

Statement to Inform Habitat Regulations Assessment Screening and Appropriate Assessment of

Melton Borough Council Core Strategy (Publication Draft)

January 2012









Prepared for





Revision Schedule

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January 2012

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Table of Contents

1	Introduction	1
1.1	Habitat Regulations Assessment	1
1.2	Structure of this HRA/AA Report	2
1.3	Melton Core Strategy	2
2	Methodology	4
2.1	Introduction	4
2.2	A Proportionate Assessment	4
2.3	The Process of HRA	5
2.4	Evidence Gathering	6
2.5	Likely Significant Effect Test (Screening)	7
2.6	Appropriate Assessment and Mitigation	7
2.7	Consultation with Statutory Bodies	8
2.8	Physical scope of the HRA	8
2.9	The 'in combination' scope	11
3	Pathways of Impact	14
3.1	Introduction	14
3.2	Disturbance	14
3.3	Atmospheric pollution	19
3.4	Water resources	23
3.5	Water quality	26
3.6	Supporting Habitat	27
4	Rutland Water SPA/Ramsar	29
4.1	Introduction	29
4.2	Potential Pressures from Melton	29
4.3	Summary of HRA Screening for Rutland Water SPA/Ramsar	30
4.4	Appropriate Assessment	34
5	Grimsthorpe SAC	42
5.1	Introduction	42
5.2	Potential Pressures from Melton	42
5.3	Grimsthorpe SAC	43
6	Humber Estuary SAC/Ramsar; Humber Flats, Marshes and	
	Coast SPA	45
6.1	Introduction	45
6.2	Potential Pressures from Melton	45



6.3	Humber Estuary SAC/Ramsar; Humber Flats, Marshes and Coast SPA	46
6.4	Appropriate Assessment	50
7	HRA/AA Summaries and Conclusions	53
7.1	Summary of Screening	53
7.2	Summary of Appropriate Assessment	53
Figu	re 3 Melton Borough and European Designated Sites	56
App	endix 1: Screening tables for Core Strategy preferred approaches	58
App	endix 2: Plan of Melton Borough showing towns and villages mentioned in text	86
Арр	endix 3: HRA/AA Consultation Responses	87
App	endix 4: Traffic data extract	106



1 Introduction

1.1 Habitat Regulations Assessment

1.1.1 The Habitats Directive applies the precautionary principle to Natura 2000 Sites (Special Areas of Conservation, SACs, and Special Protection Areas, SPAs; as a matter of UK Government policy, Ramsar Sites¹ are given equivalent status). Collectively, such sites are referred to as "European sites". The need for Appropriate Assessment (AA) is set out within Article 6 of the EC Habitats Directive 1992, and interpreted into British law by the Conservation of Habitats and Species Regulations 2010 (Box 1). The ultimate aim of the Directive is to "maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest" (Habitats Directive, Article 2(2)). This aim relates to habitats and species, not the Sites themselves, although the Sites have a significant role in delivering favourable conservation status.

Table 1.1: The legislative basis for Appropriate Assessment

Habitats Directive 1992

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

Article 6 (3)

Conservation of Habitats and Species Regulations 2010

"A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the European site in view of that European sites conservation objectives ... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site".

- 1.1.2 URS (formerly URS Scott Wilson Ltd) has been appointed by Melton Borough Council ("the Council") to assist in undertaking a Habitat Regulations Assessment Screening (HRA Screening) and Appropriate Assessment of the potential effects of the Local Development Framework (LDF) Core Strategy, on the Natura 2000 network and Ramsar Sites (herein collectively referred to as 'European sites'). This HRA Screening has been carried out on a Working Draft of the Draft Melton Core Strategy (Publication) DPD received by URS on 17th October 2011 and subsequently on a revised draft received in December 2011.
- 1.1.3 The LDF will supersede the current Unitary Development Plan. The current Unitary Development Plan was adopted in 1999 and is saved until the LDF Development Plan Documents (DPDs) come into effect. The Council's aim is to adopt the Core Strategy in 2012.

