.worcestershire.gov.uk/cms/planning/planning_policy__strategy/adopted_minerals_local_plan.aspx	No in-combination effects.	
Waste Core	Planning for waste management facilities in Worcestershire till 2027. HRA identified areas	No in-combination effects.	

Strategy for Worcestershire Adopted Waste Local Plan 2012-2027	where it cannot be concluded that there would be no LSE for impacts from waste proposals. The closest area occurs around Fens Pools to the east of Stourbridge. Fens Pool has been screened out because of its distance from Shropshire and the nearest site allocations and the lack of effect pathways. http://www.worcestershire.gov.uk/cms/planning/planning_policy__strategy/waste_core_strategy.aspx		
Wyre Forest District Site Allocations and Policies Local Plan	Adopted 2013. No Natura 2000 sites within 10km of Shropshire's border and no effect pathways identified to sites further away. http://www.wyreforestdc.gov.uk/cms/planning-and-buildings/planning-policy/site-allocations-and-policies.aspxno	No in-combination effects.	
South Staffordshire District Council	Site Allocation documents due to be consulted on early in 2014. No Shropshire site allocations in this area fall within 10km of a Natura 2000 site and no effect pathways have been identified. http://www.sstaffs.gov.uk/your_services/strategic_services/planning_policy_-_local_plans/site_allocations.aspx	No in-combination effects.	
Staffordshire Moorlands District Council Site Allocations Development Plan	Public consultation on specific site allocations will be undertaken in 2014. Market Drayton site allocations do not lie in a buffer zone for Natura 2000 sites and are c. 15km from Aqualate Mere, with no effect pathways identified. HIN009 and HIN 002 lie around 9 km from Aqualate Mere. With a combined total of 38 dwellings there should be no likely significant effect due to recreational impacts and no other effect pathways have been identified.	No in-combination effects	
Powys LDP 2011-2026	Deposit Plan said to be ready for public consultation in June 2014. http://static.powys.gov.uk/uploads/media/LDP_Initial_Consultation_Report_-_March_2013_01.pdf http://static.powys.gov.uk/uploads/media/LDP_Preferred_Strategy_March_2012__Doc4__en_01.pdf Candidate Sites Map: http://www.powys.gov.uk/index.php?id=12006&L=0	No in-combination effects - site allocations not known.	
Cheshire West and	Submitted Dec.2013, awaiting examination 2014. HRA determined no in combination effects on Brown Moss or Fenns Whixal Mosses. Both around 10km from likely growth	No in-combination effects.	

Chester Local Plan (Part one) Strategic Policies	areas (200 houses proposed for Malpas c. 10km from Brown Moss and c. 9 km from the nearest part of Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC). Local Plan (Part 2) Land Allocations and Detailed Policies yet to be consulted on. http://www.cheshirewestandchester.gov.uk/your_council/policies_and_performance/council_plans_and_strategies/planning_policy/emerging_local_plan.aspx		
Cheshire East Local Plan	Pre-Submission Core Strategy has been consulted on and is being updated – being submitted for examination in 2014. Site Allocation document will follow after Core Strategy. http://cheshireeast-consult.limehouse.co.uk/portal/planning/cs/cspre?pointId=s1377262947291#section-s1377262947291	No in-combination effects. Site allocations not known.	
Cheshire Replacement Minerals Local Plan	Adopted in 1999. Nearest Cheshire minerals allocation to Shropshire one is over 16km and no effect pathways identified. http://www.cheshireeast.gov.uk/planning/spatial_planning/saved_and_other_policies/cheshire_minerals_local_plan.aspx	No in combination effects.	
Cheshire Replacement Waste Local Plan	Nearest allocation beyond Nantwich. http://www.cheshireeast.gov.uk/planning/spatial_planning/saved_and_other_policies/cheshire_waste_local_plan.aspx	No in-combination effects.	

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Albrighton	Albrighton	S1.1a	ALB002	Extent of former site	Land east of Shaw Lane	180dw	B		NO	NO
Albrighton	Albrighton	S1.1a	ALB003	Housing	Land at White Acres	20dw	B		NO	NO
Bishops Castle	Bishops Castle	S2.1a	BISH013sd	Housing	Schoolhouse Lane	40 dw	C2	Development over 10 houses requires appropriate assessment due to addition of phosphate to River Clun	YES	YES
Bishops Castle	Bishops Castle	S2.1b		Employment	Land at Bishops Castle Business Park, Phase 2	2.8ha	C2		YES	YES
Bishops Castle	Bucknell	S2.2	BUCK001 employment	Employment - existing timber year and new workshop units	Timber Yard/Station yard	1.4ha	C2	Development over 10 houses requires appropriate assessment due to addition of phosphate to River Clun	YES	YES
Bishops Castle	Bucknell	S2.2	BUCK001 housing	Housing	Timber Yard/Station yard	70dw	C2	Development over 10 houses requires appropriate assessment due to addition of phosphate to River Clun	YES	YES
Bishops Castle	Chirbury	S2.2	CHIR001	Housing	Land to the rear of Horseshoe Road	30 dw plus 20 dw further in village	B	No pathway to Marton Pool. Distance to Stiperstones	NO	NO
Bishops Castle	Clun	S2.2	CLUN002	Housing	Land at Turnpiile Meadow	60 dw	C2	No phosphate stripped at STW. Will add phosphate to River Clun.	YES	YES

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Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Bishops Castle	Lydbury North		LYD001	carried forward housing	Rear of Habershon Close (amended boundary)	20 dw for Lydbury North	C2	Site dropped. No phosphate stripped at STW. Will add phosphate to River Clun.	YES	YES
Bishops Castle	Lydbury North		LYD002	housing	Adjacent to South View	20 dw for Lydbury North	C2	Site dropped. Would have required AA	YES	YES
Bishops Castle	Lydbury North	S2.2	LYD007_008	housing	North and South of Telephone Exchange	10dw	C2	No phosphate stripped at STW. Will add phosphate to River Clun.	YES	YES
Bishops Castle	Lydbury North	S2.2	LYD009	housing	Former garage	3dw	C2	No phosphate stripped at STW. Will add phosphate to River Clun.	YES	YES
Bishops Castle	Lydbury North	S2.2	LYD010	housing	Rear of Kirby's Cottage (amended boundary)		C2	Site dropped. Would have required AA	YES	YES
Bishops Castle	Lydbury North	S2.2	LYD011	housing	Adjacent to Church Close	5dw	C2	No phosphate stripped at STW. Will add phosphate to River Clun.	YES	YES
Bridgnorth	Bridgnorth	S3.1	BRID001-004&020b/09	Housing	Land North of Wenlock Road	200 dw	B		NO	NO
Bridgnorth	Bridgnorth	S3.1	BRID020a/09	Carried forward housing	Land North of Wenlock Rd	300 dw	B		NO	NO
Bridgnorth	Bridgnorth	S.3	ELR011	Livestock Market	South of A458 opp Wenlock Rd		B		NO	NO

Appendix 5 SAMDev HRA screening results July 14:
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Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Bridgnorth	Bridgnorth	S.3	W039	Employment (recycling)	Off Old Worcester Rd		B		NO	NO
Bridgnorth	Ditton Priors	S3.2	DITT005	Housing	Land opposite 6 Station Rd	?	B		NO	NO
Bridgnorth	Highley	S9.1a	HIGH003	Housing	Rhea Hall	30dw	B		NO	NO
Bridgnorth	Morville	S7	M1	Mineral	Morville		B		NO	NO
Bridgnorth	Neenton	S3.2	NEE001	Housing	Land at The Pheasant Inn	7 dw has pp	B		NO	NO
Broseley	Broseley	S4.1	ELR017	Employment	Land south of Avenue Road		B		NO	NO
Church Stretton	Church Stretton	S5.1	CSTR018	Carried forward housing	School playing field, Shrewsbury Road	52dw	B	Distance too great and alternative sites	NO	NO
Church Stretton	Church Stretton		CSTR027 Housing	Housing	New House Farm	80dw	B	Distance too great and alternative sites	NO	NO
Church Stretton	Church Stretton		ELR070 NEW not published	Employment - B1	New House Farm West	2ha	B	No pathway	NO	NO
Church Stretton	Church Stretton	S5.1	CSTR019 pai adjusted	Reserve Housing Allocation	Battlefield to rear of Oaks Road/Alison Road	25dw	B	No pathway	NO	NO
Church Stretton	Church Stretton		CSTR013	Housing	South west of Church Way Business Park		B		NO	NO
Church Stretton	Church Stretton		CSTR014	Housing	Land adj to Church Stretton		B	No pathway	NO	NO

