North West Leicestershire District Council

Habitats Regulations Assessment of the North West Leicestershire Core Strategy - Submission Version

Final Report

May 2012

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Appendices

1 Introduction

1.1 Habitats Regulations Assessment (HRA) is required under the European Directive (92/43/EEC) on the 'conservation of natural habitats and wild fauna and flora'. The Directive, ratified in the UK in 1992 seeks to protect the most valuable habitats and species in Europe. Alongside the European Birds Directive (79/408/EEC), this legislation sets the framework for the creation and protection of a network of protected sites across Europe, known as Natura 2000 or European sites.

1.2 Natura 2000 sites covered through the legislation are Special Areas of Conservation (SACs), designated for their species and habitats and Special Areas of Protection (SPAs), designated for the protection of birds. For the purposes of completeness the protection of sites is also extended to the cover candidate SAC sites and potential SPA sites, although there are none in the district of North West Leicestershire.

1.3 Any plan or project that has the possibility of impacting on a Natura 2000 site must be assessed to ascertain the likelihood and significance of effects to the integrity of the site. The Habitats Directive Articles 6(3) and 6(4) sets the requirement for assessment as:

> *"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subject to Appropriate Assessment of its implications for the site in view of the site's conservation objectives…"*

1.4 Initially the Habitats Directive was misinterpreted into UK legislation and did not require the assessment of land use plans for their potential to impact on Natura 2000 sites. A ruling from the European Court of Justice in October 2005 identified that this was incorrect and the Directive was being improperly implemented. The revised legislation, The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007, was adopted to rectify this situation and set out the requirement of the assessment of land use plans.

1.5 This Habitat Regulation Assessment is of the North West Leicestershire Core Strategy (April 2012). A brief description of the HRA process and how this relates to North West Leicestershire's sites is outlined within section 2.

2 The Habitats Regulation Assessment process

2.1 The Habitats Regulations Assessment (HRA) is used to describe the process of Appropriate Assessment that is required under The Conservation (Natural Habitats, &c.) (Amendments) (England and Wales) Regulations 2007.

2.2 The HRA process is set up as a number of key stages. A first screening was completed of the Core Strategy proposals for growth and change (Nov 2008) and this is now a full screening, and assessment of the submission Core Strategy (May 2012). The intended outcome of this process is to show the likely impact of the Core Strategy on the protected sites, if the impacts are likely to be significant and if so can these impacts be avoided or mitigated. The stages of screening and assessment are:

- identification of all the sites in and round the plan area that may be affected by the Core Strategy (section 3)
- gain an understanding of the conservation objectives of the European sites (section 3 and Appendix 2)
- establish the main mechanisms by which the Core Strategy could influence the Natura 2000 sites (Appendix 3) and drawing out what the specific impacts may be for each site and relevance to the Core Strategy (section 4 and Appendix 4)
- looking for the possible impacts of the Core Strategy in combination with other plans (section 5 and Appendix 5)
- providing mitigation recommendations for the Core Strategy and other mechanisms (section 6, Appendix 6 and Appendix 7)
- concluding the HRA and making decisions on what the next steps of HRA should be (section 7).

2.3 Table 2.1 shows the stages of the HRA.

Table 2.1: Stages of Habitats Regulations Assessment (shaded stage not completed due to findings of screening and assessment)

Screening	• Identify Natura 2000 (N2K) sites within and adjoining the local plan area and acquire, examine and understand the conservation objectives for each feature of the site. • Consider the changes that policies and proposals in the plan may cause. • Assess whether any elements of the plan are likely to have a significant effect on any interest feature of each N2K site, either indirectly, directly, alone or in combination with other projects and plans. • If no significant effects are likely to occur as a result of implementation, the plan (or certain policies and proposals within it) can be published with no further reference to the Habitat Regulations, i.e. 'screened out' from stage 2. If there are likely significant effects arising from elements of the plan on certain N2K sites, or it is uncertain whether such effects will be significant, progress to next stage.

Appropriate Assessment	• Undertake an assessment of the implications of the plan (those policies and proposals within it identified in stage 1 as requiring AA) for each N2K site likely to be affected, in light of their conservation objectives. • Consider how the plan in combination with other plans or projects will interact and affect the site when implemented. • Consider how the effect of the plan on the integrity of the site could be mitigated and consider alternatives or develop mitigation measures. • If it can be demonstrated that the plan will not have an adverse effect on the N2K, the plan can be adopted. If the plan is still likely to have an adverse impact on the site(s) progress to next stage.
Assessment where no alternatives exist	• The competent authority must demonstrate that there are no alternative solutions to the plan which are less damaging. • The competent authority must establish if there are *'imperative reasons of overriding public interest'* to proceed with the plan or policy. • Identify and agree compensation measures and how these will be monitored.

2.4 To screen the plan for impacts it is necessary to identify strategic or spatial issues in the Core Strategy that may result in impacts on Natura 2000. This allows an opportunity for these impacts to be avoided early on in the plan preparation process, by seeking alternative approaches or locations for growth.

2.5 During the initial screening of the November 2008 version of the Core Strategy the potential for adverse impacts on the SAC site could not be ruled out. Furthermore, it was identified that there was the potential for significant harm. Therefore, how the plan should proceed and additional material necessary way agreed between the local planning authority and Natural England and the Environment Agency.

2.6 It was determined that further HRA was required including this screening of the emerging proposed submission Core Strategy. Consultation with Natural England, the Environment Agency and water Utilities Company was also carried out to determine the methods for the further assessment, as well as more detail on the Natura 2000 site and its sensitivities and how mitigation could be achieved.

2.7 This stage of the HRA will be looking for ways that any significant effects can be avoided or mitigated against. In order for the Core Strategy to proceed it would have to be shown that this is possible. Where significant effects are identified it may be possible to mitigate against site specific impacts using 'conventional' mitigation measures. This includes measures to prevent disturbance, use further appropriate assessment, setting planning obligations or conditions. If such an approach is shown to be necessary it will be essential to explicitly state this in the Core Strategy.

2.8 For strategic issues, where the impacts can not be identified on a site specific basis, it may be necessary to include specific policy in the Core Strategy to mitigate or avoid the potential for impact. This may particularly be where the implementation will require a more detailed level of assessment.

2.9 It is necessary for the outcomes of the HRA to be discussed and agreed with Natural England and the Environment Agency, and ideally consensus reached on the conclusions of the HRA.

Therefore, although these agencies have already consulted this report presents a formal opportunity for further comment.

2.10 It should be highlighted here HRA at this level does not preclude the need for subsequent appropriate assessment at a site specific level if identified as necessary when seeking planning permission.

Determining 'likely significance'

2.11 An important part of the HRA is determining whether the plan is likely to have a significant impact on the Natura 2000 sites. A draft assessment guidance on HRA from the Welsh Assembly Government although prepared for Wale is relevant to sites in England. It suggests that likely in this context impacts should be "*readily foreseeable not merely a fanciful possibility*" and significant means "*not trivial or inconsequential but an effect that is potentially relevant to the site's conservation objectives…The European Court of Justice has held that any effect likely to undermine the conservation objectives of a European sites should be regarded as a likely significant effect…*" (paragraph 2.2.4) [1].

'In combination' effects

2.12 The regulatory requirements of HRA set out a requirement that in addition to determining if the plan would have a significant effect on Natura 2000 sites on its own, it is also necessary to assess if there would be any significant effects in combination with other plans and projects.

2.13 This 'in combination' assessment will need to look for other plans and projects that also require HRA, such as the LDFs of neighbouring local authorities, as well as projects proposed or underway in the area. In order to achieve this it may be suitable to adopt some type of cross boundary working on HRA issues, and the need for a system to be in place to flag up other strategies and plans in the area that may have relevance to the HRA of the Core Strategy. Other plans and strategies that may contribute 'in combination' with the Core Strategy on the SAC site is identified in section 6 of this report.