¹ Wetlands of International Importance designated under the Ramsar Convention 1979



1.2 Structure of this HRA/AA Report

1.2.1 Chapter 2 of this report explains the process by which the HRA Screening and Appropriate Assessment (AA) has been carried out and identifies the physical scope of the HRA/AA. Chapter 3 explores the relevant pathways of impact resulting from the scale of development that will be delivered in Melton. Chapters 4, 5 and 6 present the HRA Screening and AA. These chapters are organised on the basis of one chapter per European site, except where multiple European sites overlap in a particular geographic area (these are considered together in the same chapter). The HRA Screening is presented in a table, which includes consideration of the interest features and ecological condition of the European site, environmental process essential to maintain site integrity and conservation objectives. A brief assessment of the Core Strategy in respect of each European site (both in isolation and in combination with other projects and plans) is then carried out. Where policies are screened in with respect to a particular European Site, these processes are discussed further as part of the AA in the same chapter. The conclusion of the HRA Screening and AA is then summarised in Chapter 7 with a summary of recommended amendments to Core Strategy policy wording.

1.3 Melton Core Strategy

- 1.3.1 The Core Strategy has been developed with consideration of the Borough's profile, local priorities, future challenges and the needs and aspirations of the local community to 2026. Key issues have been identified (Melton Borough Core Strategy section 3.7):
 - Meeting the need for development the population will grow to 2026, there will be a
 need for homes, jobs, shops, leisure opportunities, community services and facilities
 and infrastructure. This will require a multi agency response and structured
 engagement with the private sector Where development will take place a more
 sustainable pattern of development with access to services and facilities by a range of
 non-car transport choices.
 - Meeting housing needs younger people and families will want a home of their own that they can afford and our aging population will also want housing choices, particularly those who want a home which is more adaptable to changing circumstances.
 - Meeting economic needs we want investment in the Melton Mowbray brand, including the town centre and our rural economy. Our community, particularly the young, will want jobs to match their talent. We want to build on the spirit of entrepreneurship that exists in our community.
 - Providing for sustainable and efficient movement the existing and new community will continue to move for employment, shopping, education and leisure. Problems of traffic congestion in Melton Mowbray, in particular, need to be addressed to improve economic efficiency.
 - Improving Melton Mowbray Town Centre the town should match its brand image and continue to be the main social and economic focus for the Borough.
 - Protecting the countryside changes in farming, rural employment and pressure for growth will need to be carefully managed to protect our valued and much loved landscape.



- Tackling climate change the Borough is likely to continue to feel the impacts of Climate Change, especially through flooding events, which we must adapt to and prepare for. We also have opportunities to mitigate against a changing climate through renewable energy supplies and delivering new growth in the most sustainable locations.
- Better design the Borough should match its brand; the opportunities for high quality, sustainable design should be maximised.
- 1.3.2 The long-term spatial vision for the Borough is expressed as follows:

Spatial Vision

By 2026 residents of Melton will enjoy one of the best qualities of life in the most self-contained district in the region. Development will have been managed in a way which meets the needs of the local community, benefits the economy and improves the quality of the local environment. In particular:

- the type, tenure and price of local housing will more closely reflect the housing needs of the whole community;
- Melton will be home to a diverse, competitive and innovative range of businesses which will provide good job opportunities for local people and high levels of local employment; and
- More people will have opportunities to improve their health and wellbeing from access to key services and facilities.

Melton Mowbray will be the main social and economic focus for the Borough, but will retain its character as a historic English market town. Melton Mowbray will be a place where people want to live and work and its town centre will provide a high quality visitor experience with more and better shopping, markets, heritage and leisure attractions. It will reflect the strong brand image of Melton Mowbray and traffic congestion will be well managed.

Our villages will be vibrant, each with its own distinct character and heritage. There will be more job opportunities and more homes for local people - especially affordable housing.

Melton's beautiful and tranquil countryside will be valued and enjoyed by local people and visitors alike. The countryside will be supported by profitable and sustainable farming and land based activities.