Appendix 5 SAMDev HRA screening results July 14:
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Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
					School					
Church Stretton	Church Stretton	S5.1	ELR078	Employment	Spring Bank Farm		B	No pathway	NO	NO
Cleobury Mortimer	Cleobury Mortimer	S6.1	CMO002	carried forward housing	Land at Tenbury Road		B		NO	NO
Cleobury Mortimer	Cleobury Mortimer	S6.1	CMO005	carried forward housing	New House Farm Tenbury Road		B		NO	NO
Cleobury Mortimer	Cleobury Mortimer	S6.1	ELR068CM	employment carried forward	adj Cleobury Mortimer Industrial Estate Tenbury Rd		B		NO	NO
Cleobury Mortimer	Cleobury Mortimer	S6.3	ELR071	employment	Land at The Old Station Business Park		B		NO	NO
Cleobury Mortimer	Kinlet	S6.2	KLT001sd	housing			B	no pathway	NO	NO
Craven Arms	Craven Arms	S7.1	CRAV002	Carried forward housing	Land off Watling St	25	B	no pathway	NO	NO
Craven Arms	Craven Arms	S7.1	CRAV003 & 9	Carried forward housing	Land between Watling Street and Brook Road	235	B	no pathway	NO	NO
Craven Arms	Craven Arms	S7.1	CRAV004 & 10	Carried forward housing	Land at Watling Street/Clun Road, Craven Arms	60	B	no pathway	NO	NO

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Craven Arms	Craven Arms	S7.1	CRAV024	Carried forward housing	Land off Clun road adj. Alexander Park	25	B	no pathway	NO	NO
Craven Arms	Craven Arms	S7.1	CRAV030	Housing	Land at Newington Farm	5	B	no pathway	NO	NO
Craven Arms	Craven Arms	S7.1	elr053	Employment	Land at Newington Farm	8ha	B	no pathway	NO	NO
Craven Arms	Craven Arms	S7.1	ELR055	Employment	Land west of A49		B	no pathway	NO	NO
Craven Arms	Craven Arms		LS2005_00002	Employment carried forward	North of Long Lane, Craven Arms		B	Site dropped	NO	NO
Ellesmere	Cockshutt	S8.2	CO002a & b	Housing	Land west of Cockshutt off Shrewsbury Road	10 dw	B	Policy mitigation	YES	YES
Ellesmere	Cockshutt		CO005	Housing	Cockshutt House farm	Up to 5 dw with COO23sd	B	Small size but within 5km. Recreation in combination	YES	YES
Ellesmere	Cockshutt	S8.2	CO018	Carried forward housing	Land south of Chapel House Farm	5 dw	B	Small size but within 5km. Recreation in combination	YES	YES
Ellesmere	Cockshutt	S8.2	CO023sd	Housing	Land to South of Kenwick Rd	Up to 5 dw with COO5	B	Small size but within 5km. Recreation in combination	YES	YES
Ellesmere	Cockshutt			Housing	Land adj. to The Parklands		B	Site dropped Recreation in combination	NO	YES

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Ellesmere	Cockshutt			Housing	Land to the rear of the Old Smithy		B	Site dropped. Recreation in combination	NO	YES
Ellesmere	Dudleston Heath	S8.2	DUDH006sd	Housing	Ravenscroft Haulage Site	20dw	B	Outside River Dee catchment	NO	NO
Ellesmere	Ellesmere	S8.1	ELL003a	mixed use site	Land south of Ellesmere	250 dw	C2	Recreational impact on Colemere. Policy mitigation	YES	YES
Ellesmere	Ellesmere	S8.1	ELL003b	Leisure/tourism	Land south of Ellesmere	18ha hotel, marina, leisure centre, caravan site, garden centre	C2	Pathway to Colemere through canal. Policy mitigation	YES	YES
Ellesmere	Ellesmere	S8.1	LN2003_00036(ELR075)	Employment	off Grange Rd, Ellesmere	3ha	B	No pathways known and with policy mitigation certain no impact	NO	YES
Ellesmere	Ellesmere	S8.1	LN2003_00037 (ELR074)	Employment	Ellesmere Business Park, Oswestry Road, Ellesmere	6ha	B	No pathways known and with policy mitigation certain no impact	NO	YES
Ellesmere	Ellesmere		NS2006_00725(ELR076)	Employment	Plots 2 & 3Ellesmere Business Park Oswestry Rd	0.4ha	B	No pathways known and with policy mitigation certain no impact	NO	YES
Ellesmere	Tetchill	S8.2	TET001	Housing	Land South of Cairndale	10dw	B	screened out as under 20 dwellings for settlement	NO	NO

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Ellesmere	Welsh Frankton	S8.2	WFTN002	housing	Land Adj. St Andrews Church	5 dw	B	screened out as under 20 dwellings for settlement	NO	NO
Ellesmere	Wood Lane	S8.3	M4	Mineral	Wood Lane		C2	Nearness to N2K sites, vulnerable to changes to groundwater	Yes	YES
Highley	Highley	S9.1b	LB2004_00017	Employment	Adj Netherton Workshops, off B4555, Highley (HIG4)	0.6ha	B		NO	NO
Ludlow	Ludlow	S10.1	ELR058(part)	employment - all B classes	South of Eco park The Sheet		B	Site dropped?	NO	NO
Ludlow	Ludlow	S10.1	LUD017sd	housing	Land at Rocks Green	200dw	B	Downstream of Downton Gorge & no public access	NO	NO
Ludlow	Ludlow	S10.1	LUD034	Housing	Land east of Eco Park	80dw	B	Downstream of Downton Gorge & no public access	NO	NO
Ludlow	Ludlow	S10.1	ELR059	employment - B1/B8	Land east of Ludlow Eco Park, Sheet Road, Ludlow	2.5ha	B	Downstream of Downton Gorge	NO	NO
Ludlow	Onibury	S10.2	ONBY003	Housing	Onibury Farm	8dw	B		No	NO
market drayton	Hinstock	S11.2	HIN002	Housing	Land at Hinstock (Newport Road)/ Land West of Manor Farm Drive	8 dw	B		No	NO
market drayton	Hinstock	S11.2	HIN009	Housing	Land at Bearcroft	30 dw	B	preapp/13/00537 44 units	No	NO

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
market drayton	Hodnet	S11.2	HOD009	Housing	Land to rear of Shrewsbury St	10dw	B		No	NO
market drayton	Hodnet	S11.2	HOD011	Housing	Shrewsbury Street Farm	10 dw	B		No	NO
market drayton	Hodnet	S11.2	HOD010	Housing	Land off Station Road	30 dw	B		No	NO
market drayton	market drayton	S11.1	ELR024	Employment	Sych Farm (Phase 2)	16ha	B		No	NO
market drayton	market drayton	S11.1	MD010/028	Housing	Land between Croft Way and Greenfields Lane	76 dw	B		No	NO
market drayton	Market Drayton	S11.1	MD030	Housing	Land off Rush Lane Market Drayton	110 dw plus 214 dw	B		No	NO
market drayton	Market Drayton		new MD048sd	housing	Land at Newcastle Road		B		NO	NO
market drayton	Stoke Heath	S11.2	STOK003/STH002	housing	Land at The Club Dutton Close	25 dw	B		No	NO
market drayton	Stoke Heath		STOK002/STH001	housing	Land at the 'Old Camp'		B		No	NO
market drayton	Stoke Heath		STOK001		Land at Rosehill Road		B		No	NO
market drayton	Stoke Heath		STH002 (STOK003)	Housing	Land at The Club Dutton Close/ Dutton Close	25 dw	B		No	NO

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Minsterley Pontesbury	Minsterley	S12	MIN002 inc MIN015	Mixed Use Allocation	Land at Hall Farm	17dw	B	Negligible impact	NO	NO
Minsterley Pontesbury	Minsterley	S12	MIN007/R	carried forward housing	Land off Callow Lane	32 dw	B	Negligible impact	NO	NO
Minsterley/Pontesbury	Pontesbury	S12	PBY018/R & PBY029	New Site Area for Mixed use	Land at Hall Bank, Pontesbury.	60 dw	B	Negligible impact	NO	NO
Minsterley/Pontesbury	Pontesbury	S12	PBY019	carried forward housing	Land off Minsterley Rd	16 dw	B	Negligible impact	NO	NO
Much Wenlock	Much Wenlock	S13	None	Neighbourhood Plan			B		NO	NO
Oswestry	Gobowen	S14.2	GOB008	Housing	Land at Southlands Avenue	20dw	B	Recreational impacts and hydrological impacts on River Dee unlikely at this distance	NO	NO
Oswestry	Gobowen	S14.2	GOB012	Housing	Land between A5 and Shrewsbury railway line	90 dw	B	Recreational impacts and hydrological impacts on River Dee unlikely at this distance	NO	NO
Oswestry	Kinnerley		KNY001	housing	Land adjacent Kinnerley Primary School	12 dw	B	No pathway	NO	NO
Oswestry	Kinnerley		KNY002	housing	Land west of School Road	12dw	B	No pathway	NO	NO
Oswestry	Knockin	S14.2	KK001	Housing	Land north of Lower House Farm	15dw	B	No pathway, also under 20 for settlement	NO	NO
Oswestry	Llanymynech	S14.2	LLAN001	housing	Former Railway Land, Station Road	32 dw	C2	Policy mitigation	YES	YES