2.14 The next section identifies the Natura 2000 site in the plan area (the River Mease SAC) that may be affected by the Core Strategy, and sets out the relevant conservation objectives of the European site.

[1] Welsh Assembly Government (October 2006) Draft Guidance – The Assessment of Development Plans in Wales under the provisions of the Habitats Regulations

3 Identifying Natura 2000 site and relevant site information

3.1 This is the initial step of the screening process and involves identifying the sites, in and around North West Leicestershire that the Core Strategy could have an impact on.

3.2 All sites within the district, or within 20km of the district boundaries, have been identified, these are:

Inside the district:

- River Mease – Special Area of Conservation (SAC).

Outside the district boundaries:

- Ensor Pool Special Area of Conservation (SAC) is approximately 17 km from the district boundary;
- Cannock Chase SAC, Cannock Extension Canal SAC, Pasturefields Salt Marshes SAC and West Midlands Mosses SAC are all over 20 km from the border of North West Leicestershire.

3.3 An assessment was carried out to identify Natura 2000 sites within 20km from the local authority boundary. This 20 km threshold is indicative and does preclude the effects development may have on international designations further afield. However, this is a general and common threshold used by the majority of local authorities and other organisations.

3.4 Within North West Leicestershire there is one SAC, the River Mease, and the River Mease SAC flows beyond the border. There is one site, Ensor Pool SAC, within 20km of the North West Leicestershire border.

3.5 The information collated on the River Mease SAC and Ensor Pool SAC, particularly in relation to vulnerability has been collated from various sources: Natural England's website, magic.gov.uk, Joint Nature Conservation Committee (JNCC), 'Standard Data Form' and the Appropriate Assessment of the Housing Land Release Supplementary Planning Document (SPD).

Ensor Pool SAC

3.6 Ensor Pool SAC is an inland water body, with grassland, situated within a flooded brick-pit that has been abandoned for fifty years. The 3.5 ha area is located adjacent the built up area to the south of Nuneanton, approximately 17 km from the North West Leicestershire border. The crayfish population would be vulnerable to pollution and introduction of non-native crayfish. The strategic sites proposed within the North West Leicestershire Core Strategy Consultation report would not have a significant impact on this site, because development in the plan area is not within the catchment area of the SAC. Potential impacts on the site would most likely result from development proposals within and adjacent to Nuneaton and be localised.

River Mease SAC

3.7 Basic site plan showing buffer zones around the River Mease sites are shown in Appendix 1 along with the catchment of the River. The buffer zones show distances of 2.5kms and 5kms from the SAC, which are only indicative measurements, but provides an indication of which settlements are in close proximity of the River Mease. The buffers illustrate that Measham and south of Ashby-de-la-Zouch is within 2.5 km of the River Mease. The north of Ashby-de-la-Zouch, west of Ibstock and extreme west of Coaville is within 5km of the designation.

3.8 The catchment map shows that two principal settlements. Ashby-de-la-Zouch and Measham are within the River Mease catchment. As well as the Sustainable Villages of Appleby Magna, Blackfordby, Donisthorpe, Moira, Packington and Oakthorpe and several Rural Villages.

3.9 Significant also is map A in Appendix 1 that shows the River Mease catchment and the sewage treatment works that serve the main settlements. The main risk pathway is not the distance to the River Mease but the route of waste water and capacity at relevant treatment works. Most important for this area is the waste water from Ashby-de-la-Zouch that flows to Packington treatment works where there is limited capacity and waste water from Measham that flows to the Measham Waste Water Treatment Works.

3.10 The paragraphs 3.11 to 3.13 sets out the relevant conservation objectives for the European designated River Mease Special Area of Conservation.

3.11 **River Mease – Special Area of Conservation**

Site code: UK0030258
Total area: 21.86ha

Primary reasons for designation

The River Mease SAC is an inland water source within a lowland clay area of North West Leicestershire. The river flows westwards over Sherwood Sandstone and Mercia Mudstone, into the River Trent at Croxall. The overall form of the river contains a range of physical in-channel features, which provides channel diversity compared to other similar rivers, and bankside tree cover.

The River Mease is important for its population of **Spined loach *Cobitis taenia*** and **Bullhead *Cottus gobio*,** which is the primary reason for selection of this site in Annex II of the Habitats Directive.

The site contains habitats listed under Annex I of the Habitats Directive and these are a qualifying feature. They are **water courses of plain to montane levels with the *Ruanunculion fluitantis* and *Callitricho-Batrachion* vegetation.** The site also contains a variety of species listed under Annex II of the Habitats Directive which are also primary reasons for selection. These species include **White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*** and **Otter *Lutra lutra*.**

The site also supports valuable habitat used by these protected species, such as floating sweet-grass *Glyceria gobio* found in the lower reaches of the Gilwiskaw Brook, and other vegetations such as common club-rush *Schoenoplectus lacustris, Glyceria fluitans*, reed

canary-grass *Phalaris arundinacea*, branched bur-reed *Sparganium erectum,* greater pond sedge *Carex riparia* and bulrush *Typha latifolia,* for example.

The current condition of the SAC is **unfavourable (no change).**

Natural England have assessed the River Mease in terms of its status as a Site of Special Scientific Interest (SSSI). This assessment is relevant to the species and habitat identified as protected by the SAC designation. The required SSSI environmental objectives for the water course, including specific principles for individual habitats and species, are defined by Natural England and set out in Appendix 2.

Environment Agency's River Basin Management Plan[2] Annex D identifies the protected water objectives and Natura 2000 actions relating to the River Mease, as set out in Appendix 3. These reflect the vulnerabilities listed below relating to water issues.

The Environment Agency's Tame, Anker and Mease Catchment Abstraction Management Strategy[3] identifies the Measham Ground Water Management Unit as over licensed. The Environment Agency has identified that the sewerage works at Packington are at maximum capacity and have an impact on phosphorus conservation targets. Stage 4 management options are currently being developed by the Environment Agency relating to water quality.

The ecological status of the water course is a major determinant of Favourable Condition Status (FCS) for all features. The overall objective for the SAC is to protect and improve the water or water-dependent environment to the extent necessary to achieve favourable conservation status for all the water dependent features for which the protected area is designated.

The integrity of the site needs to be maintained and its main vulnerabilities have been identified as:

- **Abstraction levels** of water can effect water levels and the species population.
- **Water quality** is a particular vulnerability for the River Mease, due to the capacity of the sewerage works at Packington, which means conservation targets for Phosphate can not be currently met.
- **Dumping, storage, spreading or discharging of any material or substances** can be problem comes from agriculture, but can also come from roads and development.
- **Development pressure** can cause temporary physical, acoustic, chemical and sediment barrier effects that need to be addressed in the assessment of specific plans and projects. Noise/vibration e.g. due to impact piling, drilling, will have an impact on the river. Contamination of the river can arise when contaminated land adjacent the river is disturbed e.g. as a result of development. Contamination can also arise from pollution events (which could be industry related).
- **Modification of the structure of watercourses** – including their banks.
- **Extraction of minerals** – including peat, shingle, sand and gravel, or soil.
- **Removal of habitats –** the destruction, removal or cutting of plant or plant remains within or adjacent the River Mease.

[2] Environment Agency (2009) *River Basin Management Plan Annex D*
[3] Environment Agency (2008) *Tame, Anker and Mease Catchment Abstraction Management Strategy*

- **Recreational activities –** recreation can damage or disturb features of special interest.
- **Invasive species –** invasive freshwater species.