Melton will be well prepared for the impacts of climate change and playing its part in reducing greenhouse gas emissions.

1.3.3 The Core Strategy contains 25 policies (CS1 – CS25). These are summarised in Appendix 1 of this report (Core Strategy Screening Table). Appendix 2 includes a spatial layout of the borough of Melton to indicate the location of settlements identified in Appendix 1.



2 Methodology

2.1 Introduction

2.1.1 This section sets out our approach and methodology for undertaking the HRA Screening. Habitat Regulations Assessment itself operates independently from the planning policy system, being a legal requirement of a Statutory Instrument. Therefore, there is no direct relationship to PPS12 and the 'Test of Soundness'. The HRA process we have adopted has been designed to ensure that the HRA is: a) compliant; b) accepted by key stakeholders including Natural England; c) has clear recommendations that can be used by the Council to develop their plan; and d) has a clear record of the process undertaken, providing the necessary evidence base for the plan.

2.2 A Proportionate Assessment

- 2.2.1 Project-related HRA often requires bespoke survey work and novel data generation in order to accurately determine the significance of adverse effects, that is, to look beyond the risk of an effect to a justified prediction of the actual likely effect and to the development of avoidance or mitigation measures.
- 2.2.2 However, the draft CLG guidance² makes it clear that when implementing HRA of land-use plans, the Appropriate Assessment (AA) should be undertaken at a level of detail that is appropriate and proportional to the level of detail provided within the plan itself:
 - "The comprehensiveness of the [Appropriate] assessment work undertaken should be proportionate to the geographical scope of the option and the nature and extent of any effects identified. An AA need not be done in any more detail, or using more resources, than is useful for its purpose. It would be inappropriate and impracticable to assess the effects [of a strategic land use plan] in the degree of detail that would normally be required for the Environmental Impact Assessment (EIA) of a project."
- 2.2.3 In other words, there is a tacit acceptance that HRA can be tiered and that all impacts are not necessarily appropriate for consideration to the same degree of detail at all levels (Figure 1).
- 2.2.4 For a Core Strategy, the level of detail concerning the developments that will be delivered is usually insufficient to make a highly detailed assessment of significance of effects. For example, precise and full determination of the impacts and significant effects of a new settlement will require extensive details concerning the design of the town, including layout of greenspace and type of development to be delivered in particular locations, yet these data will not be decided until subsequent stages.
- 2.2.5 The most robust and defensible approach to the absence of fine grain detail at this level is to make use of the precautionary principle. In other words, the plan is never given the benefit of the doubt; it must be assumed that a policy/ measure is likely to have an impact leading to a significant adverse effect upon a European site unless it can be clearly established otherwise.

² CLG (2006) Planning for the Protection of European sites, Consultation Paper



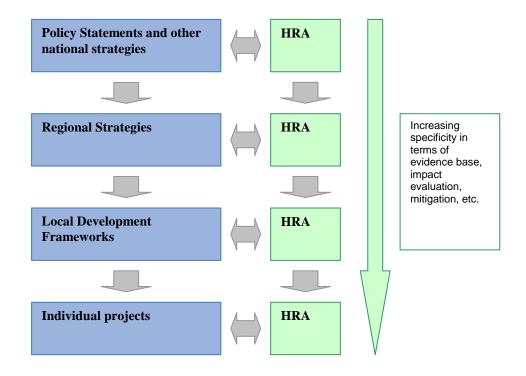


Figure 1: Tiering in HRA of Land Use Plans

2.3 The Process of HRA

- 2.3.1 The HRA is being carried out in the continuing absence of formal Government guidance. CLG released a consultation paper on AA of Plans in 2006^{3.} As yet, no further formal guidance has emerged.
- 2.3.2 Figure 2 below outlines the stages of HRA according to current draft CLG guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.
- 2.3.3 In practice, we and other practitioners have discovered that this broad outline requires some amendment in order to feed into a developing land use plan such as a Core Strategy. The following process has been adopted for carrying out the subsequent stages of the HRA (see Figure 2 below). The HRA stages included within this HRA Screening report are highlighted in blue.