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Oswestry	Llanymynech	S14.2	LLAN009	carried forward housing	Land North of Playing Fields	35 dw	C2	Policy mitigation	YES	YES
Oswestry	Maesbrook		MBK001	housing	Land at Greenfields Farm	4dw	B	Small size	NO	NO
Oswestry	Maesbrook		MBK009	housing	Land adj. to The Smithy	5dw	B	Small size	NO	NO
Oswestry	Oswestry		Car Parking for Fort	Parking	car parking for Fort		B	No impact	NO	NO
Oswestry	Oswestry	S14.1	ELR042	employment	Land north of Whittington Road	2ha	B	No pathway	NO	NO
Oswestry	Oswestry	S14.1	ELR043e	employment	South of Whittington Road	14 ha	B	No pathway	NO	NO
Oswestry	Oswestry	S14.1	ELR072	employment	Mile End East	23 ha	B	No pathway	NO	NO
Oswestry	Oswestry		OSW002	Housing	Land off Gobowen Road	36 dw	B	No pathway	NO	NO
Oswestry	Oswestry		OSW003	Housing	Oldport Farm, Gobowen Road	23 dw	B	No pathway	NO	NO
Oswestry	Oswestry	S14	OSW004	housing	Land off Whittington Road	117 dw	B	No pathway	NO	NO
Oswestry	Oswestry	S14	OSW024	Housing Land	Eastern Gateway, Sustainable Urban Extension	900 dw	B		NO	NO

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Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Oswestry	Oswestry	S14	OSW029	carried forward housing	Oswestry Leisure Centre, College Road	40dw	B	No pathway	NO	NO
Oswestry	Oswestry	S14	OSW030	carried forward housing	Land at The Cottams, Morda Road	65dw	B	No pathway	NO	NO
Oswestry	Oswestry	S14	OSW033	carried forward housing	Alexandra Road Depot	35dw	B	No pathway	NO	NO
Oswestry	Oswestry	S14	OSW034/35	carried forward housing	Land south of The Cemetery (site A & B)	80 dw	B	No pathway	NO	NO
Oswestry	Oswestry	S14	OSW042	carried forward housing	Richard Burbidge Whittington Road	180dw	B	No pathway	NO	NO
Oswestry	Oswestry	S14	OSW045	carried forward housing	Land off Victoria Fields	80dw with OSW034 & 035	B	No pathway	NO	NO
Oswestry	Oswestry		OSW068sd	Housing	Land at Trefonen Road		B	No pathway	NO	NO
Oswestry	Park Hall		PARK001 pai fixed	housing	Land at Artillery/Larkhill/Park Crescent	20dw	B	No pathway	NO	NO
Oswestry	St Martins	S14.2	STM029sd	housing	land at Rhos y Llan Farm	80 dw	B	See HRA report - no pathway	NO	NO
Oswestry	Weston Rhyn		WRN010	housing	Land south of Brookfields and Aspen	20dw	B	See HRA report - no pathway	NO	NO

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
					Grange					
Oswestry	Weston Rhyn		WRN016	housing	Land at the Sawmills	20dw	B	See HRA report - no pathway	NO	NO
Oswestry	Whittington	S14.2	WGN001	housing	Land adjacent to Oaklands Drive	80dw in total	B	No pathway	NO	NO
Oswestry	Whittington	S14.2	WGN004	housing	Land to the rear of Hershell House	80dw total	B	No pathway	NO	NO
Oswestry	Whittington	S14.2	WGN005	housing	Land to South East of School	80dw total	B	No pathway	NO	NO
Oswestry	Whittington	S14.2	WGN021	housing	Land adj. to Big House & Leefields	80dw total	B	No pathway	NO	NO
Shifnal	Shifnal	S15.1	ELR021 ELR021 ELR021 ELR021	employment	J N Bentley Ltd Lamledge Lane Shifnal	2ha	B		No	NO
Shifnal	Shifnal	S15.1	SHI004/c	Employment reserved	Land between Lawton Rd and Lamledge Lane	2ha	B		No	NO
Shifnal	Shifnal	S15.1	SHI004a	mixed use site	Land south of Aston Street	115	B		No	NO
Shifnal	Shifnal	S15.1	SHI006a	carried forward housing	Land north of Wolverhampton Road	250	B		No	NO

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Shrewsbury	Baschurch	S15.2	BAS005	Carried forward housing	Land at rear of Wheatlands Estate	40dw	B	Policy mitigation	NO	YES
Shrewsbury	Baschurch	S15.2	BAS017a	Housing	Land to the west of Shrewsbury Road	30 dw	B	Policy mitigation	NO	YES
Shrewsbury	Baschurch	S15.2	BAS025	Carried forward housing	Land to the rear of Medley Vale	25dw	B	Policy mitigation	NO	YES
Shrewsbury	Baschurch	S15.2	BAS035	Carried forward housing	Land off Station Rd	40dw	C2	Policy mitigation	YES	YES
Shrewsbury	Bomere Heath	S16.2	BOM004/R	Housing	Land off Shrewsbury Road, Bomere Heath	30 dw	B	No likely impact	NO	NO
Shrewsbury	Condover	S16.2	CON005	Housing	Land east of Shrewsbury Road	10 dw	B	No pathway	NO	NO
Shrewsbury	Condover	S16.2	CON006	Housing	Land opposite the school	10 dw	B	No pathway	NO	NO
Shrewsbury	Dorrington	S16.2	DOR004 new shape	Carried forward housing	Land off Forge Way, Dorrington	15 dw	B	Negligible impact	NO	NO
Shrewsbury	Dorrington		DOR007	Housing	Land to the rear of Sunny Cottages		B	Negligible impact	NO	NO
Shrewsbury	Dorrington	S16.2	DOR017 NEW	Housing	Adj. Old Vicarage	15 dw	B	Negligible impact	NO	NO
Shrewsbury	Gonsal Farm	S16.3	M10-11	Mineral	Gonsal Farm south of Condover	Sand and gravel	B	See Mineral allocation HRA	NO	NO

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
						working 44ha				
Shrewsbury	Hanwood & Hanwood Bank	S16.2	HAN011/R	Housing	Land west of school	25 dw	B	Negligible impact	NO	NO
Shrewsbury	Nesscliffe	S16.2	NESS004 & 012 part	housing	Land West of Holyhead Road	15 dw	B	Small size and over 5km	No	NO
Shrewsbury	Shrewsbury	S16.1	ELR006	employment carried forward	Land north of ABP, Battlefield Road, Shrewsbury	3ha	B	No pathway	NO	NO
Shrewsbury	Shrewsbury	S16.1	ELR007	employment carried forward	Land east of Battlefield Road	2ha	B	No pathway	NO	NO
Shrewsbury	Shrewsbury	S16.1	ELR064	employment	Churncote Island Gateway South		B	Included in Shrewsbury West SUE	NO	NO
Shrewsbury	Shrewsbury	S16.1	ELR067SHREW	Employment	Oxon Business Park Extension		B	Included in Shrewsbury West SUE	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW 002. 035, 083 & 128	Housing	Shrewsbury West sustainable urban extension	750dw	B	No pathway	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW001	carried forward housing	Land North of London Road	50 dw	B	No pathway	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW016	carried forward housing	Land at Hillside Drive. Part SUE	20dw	B	No pathway	NO	NO

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
					South					
Shrewsbury	Shrewsbury	S16.1	SHREW023	carried forward housing	Corner Farm Drive	25dw	B	No pathways	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW027	Housing	Weir Hill Farm Robertsford House & land off London Road	600 dw	B	No pathways	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW028. 029, 075, 107, 114 & 127 partsh. ELR02 & 66?	Employment	Shrewsbury South Sustainable urban extension	26ha	B	Downstream of N2K sites	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW073	carried forward housing	Off Ellesmere Road (East)	146dw	B	No public access to N2K sites	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW095 & 115	Carried forward housing	West of Battlefield Rd	100dw	B	No public access to N2K sites	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW105	carried forward housing	Land at Shillingston Drive	230 dw	B	Planning permission 11/03087/OUT	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW106	carried forward housing	Land off Hillside Drive, Belvidere	20dw	B	No pathways	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW120/ R	Carried forward housing	Land off Woodcote Way	40dw	B	No pathway	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW198	Housing	Land at Ditherington Flaxmill	120dw	B	No pathways	NO	NO