3.12 As outlined above the River Mease SAC has many vulnerabilities which can be effected by development, therefore it is important to assess the growth options and strategic policies outlined in the submission version of the Core Strategy (April 2012). Section 4 considers the different policies and the potential impacts on the Natura 2000 site.

Conservation objectives

3.13 Part of determining significance of impacts is identifying if it would adversely impact on achieving the conservation objectives for the site. The SAC has had a 'Management Plan', prepared jointly by Natural England and the Environment Agency. This sets out the conservation objectives and performance indicators.

4 Screening of submission Core Strategy impacts

4.1 The Core Strategy sets the framework for guiding major new development in the district. This includes setting the level of growth the Core Strategy must provide for over the plan period, and the spatial distribution of this growth around the district. This part of the HRA considers how development delivered through the Core Strategy has the potential to impact on the River Mease SAC.

4.2 The initial screening was of the November 2008 version of the Core Strategy. From this earlier version of the Core Strategy it was possible to identify some strategic matters related to delivering development that may have the potential to have an adverse impact on the Natura 2000 site. These strategic issues are also part of the current submission stage Core Strategy, with some changes, for instance the amount of proposed housing development directed to individual settlements is in some cases different from the original options. The identified strategic matters are:

- an expected housing growth of 9,700 new homes in the district in the plan period up to 2031
- provision for a growing economy, with allocation of 120 hectares of new and existing employment land
- identifying the towns that are to the focus for the majority of new development, these include Coalville, Ibstock, Ashby-de-la-Zouch, Measham and Castle Donington and Kegworth
- 'sustainable villages' have been identified where some development will be permitted in these villages and ‘rural village’ where very limited development could occur.

4.3 The submission Core Strategy is more comprehensive and detailed than the previous stage of preparation. The new content of the plan now needs to be screened for potential impacts on the Natura 2000 site. The additional material that needs to be screened at this stage includes:

- finalised housing numbers and development directed to individual settlements. It is essential that there is no harm to the integrity of sites and the reasons for designation either through direct land take or indirect impacts
- detailed policies, screened to make sure they are not proposing the delivery of development that would adversely harm the sites.

Potential impacts of policies and proposals

4.4 To enable the screening assessment it is necessary to identify the potential impacts of proposals and policies on the SAC, which are based on the identified vulnerability of sites, as well as issues that could directly impact on these sites.

4.5 The possible routes for the Core Strategy to have an impact are:

- water quality – the impact of development can have an effect on water quality particularly where growth outstrips treatment capacity, landfill sites, industry and quarrying may also impact on water quality. Water pollution can cause direct

impacts on sites and also nutrient enrichment can cause vegetation composition on sites to adversely affect the conservation objectives.

- direct disturbance from development – this includes development directly causing the loss of whole or part of a site, although this is controlled through national protection policies.
- human disturbance from recreation – where new housing or development for recreational use is located near to protected sites it may lead to increased recreational pressures that may cause disturbance of sites and designation features.
- water quantity – new development gives rise to increased water supply demands, this can result in lowering of water tables that can adversely impact on sites that depend on high water tables to support them, the Groundwater abstraction areas underlying Measham and south of Ashby-de-la-Zouch is already over licensed.
- changes in surrounding supporting habitats – loss of nearby open spaces and habitat links, such as hedgerows, can cause negative impacts on species on site through the loss of supporting breeding populations, linking habitats or shelter features particular where the SAC is divided into a number of distinct areas.

Initial screening for impacts on the River Mease SAC

4.6 This stage of policy screening follows on from the screening of the 2008 version Core Strategy. This report builds on the findings of the earlier screening stage, again reporting on the potential impacts of the strategy on the SAC site, but also looking at the implications of the more detailed matters included in policies and from location specific policies.

4.7 The screening and initial assessment of the Core Strategy provides an overview of the vulnerability of the SAC site. It identifies recommendations for the Core Strategy such as additional policy criteria or explanatory text to recognise potential risks to SAC site and ensure these are avoided through choices on the location of development or the way sites are delivered.

4.8 The impact identification for the SAC sites was initially completed for the 2008 Core Strategy proposals. As part of this process each policy was screened to assess where impacts may arise and what this might mean for the integrity of each site and its conservation objectives. The table in Appendix 4 of the screening report 2008 shows that there is potential for the Core Strategy to have an adverse impact on the River Mease SAC.

4.9 For the River Mease SAC site this stage of screening the impact discusses:

- The relationship with the Core Strategy and where there are potential vulnerabilities to impacts created by the plan
- The potential impacts of strategic and detailed policies
- Recommendations for avoiding impacts where identified
- Concluding remarks including the likely significance of any residual impacts.

River Mease SAC characteristics

4.10 The River Mease is described is an inland area of water within a lowland clay area of North West Leicestershire. Identified vulnerabilities to the River Mease means it could experience a range of impacts as a result of development in North West Leicestershire.

Vulnerabilities

4.11 The river flows westwards over Sherwood Sandstone and Mercia Mudstone, into the River Trent at Croxall. The overall form of the river contains a range of physical in-channel features, which provides channel diversity compared to other similar rivers, and bankside tree cover.

4.12 The River Mease SAC is in an unfavourable condition. Built development, as directed through the Core Strategy, should have a role in helping to manage the potential impacts on the SAC. The main areas where the Core Strategy may have relevance to the SAC relates to water quality and water quantity. Further detail on the vulnerabilities of the River Mease SAC is detailed above in para 3.10 and within Appendices 2 and 3.

4.13 The key issue relates to the high levels of phosphate within the River Mease. The Water Quality Management Plan (WQMP) objective is to reduce the level of phosphate in the river to enable the Conservation Objectives of the SAC to be met.

4.14 Development can cause water pollution and have an impact on species and habitats that are integral to the site designation, as identified in section 4 and Appendix 2. These impacts can be from poor water quality, which result from increased sewerage, unmitigated construction techniques and/or run-off from increased traffic generation. Therefore, it can in part be addressed through the Core Strategy, although this would need to be in combination with the implementation on other measures to control pollution and manage existing sewerage works.

4.15 There could also be impacts on water quantity from abstraction effecting the designated species' population. Therefore, water demand from new built development could have an impact on this. Suitable polices will need to be in place to ensure the efficient use of water in new development, as well as ensuring new abstraction is not in locations that would adversely impact on the groundwater feeding the river.

Screening of the Core Strategy policies

4.16 The policy review shown in Appendix 4of this report takes each of the policies of the plan in turn and identifies its potential for adverse impacts on each of the SAC sites. The table in the appendix identifies possible impact pathways, possible impacts and how these can be mitigated. Without mitigation measures in place, it is possible that some policies would have a significant impact on the SAC. However, with mitigation measures put in place and implemented thoroughly, the HRA can conclude that all policies would either have a positive effect or no significant effect (alone or in combination).

4.17 Core Strategy options that may bring pre mitigation risk to the River Mease SAC are:

- Policies CS1, CS2 and CS8 provides for an overall housing and employment distribution to the whole district up to 2031, although it does not provide any detail of the quantity of development directed to each area.
- Policy CS9 provides for a potential extension to Swadlincote, for South Derbyshire local authority, to be delivered within North West Leicestershire. This has not been adopted through the South Derbyshire Core Strategy or agreed with North West Leicestershire and no housing number has been calculated for this location. Any housing delivered for Swadlincote would be additional to North West Leicestershire housing need and Core Strategy housing requirement.
- Policy CS15 provides the housing numbers for specific locations some of which would directly impact on the River Mease SAC without any mitigation measures.
- Policy CS16 sets out the minimum standards for residential density. Impacts on the River Mease SAC could potentially increase with an increase of housing depending on the location of homes.
- Policy CS23 seeks to locate development to locations that have existing services and facilities in line with the development strategy. As outlined above, some of these locations, including Measham and Ashby, would have an impact on the SAC, but would depend on the exact location and amount of development proposed.
- Policy CS25 does direct new residential development to obtain 3 credits for water use in Code for Sustainable Homes.
- Policies CS37 and CS41 directs development to Ashby and Measham respectively which would increase the amount of waste water being directed to waste water treatment works in the local area.
- Policy CS42 provides for the overall housing distribution for rural areas up to 2031, although it does not provide any detail of the quantity of development directed to each village.