³ CLG (2006) Planning for the Protection of European sites, Consultation Paper



Evidence Gathering – collecting information on relevant European sites, their conservation objectives and characteristics and other plans or projects.

HRA Stage 1: Likely significant effects ('screening') – identifying whether a plan is 'likely to have a significant

effect' on a European site

HRA Stage 2: Ascertaining the effect on site integrity – assessing the effects of the plan on the conservation objectives of any European sites 'screened in' during HRA Task 1



HRA Stage 3: Mitigation measures and alternative solutions – where adverse effects are identified at HRA Task 2, the plan should be altered until adverse effects are cancelled out fully

Figure 2: Four-Stage Approach to Habitat Regulations Assessment

2.4 Evidence Gathering

- 2.4.1 Before undertaking an HRA, it is necessary is to gather information on the European sites that may have pathways to Melton. This helps to establish which Europeans Sites should be considered within the HRA/AA (i.e. defines the 'Long list') and provide the baseline required for the HRA Screening. The baseline for each relevant European Site is presented in a series of tables and identifies:
 - characteristics of European Site including qualifying features;
 - distance of European Site form Melton Borough Boundary;
 - historic pressures and vulnerabilities; and
 - conservation objectives of European Site.
- 2.4.2 Evidence gathering also identifies potential pathways of effects arising from policies in the Core Strategy to the European Sites, for example a review of documents from Severn Trent Water can establish whether any hydraulic pathways exist from Melton to a European Site. This information also provides the basis for the assessment.



2.5 Likely Significant Effect Test (Screening)

2.5.1 The first stage of any Habitat Regulations Assessment is a Likely Significant Effect test - essentially a high-level risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

"Is the Plan, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"

- 2.5.2 The objective is to 'screen out' those plans and projects (or site allocations/ policies) that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism or pathway for an adverse interaction with European sites. In addition, European sites may be screened out where there is no mechanism or pathway for an adverse effect from any element of a plan or project (alone or in combination with other plans and projects)
- 2.5.3 The HRA Screening of the Core Strategy Publication Draft considers those European sites listed below in Table 2.2. The HRA Screening is documented in the following sections of the report in a tabular format Where insufficient certainty exists with respect to the presence of pathway from a Core Strategy policy to a European Site the precautionary approach is adopted i.e. the policy is screened with respect to that European Site. The reasons for screening European sites 'in' or 'out' of subsequent Appropriate Assessment are also documented.

2.6 Appropriate Assessment and Mitigation

2.6.1 With regard to those European sites where it was considered not possible to 'screen out' the Core Strategy without detailed appraisal, it was necessary to progress to the later 'Appropriate Assessment' stage to explore the adverse effects and devise mitigation. The steps involved are described in Table 2.1.

Table 2.1: The steps involved in the Appropriate Assessment exercise undertaken for the Melton Core Strategy

- 1. Explore the reasons for the European designation of these sites (interest features).
- Explore the environmental conditions required to maintain the integrity of the selected sites and become familiar with the current trends in these environmental processes in addition to the conservation objectives of those sites, which are to are to maintain in favourable condition, the habitats and species for which the sites have been designated'.
- 3. Gain a full understanding of the plan and its policies and consider each policy within the context of the environmental processes would the policy lead to an impact on any identified process?
- 4. Decide whether the identified impact will lead to an adverse effect.
- 5. Identify other plans and projects that might affect these sites in combination with the Plan and decide whether there any adverse effects that might not result from the Plan in isolation will do so "in combination".
- 6. Develop measures to avoid the effect entirely, or if not possible, to mitigate the impact sufficiently that its effect on the European site is rendered effectively inconsequential.