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Shrewsbury	Shrewsbury	S16.1	SHREW210/09/030/R, 094 & 019	carried forward housing	Bowbrook/Radbrook	550dw	B	Planning application 13/03534/OUT.	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW212/09b	carried forward housing	Land off Longden Road	175dw	B	No pathways	NO	NO
Shrewsbury	Shrewsbury	S16.1	SHREW028/29/075. 107. 114 & 127	Housing Land	South SUE	950?	B	No pathways	NO	NO
Shrewsbury	Uffington	S16.2	UFF006/10	Housing	Land between Manor Farm and Top Cottages	up to 5dw	B	Small site	NO	NO
Wem	Shawbury	S17	SHAW004	carried forward housing	Land to the rear of Brickyard Farm, Poynton Road	50 dw	B	No pathway	NO	NO
Wem	Wem	S17	ELR031a	employment carried forward	Land adj. Shawbury Rd (B5063)	4 ha	B	Distance	NO	NO
Wem	Wem	S17.1	WEM003	Housing	Land off Pyms Road	100 dw	B	Within 7km of Fenn's - recreation. No hydrological link	NO	YES
Wem	Wem	S17.1	WEM012	Housing	Land at Tilley	10 dw	B	Within 7km of Fenn's - recreation. No hydrological link	NO	YES
Whitchurch	Ash Parva	S18.2	ASHP002	Housing	Land west of Ash Parva	8dw	B	Policy mitigation	NO	YES
Whitchurch	Prees	S18.2	PRE002-010-011	carried forward housing	Land West of Shrewsbury Street	30 dw	B	recreation at Fenn's only	NO	NO
Whitchurch	Prees	S18.2	PRE008	carried forward	Land West off Moreton	40 dw	B	recreation at Fenn's only	NO	NO

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
				housing	Street					
Whitchurch	Prees		PRE022sd	Housing	Land at Tudor House, Whitchurch Road, Prees		B	recreation at Fenn's only. Site dropped	NO	NO
Whitchurch	Prees Heath	S18.2	PH004sd	housing	Former Cherry Tree Hotel and adjoinging land	5dw	B	Policy mitigation	NO	YES
Whitchurch	Tilstock	S18.2	TIL001	housing	Land at Tilstock (The Vicarage)	25 dw	B	Policy mitigation	NO	YES
Whitchurch	Tilstock	S18.2	TIL002	housing	Land at Tilstock Close	13 dw	B	Policy mitigation	NO	YES
Whitchurch	Tilstock	S18.2	TIL008	housing	Land at Russell House	12 dw	B	policy mitigation	NO	YES
Whitchurch	Whitchurch	S18.1	ELR033 edited	employment carried forward	Land at the Oaklands Farm	9ha	B	Site on perched water table	NO	NO
Whitchurch	Whitchurch	S18.1	ELR035	employment carried forward	Heath Road	11ha	B	Site on perched water table	NO	NO
Whitchurch	Whitchurch	S18.1	WHIT009-Land for Future Education Provision new	Education	West of Tilstock Rd		B	No likely effect	NO	NO
Whitchurch	Whitchurch	S18.1	WHIT009-Housing new	carried forward housing	West of Tilstock Rd	500 dw	C2	Policy mitigation. Planning application	YES	YES - completed

Appendix 5 SAMDev HRA screening results July 14:
Site Allocations

Place Plan	Settlement	Settlement Policy	Site_Ref	Type	Address	Size	Category A - D	Reason For Category	Appropriate Assessment Required In Plan?	HRA At Planning Application Stage?
Whitchurch	Whitchurch	S18.1	WHIT021	Housing	Land adjacent to Big House/Land east of Alport Rd	80dw	C2	Policy mitigation	YES	YES
Whitchurch	Whitchurch	S18.1	WHIT046	carried forward housing	Land at Mount Farm	100 dw	C2	Policy mitigation. Planning application	YES	YES
Whitchurch	Whitchurch	S18.1	WHIT051	Housing	Land at the Oaklands Farm	60dw	C2	Policy mitigation	YES	YES
Whitchurch	Whitchurch	S18.1	new WHIT052sd	Housing	Land to the North of the Grove	60 dw	C2	Policy mitigation	YES	YES
Whitchurch	Whitchurch	S18.1	WHIT033/10	Housing	Land North of Mill Park	13dw	C2	Policy mitigation	YES	YES

Appendix 5 SAMDev HRA screening results July 14:
N2K Sites

N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
Aqualate Mere (Staffs)	Midland Meres and Mosses Phase 2	241	Reductions in water levels from ground water and surface water abstractions from The Hollies borehole, highly eutrophication from raised nitrogen and phosphorous and siltation entering the site via incoming water, largely from the nearby canal, as well as the presence of invasive species, in particular fish	Access by public footpath and bird hide, otherwise permit holders only	Siltation	No	Reductions in water levels from ground water and surface water abstractions from The Hollies borehole. Fed via nearby canal	Recreation. No allocations in surface water catchment.	9km	No due to distance	
Berrington Pool	Midland Meres and Mosses Phase 1	4	Biological disturbance (trampling / erosion etc) from increased public access and from native and non-native invasive species such as crassula or scrub, lowering of the water table from abstractions or conversely water-logging, eutrophication and siltation from surrounding land use, in particular agricultural run-off and potentially sewage outfalls.	No, private fishing but footpath runs adjacent and informal access from local residents is causing concern to the owner.	Siltation	No	lowering of the water table from abstractions or conversely water-logging, eutrophication and siltation from surrounding land use, in particular agricultural run-off and potentially sewage outfalls.	None. No allocations in surface water catchment	2km	No	

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N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
Berwyn SPA		24,187	Designated for birds of prey. The bird species for which this site is designated are potentially sensitive to increased visitor pressure and are also sensitive to direct erosion and disturbance (especially by dogs).	?			N/A	Recreational pressure	9.5km		
Berwyn and South Clwyd Mountain SAC		27,132	Designated for upland habitats. Parts of this site are over critical load for nitrogen, acid deposition and ozone. The heath is affected by many human factors such as damage by illegal use of off road vehicles, erosion along public footpaths, litter and unplanned fires.	?			high dependence on local hydrology	Recreational pressure	9.5km		
Bomere, Shomere and Betton Pools	Midland Meres and Mosses Phase 1	59	Biological disturbance (trampling/erosion etc) from increased public access – watersports are already popular at the site and having an impact – as well as from native and non-native invasive species such as crassula, rhododendron and sycamore, fluctuations in the water table from nearby land drainage or abstractions, eutrophication from surrounding land use, in	No but private recreational pressure	Nitrogen, ammonia and acid deposition above critical load	No	On perched water table	None. No allocations in surface water catchment.	1.6km	No	

Appendix 5 SAMDev HRA screening results July 14:
N2K Sites

N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
			particular agricultural run-off and potentially sewage outfalls.								
Brown Heath Moss	Midland Meres and Mosses Phase 2	31	Assumed to be hydrologically isolated but not understood. Sites sensitive to invasive species, water quality issues, nutrient enrichment, sedimentation, erosion, & recreational disturbance	Common land but no footpaths	Nitrogen, ammonia and acid deposition above critical load	No	Assumed to be hydrologically isolated but not understood.	No development in surface water catchment area	2.6km	No	
Brown Moss SAC	Midland Meres and Mosses Phase 1	32	The designated feature of this site, *Luronium natans*, is sensitive to increased visitor pressure. This could result in direct disturbance and loss of plants and increase the risk of non-native and/or invasive plant introductions (from dog swimming etc). Development close to the site could potentially lead to lower water quality and increased pollution from surface water run-off.	Yes, walk at site, car park. Shropshire Council owned. Footpaths and common land.	Siltation e.g. roads. Above critical load for nitrogen with nearby industry provides some.	500m to A41	Primarily fed by rainfall which maintains a small, perched water table above a clay layer. Groundwater most likely below this clay layer. ESI (2012) state that there was no mechanism by which construction of Whitchurch bypass could have affected water levels at Brown Moss,	Recreational pressure, however management plan for the site does not highlight as an issue. Physical damage to banks through trampling. This is unlikely to affect Floating Water-plantain directly, but could affect indirectly through increased turbidity.	0.9km, Whitchurch	No with counteracting measures	All of Whitchurch and Tilstock is within 5km