4.18 Therefore, without mitigation of impacts there is the potential for development directed through the Core Strategy to have **significant adverse impacts on the River Mease SAC.** This specifically relates to the declining water quality as a result of increasing levels of phosphates from waste water treatment discharges into the River Mease.

SAC consideration in the Core Strategy

4.19 The Core Strategy provides an opportunity to protect and enhance the quality of the SAC from future development through robust planning policies. The HRA recognises that the Council have worked in partnership with key organisations to develop policies which mitigate against the impact of development on the SAC. These policies are outlined in section 6 and include:

- CS25: Sustainability and New Development
- CS26: Flood Risk
- CS33: River Mease Special Area of Conservation
- CS37: Ashby-de-la-Zouch
- CS41: Measham

4.20 During the initial screening stage of the 2008 Core Strategy, the Environment Agency confirmed that all development options at Ashby-de-la-Zouch and Measham would have an impact on the River Mease and associated tributaries. At this time the Environment Agency also stated that all development within (and adjacent) villages in close proximity to the River Mease would also have an impact on the site.

4.21 Since then work has continued to address issues relating to development at Ashby and Measham. Severn Trent Water have produced a headroom assessment[4] for sewage treatment works in March 2012, which Severn Trent will update annually. The Council has also commissioned a Water Cycle Study to identify solutions that will help facilitate development whilst preventing further deterioration of water quality and water resources. These reports are outlined within section 6 below.

[4] Severn Trent Water (2012) *Headroom Capacity Assessment 2012*

5 In-combination effects

5.1 It is important to consider other plans and projects that may also have an influence over the Natura 2000 site, and how the Core Strategy could affect these to change the significance of impact on the site. This is a requirement of Article 6(3) of the Habitats Directive.

5.2 The plans, programmes and strategies that are identified as having the potential to have an impact on the SAC site, and the potential in-combination impacts, are detailed in Appendix 5.

5.3 Most significantly in this instance it will be important to consider the South Derbyshire Core Strategy development proposals, particularly proposals relating to development within the River Mease catchment area. The South Derbyshire Core Strategy has not yet been finalised.

5.4 It is necessary to be selective about which other plans, programmes and strategies may have an in-combination impact. The process has therefore focused on those plans that may have similar water quality and availability impacts to those impacts already identified for the Core Strategy.

5.5 The plans where in-combination impacts have been considered are on a national, county and local level, as well as the potential for specific projects. Plans from a variety of authors are reviewed, including neighbouring authorities, County Council, Environment Agency and Natural England.

National Plans

5.6 National plans reviewed for in-combination impacts do not set direct policy for making development decisions. The aims and objectives of these higher level plans will be implemented through lower tier policies including the Core Strategy. Therefore, direct in-combination impacts of these plans cannot be identified.

County Plans

5.7 Waste and mineral site allocations in Leicestershire have been identified with potential in-combination impacts on the River Mease, where any site within the catchment area was to be expanded. However, implementation, together with the development management policies within the plans, would mitigate any impacts at this location due to the European environmental designation. Any planning application submitted would then require an Appropriate Assessment.

5.8 Development issues relating to water quality have been identified as a risk to the SAC site screened in this assessment. Transport schemes set out in the local transport plan may have an adverse impact on the SAC site where increased road usage would increase water surface run-off. However, the use of sustainable urban drainage and the strategy to reduce car use will reduce adverse impacts.

Local Plans

South Derbyshire Core Strategy

5.9 The South Derbyshire Core Strategy has not yet been adopted and the Council have recently completed consultation on options for growth, jointly with Derby City Council and Amber Valley District Council.

5.10 The Appropriate Assessment (screening and scoping) Consultation Report for the South Derbyshire Core Strategy (October 2008) identified the Core Strategy for South Derbyshire could give rise to likely significant effects on the River Mease SAC. It concluded that as the Core Strategy is developed it will need to be subjected to additional assessment work to ensure the plan has the least possible impact on the site either through avoidance or mitigation. The later stage of appropriate assessment will focus on the water quality issues (and water quantity if new development increases pressure on water resources from the River Mease WRMU).

5.11 In light of discussions with North West Leicestershire District Council, there is the potential for extensions to Swadlincote, which is both within the North West Leicestershire local authority boundary and the River Mease catchment area. This development proposal would have the potential for in-combination impacts.

5.12 Development at Swadlincote would increase the number of homes and potentially other types of development within the River Mease catchment area. Further development in this area would increase the amount of waste water required to be treated and increase the number of homes requiring waste water treatment. These homes currently have not been included within the headroom capacity of the waste water treatment works in this location. Further work would be required between South Derbyshire District Council and North West Leicestershire District Council, with the Environment Agency, Natural England, Severn Trent Water and the development industry. This will ensure there are no in-combination impacts from development around Swadlincote and surrounding area.

Other neighbouring local authorities

5.13 The district has five other local authority neighbours including Charnwood, Hinckley and Bosworth, Rushcliffe, North Warwickshire and Erewash. All local authorities are at different stage of producing their Core Strategies and proposing strategic levels of housing and employment, along with other types of development.

5.14 None of these local authorities will deliver development which could impact on the River Mease catchment area and therefore should not impact on the SAC. These plans will also be subject to HRA and will need to take into account the relationship with North West Leicestershire local plan.

The Tame, Anker and Mease Catchment Area Abstraction Management Strategy (March 2008)

5.15 In this CAMS the River Mease and the underlying Measham groundwater unit are being assessed under the Habitats Regulations due to the SAC status of the River Mease.

5.16 The CAMS provides details on water abstraction from the River Mease and restrictions on licences to minimise the impact of abstraction on water resources within the river. The plan also identifies the area of over licenced groundwater.

Site specific plans proposals

5.17 Plans and proposals for development will come forward in and adjacent to the district throughout the lifetime of the plan. Many of the large development sites have not been identified, although the housing numbers for specific settlements have been identified. The assessment of the impacts of these plans is already part of the assessment. However, the site allocations component of the Local Plan may also require HRA screening and assessment if necessary.

5.18 Other development beyond the district boundary may also have an impact. Most significantly may be development potential around Swadlincote for housing to support housing numbers in South Derbyshire. This will increase the need for waste water treatment which would need to be accounted for within the headroom capacity of existing waste water treatment works.

5.19 Although strategic plans do not appear to have any in-combination impact on the SAC, any new applications which come forward for waste or mineral works close to the SAC could have implications for water abstraction or water quality. Any proposals of this type will need to be fully assessed for impacts on the SAC alone and in-combination/cumulatively with other development in the area. This may also be exacerbated by new traffic associated with new development in and around the River Mease catchment area.

6 Mitigation of potential impacts

6.1 In producing the Core Strategy, the Council have been working in partnership with external organisations including Severn Trent Water, Natural England and the Environment Agency to ensure new development in the River Mease catchment does not have a significant adverse impact on the River Mease SAC. The potential for significant impacts comes from declining water quality in the River Mease as a result of waste water outflow from waste water treatment works serving Ashby-de-la-Zouch and Measham. Therefore, the Core Strategy needs to put in place measures to ensure development over the plan period causes no significant adverse effects.