- In evaluating significance, URS Scott Wilson have relied on our professional judgement as well as stakeholder consultation. The level of detail concerning developments that will be permitted under land use plans is rarely sufficient to make a detailed quantification of adverse effects. Therefore, we have again taken a precautionary approach (in the absence of more precise data) assuming as the default position that if an adverse effect cannot be confidently ruled out, avoidance or mitigation measures must be provided. This is in line with CLG guidance that the level of detail of the assessment, whilst meeting the relevant requirements of the Habitats Regulations, should be 'appropriate' to the level of plan or project that it addresses (see Figure 1 for a summary of this 'tiering' of assessment).
- 2.6.3 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation i.e. to ensure that those projects or plans which in themselves have minor impacts are not simply dismissed on that basis, but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in combination assessment is therefore of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential.

2.7 Consultation with Statutory Bodies

2.7.1 In accordance with best practice, URS Scott Wilson has engaged in consultation with statutory bodies. As part of our preliminary consultation, Natural England were consulted on our proposed methodology and long list of European Sites for consideration in the HRA Processes. Issue 1 of this HRA/AA report was then sent to Natural England and Environment Agency for preliminary comments prior to the official consultation period of the Core Strategy publication DPD. Their preliminary comments are included in Appendix 3, and have been addressed in this revised document, Issue 2 of the HRA/AA report. Natural England have subsequently commented on an earlier draft of this report and their recommendations have been taken into account in producing the current (January 2012) version of this report.

2.8 Physical scope of the HRA

2.8.1 The physical scope of the HRA Screening is as shown in Table 2.2. The location of these European sites and relevant watercourses discussed in this Report are illustrated in Figure 3.

Table 2.2: Physical scope of the HRA

European site	Reason for inclusion
Rutland Water SPA/Ramsar	Located between 10-20km south east of Melton Borough Boundary. It is conceivable that qualifying bird species could be affected by development within the Borough Boundary. The site is also a key recreation area which could attract residents from the Melton Borough.
Grimsthorpe SAC	Designated for Annex 1 habitats and botanical species. Located 15km east of Melton Borough within the Grimshorpe 'Castle and Park' grounds. This is a key visitor attraction in Lincolnshire and may therefore attract residents from the Melton Borough.



European site Reason for inclusion Designated for its Annex 1 habitats, botanical species and birds. Shares hydraulic connections to the River Derwent which is key source of water abstraction for East Midlands Water Resource Zone (discussed in greater detail in 'Water Resources' section **Humber Estuary** (Chapter 3)) SAC/Ramsar and Humber Located approximately 100km downstream of the River Trent Flats, Marshes and Coast which shares hydraulic connection (downstream) of the River SPA Wreake which flows through Melton and is the main receiving watercourse for Waste water Treatment Work (WwTW). (discussed in greater detail in 'Water Quality' section (Chapter 3)).

- 2.8.2 No other pathways to other European sites have been identified.
- 2.8.3 It should be noted that during preliminary consultation with Natural England in July 2011⁴ URS Scott Wilson stated that we were considering River Mease SAC, Baston Fen SAC and Barnack Hills and Holes SAC within the HRA Screening due to potential hydraulic pathways. Within this consultation we also stated that we were working with Melton Council to identify water abstraction and water quality pathways which may further refine the 'Long List' of European sites. Subsequently, consultation with Severn Trent Water⁵, review of the 2010 Severn Trent Water Resources Management Plan (WRMP)⁶ and associated draft HRA of the WRMP⁷ identified that only Rutland Water SPA/Ramsar and Humber Estuary SAC/Ramsar and Humber Flats, Marshes and Coast SPA share hydraulic pathways to Melton. Table 2 was refined accordingly: the Humber Estuary European Sites were added to the 'Long List', and the remaining European sites were scoped out do to no hydraulic pathways being identified. These hydraulic pathways are described in greater detail in Chapter 3 (Pathways of Impact: Water Abstraction). Consultation responses are included in Appendix 3.
- 2.8.4 The scoping process evaluated whether pathways existed to the following European sites however it was concluded that they could be scoped out of consideration. Their locations are indicated in Figure 3.
 - Baston Fen SAC an isolated site located just over 20-25km south east of Melton, designated for its population of spined loach (Annex II fish species). The site does not share hydraulic connections or other pathways to the Borough of Melton).
 - Barnack Hills and Holes SAC a cluster of isolated sites designated for Annex 1 habitats located 20-25km south east of Melton, and within the East Midland Water Management Resource Zone (serving Melton). No conceivable pathway was identified. Absence of hydraulic pathways was confirmed in draft HRA of Severn Trent Water Resources Management Plan (WRMP)⁸.
 - Birklands and Bilhaugh SAC an isolated site located approximately 30km north of Meltonand within the East Midland Water Management Resource Zone (serving Melton). No