Appendix 5 SAMDev HRA screening results July 14:
N2K Sites

N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
Clarepool Moss	Midland Meres and Mosses Phase 1/West Midland Mosses SAC	16	Vulnerable to groundwater abstraction close to the site. High nitrogen and phosphorus currently. More distant industry may result in toxic contaminant deposition. General: invasive species, water quality (eutrophication and sediment) specifically urban run-off	No	Urban run off. Nitrogen, ammonia and acid deposition above critical load.	Yes A495	Vulnerable to groundwater abstraction close to the site.	Traffic emissions and run off, groundwater abstraction close to the site.	1km (Wood Lane) then 3km	NO	Note: Landscape Partnership Scheme project to improve.
Colemere	Midland Meres and Mosses Phase 2	48	Eutrophication from birds roosting that have fed on landfill site, invasive plant species, pollution from run-off. Risk of hydrogen sulphide from industrial sources. Drainage most significant impact affecting site, abstractions. Sailing, fishing and angling occur but not posing a threat at present.	Yes - easy access footpath all around. Management plan does not seek to control public access	Urban run off	Yes A528	Main source of water in the mere itself is groundwater estimated to be 61-82% of the water present), with flow entering the mere from the glacial sand and gravel aquifer during high water level conditions. Link to the Llangollen Canal.	Recreational pressure. Traffic emissions. Pathway via inflows and from canal so developments leading to reduced quality of inflows would have a detrimental effect.	0.2km (Wood Lane) then 3km	Not with counteracting measures	

Appendix 5 SAMDev HRA screening results July 14:
N2K Sites

N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
Cop Mere (Staffs)	Midland Meres and Mosses Phase 2	38	This site receives nitrogen, ammonia and acid deposition above its critical load. At risk from long term abstractions from River Sow, high N and P levels on site.	Fishing		No	Shropshire is outside sites surface water catchment. Differs from many of the meres in having a distinct inflow and outflow, the River Sow, which enters the mere at the western end and leaves at the eastern end.	None	11km	No	
Downton gorge		69	The site is potentially vulnerable to the effects of air- and water-borne pollution, particularly in respect of its significant lichenological interest. Sensitive to eutrophication of nutrient nitrogen e.g. from emissions and road transport.	No	Emissions from roads	No		NE comment - water bourne pollution not a threat at this time.	5km	No	
Elenydd SAC			Particularly sensitive to air bourne pollution	?				None - screened out in report at S4/1/1	45km	No	

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N2K Sites

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Fenemere	Midland Meres and Mosses Phase 1	16	High nutrient status of water is the key issue but cause is unclear - fish, groundwater and surface water all may contribute. Recreational pressure. At risk from both surface and ground water abstraction/draining or diversion.	No. Public footpath adjacent.	Nitrogen, ammonia and acid deposition above critical load. At risk from aerial sulphur.	No	Atkins 2012: The most significant process influencing the water balance of Fenemere were stream inflows from its catchment. Stream inflows accounted for close to half the annual inflows to the mere. Groundwater contributions were small in comparison although it is important to note that a significant proportion of the streamflow generated is likely to be shallow groundwater derived based on the underlying geology.	Impacts on water quality e.g. run-off	1.5km Baschurch	Not with counteracting measures	

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N2K Sites

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							Diffuse agricultural pollution is the most significant risk.				
Fenn's Whixall, Bettisfield, Wem and Cadney Mosses SAC	Midland Meres and Mosses Phase 2	948	Nitrogen levels high, partly due to adjacent tree nursery fertiliser. Above critical load for ammonia, emitted by poultry farms, agriculture and industry. Sulphur levels above critical load - aerial inputs appear to be from power stations . Toxic contamination such as hydrogen fluoride from neighbouring industrial sources. Abstraction potential threat. Sewage inputs have affected in the past. NE - some evidence of siltation having an adverse effect. Visitor access to mire habitats must be controlled to limit damage to sensitive mire plants by trampling.	Yes	Run-off	No		Industrial emissions. Recreational pressure within 10km	3.7km	Not with counteracting measures	
Fens Pools SAC		20	Designated primarily for great crested newts. Vulnerable to fish introductions, human disturbance and alterations in	?				Screened out at Core Strategy stage as site already surrounded by	18km	No	

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N2K Sites

N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
			water quality					urban development			
Granllyn SAC			Increased visitor pressure due to increased population could affect the Great Crested Newt populations for which this site is designated through direct erosion and disturbance;, through increased likelihood of fish introductions and by physically isolating this site from the functional metapopulation in which it exists.	Yes				None	15km	No	
Hanmer Mere (Wales)	Midland Meres and Mosses Phase 2		Water quality is key - all surface water. Public access should be confined public footpath.	Yes but no sites within 5km		Yes		No allocations within 5km	6km	No	
Hencott Pool	Midland Meres and Mosses Phase 2	12	Eutrophication mainly from surrounding agricultural run-off, lowering of the water table from surrounding activities, invasive species, in particular Canadian geese that graze, trample and enrich the vegetation	Footpath adjacent but not official access	No	No 450m A528		None	1.5km	No	

Appendix 5 SAMDev HRA screening results July 14:
N2K Sites

N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
Johnstown Newt Sites SAC			Increased visitor pressure due to increased population could affect the Great Crested Newt populations for which this site is designated through direct erosion and disturbance;, through increased likelihood of fish introductions and by physically isolating this site from the functional meta population in which it exists.	?				None	9km	No	
Llyn Bedydd (Wales)	Midland Meres and Mosses Phase 2		Water quality - feeder stream runs 2km upstream.	Carp fishery		No		No hydrological links	7km	No	
Marton Pool, Chirbury	Midland Meres and Mosses Phase 1	17	Recreational pressure - caravan park adjacent. At risk from sewerage associated with development, abstractions. Pool is eutrophic and high phosphorus. Risk from siltation and introduced species. Water levels within the pool.	Only private. No footpaths nearby	Siltation	260m B road		No allocations in surface water catchment.	5km	No, only small sites 5km away	

Appendix 5 SAMDev HRA screening results July 14:
N2K Sites

N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
Montgomery Canal SAC			Increased visitor pressure due to increased population could affect this site through direct erosion and disturbance. It may also increase the likelihood of fish introductions and there may be increased disturbance if boat use expands.	Yes		Yes		Recreational impacts, abstraction from or direct discharges into the canal.	0.2km	Not with counteracting measures	
Morton Pool & Pasture	Midland Meres and Mosses Phase 2	4	At risk from drainage and flooding. Eutrophic site as risk from invasive species such as fish. Takes drainage from surface catchment including an industrial site.	No	No	No		No allocations in surface water catchment.	3km	No	
Mottey Meadows SAC		44	Nutrient run off from surrounding farm land.				Dependant on high ground and surface water levels	None - out of R.Severn catchment	9km		
Oss Mere	Midland Meres and Mosses Phase 2	28	Apparent decline in water quality - source unknown. Abstraction and discharge including septic tanks. Extensive fishing, risk from introduced species and recreational pressure.	No Public footpath round site.	No	No		Recreational pressure. No hydrological link	1.9km	No	
Quoisley Mere (Staffs)	Midland Meres and Mosses Phase 1	28	Water quality: eutrophication. Currently suffers extensive Canada Goose damage with possible impacts from point source and diffuse water pollution. Siltation major	Footpath through site	Water pollution, siltation	No but within 400m		None - surface water catchment does not extend into Shropshire	3.5km	No	

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N2K Sites

N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
			problem. Invasive species, water levels too high.								
River Clun SAC			Freshwater pearl mussel dependant on low phosphate, sediment and nitrate levels. Pearl mussels rely on presence of trout for part of it's breeding cycle therefore trout fishing could be a threat.	No	Yes	Yes A4113		Water pollution, urban run-off, fishing, traffic emissions	N/A	Not with counteracting measures	
River Dee & Bala Lake SAC			Notified for river type, salmon, otter, club tailed dragonfly and fluvial geomorphology. All aquatic features of this site require suitable flow conditions to maintain favourable status. The Dee is already affected by falling groundwater levels and this may be affected by increased abstraction levels threats to water quality come from direct and diffuse pollution; eutrophication and siltation. Significant effects could stem from water supply/ quality issues, the pathways are unclear. Recreational use has not resulted in any significant disturbance to the features of interest (JNCC).	Yes	Siltation	Yes, numerous	Habitats and species sensitive to water quality, quantity and flow rate including siltation	Water pollution, changes in water levels, urban run-off, traffic emissions	6km	No	pressures include diffuse urban and diffuse rural pollution, as well as nutrient pressure from point sources such as sewage works