6.2 This section sets out the measures that need to be implemented to avoid and mitigate against significant effects. Measures have been identified though a technical Water Cycle Study[5] and work undertaken by Severn Trent Water.

6.3 To be implemented, the measures identified by Severn Trent Water and in the Water Cycle Study need to be translated into Core Strategy policy and other documents that will control development in the plan area. This section sets out the mitigation measures set out in the Core Strategy policies which seek to reduce the impact on the River Mease SAC. These measures are to ensure development either is delivered within existing headroom capacity at the treatment works or provide for longer terms solutions for increasing capacity.

6.4 The HRA provides comments on each of the mitigation measures.

Severn Trent Water – headroom assessment (March 2012)

6.5 Severn Trent Water has an obligation to provide capacity to treat additional flows and loads that arise from additional residential properties.

6.6 Severn Trent Water has assessed the sewerage treatment headroom capacity facilities to inform the Core Strategy and planning application decisions. The position, as at March 2012, is set out in Appendix 6 showing existing capacity. This information will be updated on an annual basis and next scheduled for March 2013.

6.7 In assessing capacity Severn Trent Water identify that there is sufficient headroom capacity for 1,218 new homes in the Packington Water Treatment works (taking waste water from Ashby) and for 1,163 new homes in Measham Water Treatment Works. This is based on an average/central estimate of headroom capacity (table 6.2), based on assumptions that can affect the quantification of headroom. With each assessment assumptions can be reviewed as part of annual process.

6.8 Table 6.1 outlines the central estimate headroom capacity compared to the proposed number of homes in each water treatment works area for Packington and Measham. It shows that there is sufficient capacity for both waste water treatment works to meet the needs of both existing permissions and proposed residual housing numbers in the Core Strategy.

[5] Amec (April 2012) *Water Cycle Study*

Table 6.1: Headroom capacity compared to homes at treatment works

Waste water treatment works	Central estimate headroom capacity	Existing permissions	Core Strategy residual housing number (+ villages)	Total number of proposed homes
Packington (serving Ashby)	**1218 homes**	456 homes	560 homes+	1016 homes
Measham	**1163 homes**	66 homes	440 homes+	506 homes

6.9 For Measham waste water works there is enough headroom capacity remaining for over 500 additional homes to those allocated in the Core Strategy. Therefore, impacts can be avoided with no mitigation necessary.

6.10 However, for the Packington waste water works there is only enough headroom capacity left for just over 200 new homes in the Ashby area, beyond those allocated through the Core Strategy. This is based on a central estimate as table 6.2. There are also potential 'worst case' and 'best case' scenarios, depending on the factors that can affect the quantification of headroom. In the 'worst case' scenario this can restrict the number of properties within existing headroom to 735 properties for the Packington water works. Therefore, there is the risk that headroom capacity could be exceeded over the plan period (medium to long-term), especially if there is significant employment growth in addition to housing growth.

Table 6.2: Scenarios for headroom capacity at the Packington treatment works

	Worst Case	Central estimate	Best Case
Assumption 1	Use lowest volumetric headroom figure of 233 m3	Use mid-range volumetric headroom figure of 336 m3	Use best case volumetric headroom figure of 647 m3/d
Assumption 2	No application of sustainable homes standard (use standard 135 l/h/d)	Use average of normal and sustainable homes water usage (@276 l/prop/d)	Full application of sustainable homes water consumption (100 l/h/d)
Headroom (properties)	735	1218	2753

6.11 The Severn Trent Water note appears to show that they have no solution at the present time for reducing effluent and reducing phosphorus discharge levels from increasing demand. This means at the moment the only way to mitigate adverse impacts is to only develop within the measured headroom capacity. Should the pattern of future development not match headroom capacity Severn Trent would look to explore potential for local waste water transfer at this stage. However, the Water Cycle Study indicates that there may be medium or long-term solutions or third party solutions, beyond those currently recognised by Severn Trent Water.

6.12 Appendix 7 provides a note prepared by the Core Strategy plan making team, relating to the proposed housing numbers in the Core Strategy and headroom capacity. This supports the Severn Trent capacity report that restricts growth in Ashby and Measham to that which would not exceed the current agreed headroom at the two identified waste water treatment works (1,218 Ashby (i.e. Packington) and 1,163 Measham).

6.13 This note has been signed-off by both the Environment Agency and Natural England within Appendix 7. This gives their agreement that the Core Strategy is setting development at levels in Ashby and Measham within existing headroom capacity and therefore can proceed.

6.14 However, it is important to highlight that these calculations do not factor in any other development types, such as the amount of land that could be directed to Ashby for employment, retail, hotels and leisure etc, which would also discharge waste water. Severn Trent Water have confirmed in their note that the information will be updated on an annual basis. Therefore, it will be important to carefully **monitor** the headroom capacity and water quality of the River Mease, to ensure the long term strategy for the district can be delivered. A contingency plan may need to be in place if development is causing deterioration in water quality in the River Mease, including preventing further development in Ashby until additional treatment capacity is in place.

6.15 The Council will also have to assess proposals on a site-by-site basis, to ensure the treatment works have capacity and ensure the spatial strategy and Core Strategy strategic policies are still deliverable up to 2031.

6.16 The medium to long-term solutions for increasing capacity at Packington Waste Water Treatment Works are addressed in The Water Cycle Study.

Water Cycle Study – mitigation measures

6.17 The Water Cycle Study (April 2012) identifies solutions to manage the potential for increasing levels of phosphorus in the River Mease as a result of waste water outflow from treatment works serving Ashby. Conclusions and mitigation measures are detailed within the section below and relate to:

- reviewing infrastructure requirements to meet water quality targets,
- preventing increased flood risk from surface water and sewerage, and
- to meeting CSH Level 3/4 for water efficiency to protect the region's water resources.

Reviewing infrastructure requirements

6.18 This study has reviewed the potential impacts on water quality from a number of proposed solutions to wastewater treatment. Preferred solutions for both short term and longer development have been identified.

6.19 The preferred immediate solution, Option 2 'Maintain the Load', is to permit new development to connect to the existing sewerage network in the Ashby, Packington and Measham areas. This option was not considered viable over 12 months ago, but revisions in the headroom calculations, improved treatment which is planned for the works (expected operational by March 2012), and a reduction in housing targets for Ashby, as well as the

evidence provided from the water quality modelling results; makes this a viable option **in the short term**. This option is stated, within the Water Cycle Study, feasible for the short term (in the next 5 to 10 years). It could be a longer term solution so long as headroom is not exceeded.

6.20 The study considers that Option 2 should work alongside medium/longer term solutions of additional treatment at one or both of the treatment works.

6.21 Discharge from Packington has been identified as the main contributor to the decline in water quality in the river. Therefore, improvements here have the potential for the largest improvements in water quality. The Water Cycle Study identifies a **medium term Option 4** which involves improvements at Packington Wastewater Treatment works. It includes support for a Developer Contribution Strategy, as recommended in the Water Quality Management Plan for the Mease[6], where developer contributions would be used to contribute to phosphate reduction within the catchment and prevent deterioration from new development, supporting the actions within the Water Quality Management Plan.

6.22 The Water Cycle Study concludes that there are unlikely to be significant constraints affecting the proposed developments and that any issues can be mitigated by improvements to the existing treatment works.

6.23 As indicated in paragraph 6.14 these calculations are based on housing only and capacity required from other types of development, such as employment, retail, hotels and leisure etc, which would also discharge waste water. Therefore, it will be extremely important to assess the headroom capacity on an annual basis, as indicated by Severn Trent Water, to inform decisions on the planning the medium solution Option 4b. The Core Strategy includes wording to this effect.