Appendix 5 SAMDev HRA screening results July 14:
N2K Sites

N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
River Severn SPA/Ramsar								Screened out in report	70km	No	
River Wye SAC		2235	Qualifying species such as white clawed crayfish, sea lamprey, brook lamprey, river lamprey, twaite shad and Atlantic salmon require suitable flow conditions and good water quality to maintain favourable status. Recreational pressure is currently increasing and informal walking, dogs and water sports could all potentially affect the SAC especially the designated water crowfoot communities and other species (including otter).	Yes			It is possible that future abstraction of surface and groundwater may affect water levels at the site as well as issues relating to sewerage discharges.	None - no hydrological links	21km	No	
Rhos Goch SAC			Particularly sensitive to air bourne pollution	?				None - screened out in report at S4/1/1	42km	No	

Appendix 5 SAMDev HRA screening results July 14:
N2K Sites

N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
Stipersto nes and Hollies SAC		601	Site sensitive to inappropriate grazing levels & afforestation. NE comment - physical damage from recreation could lead to damage. Increased recreational pressure on this already heavily visited site would potentially increase trampling and erosion of sensitive vegetation, additional air pollution and deposition from traffic (most access is via car) would have impacts.	Yes	yes	No	None	Recreation and associated increase in car traffic but sufficient safeguards in AONB Management Plan	3km	No	
Sweat Mere & Crose Mere	Midland Meres and Mosses Phase 2	39	Agricultural intensification causing eutrophication. Siltation controlled by land management practices. Drainage, invasive species not an issue. Fishing low key but increase would be.	No but private recreation al pressure	Nitrogen, ammonia above critical load.	Yes	Diffuse agricultural pollution is most significant risk.	EA - Most risk from diffuse pollution from surrounding land use and maintaining water levels. Traffic emissions	1.5km Cockshutt then 4.4km Ellesmere	No	
Tanat and Vrynwy bat SAC			The hibernacula are not vulnerable as all mine entrances are now securely grilled. Bats which use two of the four mines may be vulnerable because the associated breeding roosts are not known. Two known breeding roosts are	No	No	Yes	None	No, horseshoe bats not known to use any of the allocated sites for roosting/feedin g/foraging/hibe rnation. Bat	8km	No	

Appendix 5 SAMDev HRA screening results July 14:
N2K Sites

N2K site	Part of	Size (ha)	Site Vulnerability	Public access?	Traffic emission sensitivity ?	A road within 200m	Hydrological sensitivity	Potential effect pathways	Closest distance of SAMDev site	Subject to impacts from SAMDev sites?	Notes
			potentially vulnerable to human disturbance for example blocking entrances.					surveys are required for planning applications so if horseshoe bats found will require HRA.			
White Mere	Midland Meres and Mosses Phase 1	32	White Mere: eutrophic and at risk from abstraction. Very high phosphorus and increased nitrogen & is eutrophic. Sediment a big problem esp from roads in winter. Risk from recreational pressure inc boats.	Sailing club	Sediment from roads	Yes	Due to the large proportion of its catchment occupied by the open water body itself, direct rainfall on the mere surface is the most significant inflow to Whitemere, followed by runoff.	Caravan park and fishing already going on. Sediment from roads, traffic emissions.	0.5km (Wood Lane) 2km	Not with counteracting measures	

SHROPSHIRE COUNCIL

Site Allocations & Management of Development Plan (SAMDev)

Pre-Submission Draft (Final Plan)

Mineral Allocations for the plan period 2012 – 2026

Habitats Regulations Assessment

March 2014

1. Introduction

1.1 This HRA Report should be read in conjunction with the Core Strategy Development Plan Document: Habitat Regulation Assessment, Screening Report (March 2009), the Core Strategy Development Plan Document: Habitat Regulation Assessment, Stage 2 Report (February 2010) and the Site Allocations and Management of Development (SAMDev) Plan HRA FOR Site Allocations and Development Management Policies (February 2014).

1.2 The aim of this HRA Report is to assess the possible effect pathways between the allocated mineral sites in MD5a and b of the SAMDev Plan and Natura 2000 sites.

1.3 The HRA Screening Report (March 2009) and the HRA Stage 2 Report (February 2010) identified the Natura 2000 Designated Sites in and around Shropshire which could potentially be impacted by proposed plans or projects in the county. That information has been updated in Appendix 1 of the SAMDev allocations HRA (February 2014).

2. Allocated minerals sites in Shropshire

History of Mineral Allocations in Shropshire

2.1 Shropshire Council intends to allocate a number of mineral sites to provide ongoing supplies of sands and gravels for the Core Strategy plan period 2012 – 2026.

2.2 A call for potential sand and gravel sites was made in 2009 and the sites assessed here as allocations come from those submitted by mineral operators, land owners and agent in response to that call.

2.3 These allocations have been previously assessed in a document titled Assessing Sand and Gravel Sites for Allocation in the Shropshire Sub Region by Entec (June 2010)[1].

2.4 The assessment document by Entec (2010) provides background information on each of the allocations. The document assessed 18 sites from which 3 have been drawn forward as allocations for Shropshire.

2.5 The assessment document by Entec (2010) does assess the land surrounding the potential allocations including identifying any designated sites in the surrounding area. It does not, however, identify potential effect pathways by which the potential allocations might impact upon those designated sites and does not go into the detail required for the

[1] Shropshire Council and Telford and Wrekin Council. Assessing Sand and Gravel Sites for Allocation in the Shropshire Sub Region: Site Assessment Report by Entec UK Ltd, June 2010.

HRA process. This HRA report relies on the information gathered by the site assessment document by Entec (2010).

The three mineral site allocations in Shropshire for 2012 - 2026

2.6 There are only 3 allocations in Shropshire for 2012 – 2026. These 3 sites are sufficient to address the sand and gravel needs of Shropshire for that period along with the sites which currently have planning permission.

Table 1: Potential mineral site allocations

Site Name	Grid Reference
Gonsal: North and South extensions (Condover)	SJ 4847 0550
Morville extension	SO 6828 9333
Wood Lane North extension (Ellesmere)	SJ 4241 3317

Site Information

2.7 Full details of the potential allocated sites can be found in the document Assessing Sand and Gravel Sites for Allocation in the Shropshire Sub Region by Entec (June 2010)[2] in Figures 4.1 – 4.7 and Appendix A of that report.

3. Identifying Potential Effect Pathways

3.1 The particular vulnerabilities of each Natura 2000 Site in and around Shropshire, along with their reasons for designation are set out in the Core Strategy Development Plan Document: Habitat Regulation Assessment, Screening Report (March 2009) and the Core Strategy Development Plan Document: Habitat Regulation Assessment, Stage 2 Report (February 2010).

3.2 Table 2 describes the three mineral allocations, identifies any European Designated Sites within 10km and the potential effect pathways by which the proposed allocation could impact upon a European Designated Site.

3.3 Potential effect pathways have been identified for the allocated sites. Where no potential effect pathways have been found the sites have been screened out. For sites with potential effect pathways, further information has been sought.

Table 2: Potential Effect Pathways

Allocated Site	European Designated Site	Distance	Site Vulnerability	Potential Effect Pathways

[2] Shropshire Council and Telford and Wrekin Council. Assessing Sand and Gravel Sites for Allocation in the Shropshire Sub Region: Site Assessment Report by Entec UK Ltd, June 2010.

MD5b Gonsal: North and south extensions	Midland Meres & Mosses Ramsar Phase 1 – Bomere, Shomere and Betton Pools	2.3km – 3.6km	Sites sensitive to invasive species, water quality issues, nutrient enrichment, sedimentation, erosion, & recreational disturbance	Intervening habitat is a mosaic including large areas of farmed land. There are no surface water connections from Gonsal Quarry to the Ramsar sites. The Quarry is on the far side and downstream of Cound Brook, which runs through the valley between the quarry and the Ramsar Sites. The nearest point of the northern quarry extension is c. 2.3 km from the catchment of Bomere, Shomere and Betton pools. These sites are on perched water tables. Condover Quarry, which lies immediately adjacent to Bomere and Shomere pools, appears not to have affected water levels in the EU sites. Condover Quarry lies between Bomere Pool and Gonsal Quarry. In view of the above there should be no adverse hydrological effects on Bomere, Shomere or Betton Pools. There should be no impact from dust from Gonsal Northern and Southern Extensions as they are >1km from the nearest Ramsar Site. Traffic levels are unlikely to be significantly higher than current levels and the nearest road likely to be used by quarry vehicles is 1km away from the Ramsar site, making traffic emissions unlikely to have a negative effect. Therefore, no likely significant effect identified.
	Midland Meres & Mosses Ramsar Phase 1 – Berrington Pool	3.7km – 4.7km	Sites sensitive to invasive species, water quality issues, nutrient enrichment, sedimentation and erosion.	- Intervening habitat is a mosaic including large areas of farmed land. There are no surface water connections from Gonsal Quarry to the Ramsar site. The Quarry is on the far side and downstream of Cound Brook, which runs through the valley between the quarry and the Ramsar Sites. The nearest point of the surface water catchment for Berrington Pool to the northern extension is 3.2km. In view of the above there

				should be no adverse hydrological effects on Bomere, Shomere or Betton Pools. There should be no impact from dust from Gonsal Northern and Southern Extensions as they are >1km from the nearest Ramsar Site. Traffic levels are unlikely to be significantly higher than current levels and the nearest road likely to be used by quarry vehicles is 3.5km away, making traffic emissions unlikely to have a negative effect. Therefore, no likely significant effect identified.
MD5b Gonsal: North and south extensions	The Stiperstones & The Hollies SAC	9.3km	Site sensitive to inappropriate grazing levels & afforestation as well as recreational pressure.	No potential effect pathways identified
MD5b Morville extension	Nearest Natura 2000 site is over 20km away (Berrington Pool)	-	-	No potential effect pathways identified
MD5a Wood Lane North extension	Midland Meres & Mosses Ramsar Phase 1 – White Mere	410m	Sites sensitive to invasive species, water quality issues, nutrient enrichment, sedimentation, erosion, & recreational disturbance	Potential impacts from dust possible as White Mere lies 410m from the nearest point of the extension. The smallest particles could reach the Mere. There are no hydrological connections as White Mere lies on a perched water table and there are no surface water connections to the extension. In view of the above there should be no adverse hydrological effects on White Mere. Quarry traffic may pass close to White Mere on the busy A528, however recent (2013) road drainage improvements will greatly decrease sediment entering the Mere compared with previous levels.

MD5a Wood Lane North extension	Midland Meres & Mosses Ramsar Phase 2 – Colemere	170m	Sites sensitive to invasive species, water quality issues, nutrient enrichment, sedimentation, erosion, & recreational disturbance	A drainage ditch runs part way along the northern boundary of the proposed extension and groundwater flows from the proposed extension towards Colemere. Pollution incidents within the extension could adversely affect water quality. Disturbance of the surface and groundwater catchment could adversely affect the water levels.The Shropshire Union Canal and Baysil Wood lie immediately to the north of this potential mineral allocation and connect to the designated site at Colemere. Further consideration of hydrological information and an appropriate assessment will be required. Potential impacts from particulate matter possible as Colemere lies only 170m from the nearest point of the extension.
	Midland Meres & Mosses Ramsar Phase 1 – Clarepool Moss	1km	Sites sensitive to invasive species, water quality issues, nutrient enrichment, sedimentation, erosion, & recreational disturbance	There should be no impact from dust from the North Extension as it is 1km from Clarepool Moss. There are no surface water connections from Wood Lane North Extension to Clarepool Moss. Groundwater appears to flow towards Colemere and the quarry extension is beyond Colemere. In view of the above there should be no adverse hydrological effects on Clarepool Moss.
	West Midland Mosses SAC - Clarepool Moss	1km	Habitats sensitive to scrub encroachment and recreational disturbance.	There should be no impact from dust from the North Extension as it is 1km from Clarepool Moss. There are no surface water connections from Wood Lane North Extension to Clarepool Moss. Groundwater appears to flow towards Colemere and the quarry extension is beyond Colemere. In view of the above there should be no adverse hydrological effects on Clarepool Moss. The north extension will not adversely affect recreational pressure on Clarepool Moss.

	Midland Meres & Mosses Ramsar Phase 2 – Sweat Mere & Crose Mere	2.1km	Sites sensitive to invasive species, water quality issues, nutrient enrichment, sedimentation, erosion, & recreational disturbance	Intervening habitat is a mosaic including large areas of farmed land. There should be no impact from dust from the North Extension as it is >1km from the Meres. In same surface water catchment as the quarry extension but water apparently drains from higher ground to south and drains from these sites eastwards. In view of the above there should be no adverse hydrological effects on Sweat Mere and Crose Mere.
	Midland Meres & Mosses Ramsar Phase 2 – Brownheath Moss	4.3km	Site sensitive to invasive species, water quality issues, nutrient enrichment, sedimentation, erosion, & recreational disturbance	Intervening habitat is a mosaic including large areas of farmed land. Impacts not anticipated as Brownheath Moss is in a separate surface water catchment. Dust will not adversely affect the site as it is >1km away.
	Midland Meres & Mosses Ramsar Phase 2 – Fenn's. Whixall, Bettiesfield, Cadney & Wem Mosses	4.2km	Habitats present are sensitive to alterations in water level, especially lowering of water table. Some evidence of siltation having an adverse effect. Above critical load for ammonia, emitted by poultry farms, agriculture and industry	Environmental Network formed by the Shropshire Union Canal and associated habitats links this potential mineral allocation to the designated site. However, the proposed quarry extension is not in the same catchment as the Mosses. The Shropshire Union Canal is clay lined and effectively isolated from the catchment, other than it discharges into Colemere. In view of the above there should be no adverse hydrological effects on Fenn's, Whixall, Bettiesfield, Cadney & Wem Mosses. There should be no impact from dust from the North Extension as it is >1km from the Mosses. No other impacts anticipated at this distance

	Midland Meres & Mosses Ramsar Phase 2 – Hanmer Mere	6km	Sites sensitive to invasive species, water quality issues, nutrient enrichment, sedimentation, erosion, & recreational disturbance	Intervening habitat is a mosaic including large areas of farmed land Impacts not anticipated– Hanmer Mere is not in the same catchment as the proposed extension.
	Midland Meres & Mosses Ramsar Phase 2 – Llyn Bedydd	7km	Sites sensitive to invasive species, water quality issues, nutrient enrichment, sedimentation, erosion, & recreational disturbance	Intervening habitat is a mosaic including large areas of farmed land Impacts not anticipated– Llyn Bedydd is not in the same catchment.
	River Dee and Bala Lake SAC	9.7km	Habitats and species sensitive to water quality, quantity and flow rate including siltation	No surface water connections. No adverse effects anticipated at this distance

4. Summary of findings

'Screening out' of Potential Mineral Allocations from the HRA Process

4.1 Any potential mineral allocations where no Natura 2000 Sites are present within 10km have been 'screened out' of the HRA process at this stage since it can be concluded that **the allocation of these sites for sand and gravel quarrying would not have a significant effect on the integrity of any Natura 2000 Site.**

4.2 The following site has been screened out due to being over 10km from the nearest Natura 2000 Site:

- Morville extension

4.3 Mineral allocations where Natura 2000 Sites are present within 10km but where no potential effect pathway has been identified by which the designated site might be impacted by quarrying in that location can also be 'screened out' of the HRA process at this stage. The following mineral allocation has been screened out as there is no likely significant effect on Natura 2000 Sites. This is:

- Gonsal North and South Extensions

Mineral Allocations which cannot be 'Screened Out' of the HRA Process

4.4 There is one mineral allocation, Wood Lane North Extension, which cannot be 'screened out' of the HRA process at this stage and either

requires counter-acting measures and then re-screening or needs to go forward to Appropriate Assessment.

4.5 The potential effect pathways by which this mineral allocation has the potential to impact upon a Natura 2000 Site relate particularly to impacts on the water catchment water quality and air borne dust.

5. Likely significant effects of the allocation of Wood Lane North Extension on Natura 2000 sites

Potential effect pathways have been identified for two Natura 2000 (Ramsar) Sites – White Mere and Colemere. The key effect pathways are:
a) disturbance of ground or surface water flows leading to reduced or raised water levels in the Ramsar Sites,
b) reduced water quality due to pollution incidents in the proposed extension,
c) increased sedimentation in water bodies and,
d) adverse effects of dust.

The SAMDev Plan for site allocations HRA (Feb 2014) contains a map showing Natura 2000 sites in the Ellesmere area (Map 2).

5.1 White Mere

a) Water levels. The North Extension lies 410m to the east of White Mere. Natural England surface water catchment data shows the Wood Lane Quarry and proposed North Extension within the same catchment as White Mere. However, more detailed information is provided in a report produced by the TG Group titled 'Wood Lane Zone II Quarry & Landfill, Ellesmere, Shropshire, Environmental Impact Assessment of Time Extension, Geology, Hydrogeology & Hydrology' December 2010, prepared by TerraConsult, submitted with planning application reference 10/05561/EIA.