6.24 The Council will also have to assess proposals on a site by site basis, to ensure the treatment works have capacity and ensure the spatial strategy and Core Strategy strategic policies are still deliverable up to 2031.

Reducing surface water and flood risk

6.25 The Water Cycle Study states that 'any improvements to wastewater discharges need to be undertaken in parallel with improvements to diffuse sources'. Therefore, to help maintain water quality in the River Mease development in the catchment should introduce **sustainable drainage systems** (SuDS) to control surface water run-off. SuDS would provide mitigation measures to further reduce the impact on the SAC by reducing surface water flooding, controlling runoff at source, improving water quality by treating runoff and removing pollutants prior to discharge off site and, if systems such as rainwater harvesting or greywater recycling are used, reduction in water resources demands.

6.26 The study recommends that all sites greater than 1 hectare should have a **Flood Risk Assessment** prepared in line with PPS25. Since the production of the Water Cycle Study, PPS25 has been replaced by the National Planning Policy Framework and Technical Guidance relating to development and flood risk. Where possible a reduction to greenfield run-off rates should be aimed for.

[6] Environment Agency (2011) *Water Quality Management Plan*

Improving water efficiency

6.27 To reduce the overall amount of water going to treatment works and in so doing help maintain capacity the Water Cycle Study also recommends water efficiency measures.

6.28 The Water Cycle Study made an assessment of **water efficiency** in households and how builders can achieve the requirements of the Code for Sustainable Homes Level 3/4 for water consumption has been undertaken.

6.29 The study makes a suggestion to the Council to develop a policy for non-household development making it mandatory for commercial buildings to be assessed by a BREEAM assessor, with the expectation that buildings meet Good standard for water consumption targets for the building type.

6.30 Appendix D of the Water Cycle Study provides a checklist and guidance for housing developers and the Council to make sure new development complies with the mitigation measures set out in the Study.

Developer contributions

6.31 The Water Cycle Study highlights work completed by the Environment Agency in preparing a Water Quality Management Plan for the Mease, which identifies mitigation measures, actions and parties responsible. This includes the recommendation for a **Developer Contribution Strategy**, in which any new development which would increase wastewater flows to the mains will contribute to reducing the equivalent amount of phosphorus through various actions and measures. This could contribute to additional measures within the catchment area. This strategy will need to be in place as soon as possible, ideally in advance of adoption of the Core Strategy.

Core Strategy –mitigation policies

6.32 The suggestions of the Water Cycle Study and findings of the Severn Trent Water capacity assessment are not policy and in themselves will mitigate the impacts of development on the River Mease. Therefore, the mitigation measures need to be set as policy through the Core Strategy and also in other parts of North West Leicestershire's development plan.

6.33 The Core Strategy provides an opportunity to protect and enhance the quality of the SAC from future development through robust planning policies. The HRA recognises that the Council have worked in partnership with key organisations to develop policies which mitigate against the impact of development on the SAC.

6.34 The Core Strategy contains a suite of policies that will work together in avoiding and mitigating against impacts on the River Mease SAC. These policies include:

- CS25: Sustainability and New Development
- CS26: Flood Risk
- CS33: River Mease Special Area of Conservation
- CS37: Ashby-de-la-Zouch
- CS41: Measham

6.35 **Policy CS25** 'Sustainability and New Development' is shown below. The policy sets out development should reach the highest level of Code for Sustainable Homes or BREEAM if financially viable; otherwise demonstrate why it cannot be reached. This is identified for a threshold size of development which has not as yet been identified within the Core Strategy, which needs to be confirmed.

6.36 The policy requires all homes to gain at least 3 credits for Indoor Water Use within the sub-category requirement of Code for Sustainable Homes. This is extremely important to enable developments to take place and improve the use of water, although this criteria only applies to housing developments. These criteria should be strictly applied within development control and all development in Ashby and Measham should have to comply and as a priority for viability calculations.

6.37 The policy helps meet the Water Cycles Study proposed mitigation measures related to **water efficiency**.

Policy CS25: Sustainability and New Development

In order to ensure that new dwellings address wider sustainability issues, residential developments will be expected to achieve the highest level technically and financially viable under the Code for Sustainable Homes. Developers of sites of ten dwellings or more will be expected to:

A. provide a Design Stage certificate and a Post-Construction Stage certificate to demonstrate which rating under the Code for Sustainable Homes can be, and has been, achieved; and

B. Achieve at least 3 credits in Indoor Water Use (Wat 1) of the Code for Sustainable Homes, unless such measures will have a negative impact upon the River Mease SAC;

In order to ensure that non-residential developments address wider sustainability issues, developers of large sites will be expected to:

A. ensure their scheme achieves the highest rating technically and financially viable under the Building Research Establishment's Environmental Assessment Method, and to demonstrate why a higher rating cannot be achieved; and

B. provide a Design Stage certificate and a Post-Construction Stage certificate to demonstrate which rating under the Building Research Establishment's Environmental Assessment Method can be, and has been, achieved.

6.38 **Policy CS26** 'Flood Risk' is detailed below, and provides criteria against which development will be assessed in relation to flood risk, including the requirement for a site specific flood risk assessment for proposals of 1 hectare or more, as recommended in the Water Cycle Study.

Policy CS26: Flood Risk

A site-specific flood risk assessment is required for proposals of 1 hectare or greater in Flood Zone 1 and all proposals for new development (including minor development and change of use) in Flood Zones 2 and 3, and also where proposed development or a change of use to a more vulnerable class may be subject to other sources of flooding.

New development will be directed towards areas at the lowest risk of flooding within the District; with priority given to land within Flood Zone 1.

The use of Flood Zones 2 and 3a for recreation, amenity and environmental purposes will be acceptable; where an effective means of flood risk management is evident, and considerable green space provided.

Land within Flood Zone 3b will be safeguarded, to ensure that the functional floodplain is protected from development. The Council will also support proposals which reinstate the functional floodplain, where possible.

All new development will be expected to ensure that it does not increase the level of flooding experienced in other areas of the District.

Surface water run-off in all developments should be managed, to minimise the net increase in the amount of surface water discharged into the local public sewer system. On previously developed sites, surface water runoff should be attenuated by 20% on the site.

The use of Sustainable Drainage Systems (SuDS) will be expected; and design and layout schemes which enhance natural forms of on-site drainage will be encouraged.

6.39 The policy helps meet the Water Cycles Study proposed mitigation measures related to **flood risk.**

6.40 **Policy CS33** 'River Mease Special Area of Conservation' is set out below. It specifically sets out the mitigation measures required to ensure that any new development in the River Mease catchment area will not impact on the water quality further on the River Mease. This is done by requiring that there will only be new development if there is sufficient headroom capacity available at wastewater treatment works.

6.41 The HRA recognises the importance of this policy to protect water quality from new development. As stated above, if the headroom capacity reaches its maximum before the end of the plan period then no further development would be permitted under policy criteria CS33a. Therefore, it could be possible that not all the planned development in the Core Strategy would be delivered, if there were large employment or other types of developments in these locations as well as housing, or during the annual Severn Trent checks the headroom capacity was lower than predicted in previous years.

6.42 Therefore, the annual assessment of headroom capacity undertaken by Severn Trent Water and monitoring of River Mease water quality will be extremely important in monitoring the Core Strategy policies. Firstly, to enable further mitigation plans to be put in place relating to Option 4b of the Water Cycle Study, and secondly, to ensure that all development proposed within the Core Strategy (particularly housing and employment proposals in

Ashby) can be delivered. The Core Strategy needs to be flexible to allow for any potential changes in future.

6.43 The policy also raises the need for new development to comply with the **Developer Contribution Strategy.** The Developer Contributions Strategy needs to be in place as soon as possible to secure future headroom capacity. At the latest it should be in place by the time the Core Strategy is adopted. If not, then the Council could consider having a moratorium on development in Ashby until the Developer Contributions Strategy is in place.