The Upper Boulder clay caps the higher ground in a 'crescent' to the south, west and north of the Wood Lane quarry complex. White Mere is situated on the clay to the north-west of the site. The quarry, Cole Mere and the land to the east and south east of the site are on ground underlain by fluvioglacial deposits (sands, gravels, silts and clays);

The relationship of White Mere to the local surface and groundwater systems has been investigated by the EA (2003). White Mere appears to be hydrologically isolated from local groundwater and surface water and is perched on a layer of

boulder clay within its own limited topographical catchment. The EA study concluded that the inflows to White Mere are entirely dependent on local runoff from a small catchment and that the discharges from the mere are by evaporation and seepages into the ground water system. There are no watercourses feeding into or draining from White Mere (other than the overflow when water levels are high enough, to the Shropshire Union Canal). Hence White Mere appears to be hydrologically isolated from the North Extension.

b) Reduced water quality in White Mere. As White Mere is hydrologically isolated from the proposed extension, pollution incidents such as spillage of oil or chemicals should not affect water quality.

c) Increased sedimentation in White Mere. The entrance to the Wood Lane complex lies around 300m south of White Mere on the busy A528. Throughout the many years of quarry activity, mitigation measures to prevent sediment being taken out on to the road by quarry traffic have been in place. The LPA would expect best practice to be followed in future under policy MD5 and MD17. Sediment entering White Mere from the A528 has been recognised as a problem by Natural England and Shropshire Council's Highways section. In 2013, under a joint project, SC Highways have installed two new sediment traps collecting the road run-off adjacent to White Mere and NE have produced wetland SUDs features on the bank of the Mere to provide additional filtering. These additional improvements should reduce the sediment levels entering the Ramsar Site from the A528. Extraction of mineral from the proposed extension would not be expected to commence until extraction from the existing quarry site has ceased. Therefore an increase in traffic movements would not be expected.

d) Adverse effects of dust. White Mere is just over 410m from the closest corner of the North Extension site, separated by farm land and previously quarried areas. Minerals Policy Statement 2 (now replaced by the NPPF) stated that:
'Effects of dust will depend on the prevailing wind direction and the transport distance is related to particle size;

- Large particles (>30 micrometres) will mostly deposit within 100m of the source.
- Intermediate particles (10-30 micrometres) are likely to travel up to 200-500m
- Smaller particles (<10 micrometres) can travel up to 1km from the source.'

The wind rose from Shawbury indicates that the prevailing wind is south-westerly and so would tend to blow dust away from White

Mere. It is likely at over 400m, that only the smallest particles could reach White Mere. Dust emissions are already controlled on the site for the existing quarry and best practice measures will be required at the planning application stage under MD5 and MD17.

5.2 **Cole Mere**

a) Water levels. The North Extension lies at its closest point 170m to the west of Colemere. Natural England's surface water catchment data shows the Wood Lane Quarry and proposed North Extension within the same catchment as Colemere. However, more detailed information is provided in the report produced by the TG Group titled 'Wood Lane Zone II Quarry & Landfill, Ellesmere, Shropshire, Environmental Impact Assessment of Time Extension, Geology, Hydrogeology & Hydrology' December 2010, prepared by TerraConsult, submitted with planning application reference 10/05561/EIA.

The surface water catchment for Colemere was estimated from OS mapping and extends to about 4km^2 of which about 0.3km^2 lies in the Wood Lane complex. A minor stream enters Colemere at its north-western corner in the vicinity of Little Mill. A water course carries a discharge from the mere and is the source of the River Roden. There is also an inflow from the Shropshire Union Canal to Colemere. There are no natural surface water features within the Wood Lane Complex. Neither are there any surface water drains or streams linking the complex to any surface water body outside of it. However, a ditch follows the line of the eastern half of the northern boundary, and it is unclear if this is on or outside the boundary. The ditch carries water south-east down a small valley away from Colemere. Surface water within the base of the active quarry is a result of groundwater ingress into the workings. During working, water is abstracted and recharged to ground water via lagoons elsewhere in the quarry. The groundwater levels across the site, including the proposed extension, are monitored in a number of piezometers and evidence from these has informed the following:

The groundwater body is contained within the glacial and more recent drift deposits. The area in which the quarry complex is located is on or close to the topographic divide between the Roden and Perry river catchments and consequently there is likely to be groundwater flows broadly towards both these water courses. However, the quarry complex appears to be located just inside the catchment area of the River Roden and consequently the general flow direction from it is anticipated to be towards the east (i.e. towards Colemere). The flow is in the direction of the hydraulic gradients that generally slope towards surface watercourses. The quarry complex is thus in a recharge area with

the streams and meres (except White Mere) being in discharge zones.

The direct effect of de-watering on the water-table is localised and short-term being limited to the period when digging extends below the water-table. No significant losses occur during this operation. It is proposed that the depth of working in the extension area can be limited to above the water table eliminating the need for de-watering.

In view of the above, following more detailed information and analysis of water movements to inform any necessary avoidance or mitigation measures at the planning application stage, impacts on water levels should be avoided.

b) Reduced water quality in Cole Mere. Groundwater quality is monitored within a number of the perimeter monitoring boreholes around the site at a frequency and for contaminant species agreed by the Environment Agency and specified in the site Environmental Permit. The continuation of landfill operations in the Wood Lane complex received an Environmental Permit in 2009, following a detailed HRA.

For operations on site, pollution prevention measures are already in operation and these would be expected in future to continue to follow current best practice. For any works proposed in the Northern Extension a comprehensive management plan to prevent pollution of the groundwater would be required under policies MD5 and MD17 for the planning application.

c) Increased sedimentation in Colemere. As there are no surface water courses connecting the extension to Colemere, no sedimentation is anticipated.

d) Adverse effects of dust. At its closest point, the proposed Northern Extension is only 170m from Colemere Ramsar Site. Using the figures quoted above, there is a possibility that intermediate and small particles of dust from the workings could reach Colemere. As the prevailing wind is south-westerly, much of the dust would either spread north east of Colemere or fall on its westernmost end. However, there is a belt of trees to the north of the Extension, before the Ramsar is reached.

Past and current quarrying operations have been implemented using mitigation methods for dust. Under Development Management policies MD5 and MD17 a detailed and stringent mitigation management plan would be required at the planning application stage.

5.3 **Conclusion of Habitats Regulations Assessment for the Wood Land site allocation**

Under Development Management policies MD5 and MD17, detailed information and analysis of water movements, and stringent mitigation management plans will be required at the planning application stage to remove any adverse impacts from dust, sediment and changes in water levels or quality. An Appropriate Assessment will be required at the planning application stage and under policy MD5 and National Planning Policy Framework 119, permission will not be granted if it cannot be ascertained that the development will not adversely affect the integrity of Natura 2000 Sites. Therefore it can be concluded that sufficient controls are in place within the SAMDev Plan to ensure that there will be no likely significant adverse effects on Natura 2000 sites as a result of the minerals allocations.

6. Next steps in the Habitats Regulations Assessment process

6.1 Natural England must be formally consulted on Habitats Regulations Assessments of forward plans under the process set out within the Conservation of Species and Habitats Regulations 2010.

6.2 This HRA Report and its conclusions can only be adopted by Shropshire Council once Natural England has been formally consulted and their comments received and taken into account.

7. Conclusions

7.1 Out of the three mineral allocations considered in the Habitats Regulations Assessment Report it can be concluded that 2 will have no likely significant impact on any Natura 2000 site.

7.2 For the remaining mineral allocation effect pathways have been identified by which sand and gravel extraction might have the potential to impact upon Natura 2000 sites.

7.3 This site is formally allocated within the Site Allocations and Management of Development DPD and it will still need to be subject to a planning application to the Local Planning Authority prior to development commencing.

7.4 At the planning application stage the Wood Lane North extension (Ellesmere) will need to be subject to a full Appropriate Assessment under the Habitats Regulations Assessment process set out within the Conservation of Species and Habitats Regulations 2010 and to formal consultation with Natural England.

7.5 Formal allocation of this mineral site which cannot be 'screened out' within the Site Allocations and Management of Development DPD does not reflect a commitment from Shropshire Council to grant planning permission when a planning application is subsequently made. **If it should prove not possible for the developer to show, to the satisfaction of Shropshire Council and Natural England and beyond reasonable scientific doubt, that the proposed quarrying activity would not have an adverse effect on the integrity of any Natura 2000 Site then Shropshire Council will refuse planning permission.**