6.44 The policy helps meet the Water Cycles Study proposed mitigation measures related to **Developer Contribution Strategy and medium to long term solutions for capacity**. The policy also supports the Severn Trent Water non-technical work**.**

Policy CS33: River Mease Special Area of Conservation

The Council will work with Natural England, the Environment Agency, Severn Trent Water and the development industry to improve the water quality of the River Mease Special Area of Conservation.

In order to achieve this, our strategy will be to only allow new development within the River Mease catchment where:

A. There is sufficient headroom capacity available at the Wastewater Treatment Works to which it is proposed that flows from the development will go; and

B. The proposed development is in accordance with the provisions of the Water Quality Management Plan including, where appropriate, the provision of infrastructure or water quality improvements proposed in a Developer Contributions Strategy.

In the event that there is no headroom capacity available at wastewater treatment works, development will only be allowed where it can be demonstrated that the proposed development will not have an adverse impact upon the River Mease Special Area of Conservation.

6.45 **Policy CS37** 'Ashby-de-la-Zouch' is detailed below. This policy provides mitigation measures for development located at Ashby, including supporting proposals to upgrade the Packington Wastewater Treatment Works; reducing flood risk in the Packington area; and water requirements relating to Code for Sustainable Homes and BREEAM.

6.46 As described above the amount of residual housing in the policy, along with housing already permitted, falls just below the headroom capacity of the treatment works, helping to avoid adverse impacts. Therefore, policy CS30 will need to be applied to prevent further growth if capacity is exceeded.

6.47 However, the policy does not account for the amount of employment to be allocated within Ashby or other types of development such as hotels, leisure, education facilities etc, which would increase the amount of waste water to Packington works.

Policy CS37: Ashby-de-la-Zouch

To support Ashby-de-la-Zouch's role as a Rural Centre, North West Leicestershire District Council will:

A. *Make provision for at least 560 more homes by 2031 to the north of Ashby-de-la-Zouch. A Masterplan will be required to demonstrate how the area will be developed, including:*

i. *phasing and the mix of different uses and their relative disposition to other uses;*

ii. *a range of infrastructure, including a new primary school and extensions to the existing secondary schools, open space, public transport, provision for walking and cycling and other new transport infrastructure as necessary to create a sustainable community will be provided; and*

iii. *consideration to the prior extraction of any remnant shallow coal.*

B. *Require new development in the Gilwiskaw catchment to incorporate measures to reduce flood risk in the Packington area;*

C. *New dwellings on sites of ten dwellings or more in Ashby-de-la-Zouch will be expected to meet the following sub-category requirements of Code for Sustainable Homes, unless it can be proved that to do so will have a negative impact on the River Mease Special Area of Conservation:*

Category	***Sub-categories***
Water	*Full credits to be achieved in External Water Use ("Wat 2")*
Surface water run-off	*Full credits to be achieved in Management of Surface Water Run-off from Developments ("Sur 1")*
	At least 1 credit to be achieved in Flood Risk ("Sur 2")

5. *New non-residential buildings on large sites in Ashby-de-la-Zouch will be expected to meet the following sub-categories of the Building Research Establishment's Environmental Assessment Method, unless it can be proved that to do so will have a negative impact on the River Mease Special Area of Conservation:*

Category	***Sub-categories***
Water	*Full credits to be achieved in Water Consumption ("Wat 01")*
	Full compliance to be achieved in Water Monitoring ("Wat 02")
	Full credits to be achieved in Water Leak

	Detection and Prevention ("Wat 03")
	Full compliance to be achieved in Water Efficient Equipment ("Wat 04")
Land use & ecology	*Full compliance to be achieved with Ecological Value of Site and Protection of Ecological Features ("LE 02")*
	Full credits to be achieved in Mitigating Ecological Impact ("LE 03")
	Full credits to be achieved in Enhancing Site Ecology ("LE 04")
	Full credits to be achieved in Long Term Impact on Biodiversity ("LE 05")
Pollution	*Full credits to be achieved in Surface Water Run-off ("Pol 03")*

D. Support the Ashby Town Centre Partnership to help deliver a vibrant town Centre.

6.48 **Policy CS41** 'Measham' is detailed below. This policy provides mitigation measures for development located at Measham, including water and reducing pollution requirements relating to Code for Sustainable Homes and BREEAM. It also set the level of development in the village and levels that will avoid adverse impacts by being within the headroom capacity. However, as with development in Ashby the policy is not clear on the quantity of non-residential development that will be permitted. Therefore, policy CS33 will need to be applied to prevent further growth if capacity is exceed.

Policy CS41: Measham

To support Measham's role as a Rural Centre, North West Leicestershire District Council will:

A. Make provision for at least 440 more homes by 2031 to the north-west of Measham. A Masterplan will be required to demonstrate how the area will be developed, including:

i. phasing and the mix of different uses and their relative disposition to other uses;

ii. a range of infrastructure, including schools, open space, health facilities, public transport, provision for walking and cycling and other new transport infrastructure as necessary to create a sustainable community will be provided; and

iii. measures to reinstate the Ashby Canal; and

iv. consideration of measures in connection with coalfield legacy and groundwater sources protection.

B. New dwellings on sites of ten dwellings or more in Measham will be

expected to meet the following sub-category requirements of Code for Sustainable Homes, unless it can be proved that to do so will have a negative impact on the River Mease Special Area of Conservation:

Category	***Sub-categories***
Water	*Full credits to be achieved in External Water Use ("Wat 2")*
Surface water run-off	*Full credits to be achieved in Management of Surface Water Run-off from Developments ("Sur 1")*
	At least 1 credit to be achieved in Flood Risk ("Sur 2")

C. *New non-residential buildings on large sites in Measham will be expected to meet the following sub-categories of the Building Research Establishment's Environmental Assessment Method, unless it can be proved that to do so will have a negative impact on the River Mease Special Area of Conservation::*

Category	***Sub-categories***
Water	*Full credits to be achieved in Water Consumption ("Wat 01")*
	Full compliance to be achieved in Water Monitoring ("Wat 02")
	Full credits to be achieved in Water Leak Detection and Prevention ("Wat 03")
	Full compliance to be achieved in Water Efficient Equipment ("Wat 04")
Land use & ecology	*Full compliance to be achieved with Ecological Value of Site and Protection of Ecological Features ("LE 02")*
	Full credits to be achieved in Mitigating Ecological Impact ("LE 03")
	Full credits to be achieved in Enhancing Site Ecology ("LE 04")
	Full credits to be achieved in Long Term Impact on Biodiversity ("LE 05")
Pollution	*Full credits to be achieved in Surface Water Run-off ("Pol 03")*

D. *Require that new development respects the character and appearance of the Measham Conservation Area and incorporates distinctive features that reflect the heritage of the village into the design of new developments.*

7 Recommendations for additional mitigation

7.1 The Core Strategy policies and distribution strategy are likely to be able to mitigate against significant adverse impacts on the short to medium term. However, to further help mitigate against impacts in the medium to long term the HRA suggests the plan contains some additional material, either as policy or supporting text:

- Policies for Measham and Ashby are clear that non-residential development is subject to the same controls as residential development, and headroom capacity limits apply to all development types that would result in additional waste water flows
- The possibility of the annual assessment by Severn Trent Water meaning that no new development can take place in the Ashby, or the River Mease catchment, if annual assessment shows the headroom capacity has been reached or the River Mease is suffering significant adverse impacts as a result of phosphorus level and there is not alternative solution in place.
- The possible requirement that the annual assessment of capacity levels will require a review of the distribution policy of the Core Strategy.

Impact of other plans

7.2 There are a number of other plans that could have an impact on the SAC in-combination with the impacts which could result from the Core Strategy. In particular, Core Strategy for South Derbyshire could give rise to likely significant effects on the River Mease SAC. The later stage of appropriate assessment will focus on the water quality issues (and water quantity if new development increases pressure on water resources from the River Mease Water Resource Management Unit). Therefore, it will be important for the Council to work closely with South Derbyshire and assess the effects of both Core Strategies in-combination when South Derbyshire moves forward with their Core Strategy. It will also be imperative to keep up-to-date with other key organisations who are producing plans which will in-combination increase the impact on these sites.

7.3 In addition to working with neighbouring local authorities it will be important for the Council to work in close partnership with other relevant organisations. This will include the Environment Agency, Natural England and Severn Trent Water, who should be able to advise on developing the Core Strategy and additional assessment work to ensure the plan has the least possible impact on the SAC and that all the development proposed within the Ashby area can be delivered within the time period of the plan up to 2031.

8 Conclusion

8.1 The Habitats Regulations Assessment for North West Leicestershire Core Strategy document identifies one Natura 2000 site where development in North West Leicestershire could potentially cause significant adverse impacts. This is the River Mease Special Area of Conservation (SAC). The primary reasons for the Mease being designated a SAC are the presence of spined loach and bullhead fish species.

8.2 Water quality in the River Mease is deteriorating due to elevated levels of phosphates as a result to waste water discharge from treatment works. In particular, the Packington Waste Water Treatment Works serving Ashby is a major source of these pollutants.

8.3 Any new development that will discharge sewerage into treatment works on the River Mease risks increasing the levels of phosphorus, which are already resulting in the River Mease SAC being in 'unfavourable' condition. Water quality in the River Mease, impacting on the SAC, is one of the main constraints to growth in the Ashby and Measham area.

8.4 Screening of the Core Strategy and proposed growth levels as part of the HRA has identified that without mitigation and avoidance measures being in place there is the potential for significant adverse impacts on the SAC and development should not proceed.

8.5 However, work has been on-going to identify capacity and find ways of addressing the issues relating to water quality and development at Ashby and Measham. Severn Trent Water has produced an assessment of existing headroom capacity for the sewage treatment works in March 2012. The Council also commissioned a Water Cycle Study to help identify solutions that will help facilitate development, whilst preventing further deterioration of water quality and water resources.

8.6 The Water Cycle Study concludes there is sufficient headroom capacity for 1218 new homes in Packington and 1163 new homes in Measham. These figures have been signed off by both the Environment Agency and Natural England in a note prepared by the Council. Severn Trent Water will be making an assessment annually to inform future development.

8.7 However, it is important to highlight that these calculations do not factor in any other development types, such as new employment or retail at Ashby for example. Any new development, residential and non-residential, that results in increase in demand at the sewage treatment works will use up capacity that despite being described as household capacity actually applies to all types of development.

8.8 The Water Cycle Study (April 2012) identifies solutions to manage the potential for increasing levels of phosphorus as a result of development in the River Mease Catchment area.

8.9 The preferred short term solution, Option 2 'Maintain the Load', is to permit new development to connect to the existing sewerage network in the Ashby, Packington and Measham areas. This option is considered feasible for the short term (in the next 5 to 10 years) and is line with Severn Trent Water's findings.

8.10 The Water Cycle Study identifies a medium term Option 4b which involves improvements at Packington Wastewater Treatment works. The Water Cycle Study concludes that there are

unlikely to be significant constraints affecting the proposed developments and that any issues can be mitigated by modifications to the sewer network.

8.11 The Water Cycle Study highlights a number of other important mitigation measures that will need to be implemented through the Core Strategy and other development plan documents and through site specific decisions. These measures will help to implement a long-term strategy to avoid significant adverse impacts on the River Mease SA, primarily relating to maintaining and improving capacity at the Packington and Measham Waste Water Treatment Works. The measures are:

- Development proposals should incorporate sustainable drainage systems (SuDS) to control surface water run-off.
- Development proposals should reduce flood risk.
- Development proposals should achieve the requirements of the Code for Sustainable Homes Level 3/4 for water consumption, and for non-household developments Good standard for water consumption.
- Development proposals should contribute towards reducing phosphorus within the River Mease, in line with Developer Contribution Strategy.

8.12 The Core Strategy put in place policies that will help to implement the measures identified in the Water Cycle Study to protect and enhance the quality of the SAC. The policies of the Core Strategy that will help mitigate impacts are:

- **Policy CS25: Sustainability and New Development:** supporting more efficient use of water in new development to reduce flows to treatment works.
- **Policy CS26: Flood risk:** This makes sure development is appropriately located in relation to flood zones and the integration of sustainable drainage systems to reduce diffuse pollution.
- **Policy CS33: River Mease SAC:** Sets the requirements to ensure new development takes place within the existing headroom capacity at treatment works. Also, to make sure that development meets the requirements of the Developer Contribution Strategy.
- **Policy CS15 Distribution of Housing, CS37 Ashby and CS41 Measham:** These policies set out the overall level of housing development that will be accommodated in the Ashby and Measham, both within existing headroom capacity. Policies CS37 and CS41 also specify the sustainability criteria that will have to be met in these settlements relating to sustainable drainage and water use.

8.13 The HRA would suggest that the Core Strategy needs to be clear that headroom capacity applies to all types of development. The figures shown for Packington and Measham treatment works are total capacity and no only housing.

8.14 The site specific policies give no indication of the quantity of non-residential development permitted in Ashby or Measham. Therefore, the impact of employment development is still unknown in these areas and depending on the type of employment it will have potential to make significant reductions into the remaining capacity.

8.15 The Core Strategy also presents strategic policies relating to retail, town centres and other non-residential growth. Many of the policies will provide development within the River

Mease catchment area, potentially increasing the amount of waste water. This will be dependent on the location of specific proposals. If no more information is given on the quantity of employment, retail or other types of non-residential development the Core Strategy needs to make clear that the same headroom capacity considerations apply as for residential.

8.16 These Core Strategy policies are supported by the HRA. Implementation and delivery of these policies will be essential in minimising the impact of development on the River Mease SAC.

8.17 The Core Strategy policies and distribution strategy are likely to be able to mitigate against significant adverse impacts in the short to medium term. However, to further help mitigate against impacts in the medium to long term the HRA suggests the plan contains some additional material, either as policy or supporting text:

- Policies for Measham and Ashby should be clear that non-residential development is subject to the same controls as residential development, and headroom capacity limits apply to all development types that would result in additional waste water flows
- The possibility of the annual assessment of capacity by Severn Trent Water will mean that no new development can take place in Ashby, or the River Mease catchment, if it is shown that headroom capacity has been reached. Similarly, if monitoring shows the River Mease is suffering significant adverse impacts as a result of phosphorus levels and there is no alternative solution in place this may prevent further development permissions.
- The possible requirement that the annual assessment of capacity levels will require a review of the distribution policy of the Core Strategy.

8.18 The Council will have to assess proposals on a site-by-site basis, to ensure the treatment works have capacity and ensure the spatial strategy and Core Strategy strategic policies are still deliverable up to 2031. The Allocations DPD should also have HRA screening.

8.19 As the South Derbyshire Core Strategy develops further, it will be important to consider this plan in combination with the North West Leicestershire Core Strategy, particularly in relation to any proposals relating to development within the River Mease catchment area.

8.20 The HRA has assessed all sites within the Core Strategy for potential impacts on the River Mease SAC. With mitigation measure put in place, it is concluded that the Core Strategy **will not have a significant adverse impact on the River Mease SAC.**