⁴ Email dated 7th July 2011 from Leila Payne (URS Scott Wilson) to Caroline Harrison (Natural England)

⁵ Email dated 11th August 2001 from Peter Davies (Severn Trent Water) to Shaza Mark (Melton Council)

⁶ http://www.stwater.co.uk/upload/pdf/Final_WRMP_2010.pdf

⁷ Accom (June 2010) DRAFT Severn Trent Water Resourcing Management Plan Habitat Regulations Assessment (Unpublished at time of writing)

time of writing)

8 Aecom (June 2010) DRAFT Severn Trent Water Resourcing Management Plan Habitat Regulations Assessment (Unpublished at time of writing)



conceivable pathway was identified. The absence of hydraulic pathways was confirmed in the draft HRA of Severn Trent WRMP⁹:

- River Mease SAC located approximately 30km west of Melton Borough, designated for its Annex II fish species (spined loach and bullhead). The river is located upstream of the River Trent, therefore would not be affected by waste water discharge from the Borough this topic is discussed in greater detail in 'Water Quality' section, Chapter 3. confluence with the River Trent is upstream of the Rivers Dove and Derwent and therefore would not be affected by water abstraction from these rivers - discussed in greater detail in 'Water Resources' section, Chapter 3). The absence of hydraulic pathways was confirmed in the draft HRA of Severn Trent WRMP¹⁰:
- Orton Pit SAC an isolated site located approximately 40km south east of Melton no conceivable pathway was identified);
- Upper Nene Valley Gravel Pits SPA/Ramsar an isolated site located approximately 40km south of Melton - no conceivable pathway was identified);
- Nene Washes SAC/SPA/Ramsar located approximately 40km south east of Melton no conceivable pathway was identified;
- Ensor's Pool SAC an isolated site located approximately 40km south west of Melton no conceivable pathway was identified;
- Woodwatten Fen SPA/ Fenland SAC an isolated site located approximately 50km south east of Melton – no conceivable pathway was identified;
- Peak District Dales SAC located approximately 50km north west of Melton, in close proximity to River Derwent and Rive Dove and within the East Midland Water Management Resource Zone (serving Melton). The absence of hydraulic pathways was confirmed in the draft HRA of Severn Trent WRMP¹¹ which considered water resourcing schemes being taken forward:
- South Pennine Moors SAC/ Peak District Moors SPA located approximately 50km north west of Melton within close proximity to the River Derwent and River Dove and within the East Midland Water Management Resource Zone (serving Melton). The absence of hydraulic pathways was confirmed in the draft HRA of Severn Trent WRMP¹² which considered water resourcing schemes being taken forward;
- Bees Nest and Green Clay Pits SAC located approximately 50km north west of Melton and within the East Midland Water Management Resource Zone (serving Melton). No conceivable pathway was identified. The absence of hydraulic pathways was confirmed in the draft HRA of Severn Trent WRMP13; and

⁹ Aecom (June 2010) DRAFT Severn Trent Water Resourcing Management Plan Habitat Regulations Assessment (Unpublished at time of writing)

10 Aecom (June 2010) DRAFT Severn Trent Water Resourcing Management Plan Habitat Regulations Assessment (Unpublished at

time of writing)

¹ Aecom (June 2010) DRAFT Severn Trent Water Resourcing Management Plan Habitat Regulations Assessment (Unpublished at time of writing)

¹² Aecom (June 2010) DRAFT Severn Trent Water Resourcing Management Plan Habitat Regulations Assessment (Unpublished at

time of writing)

13 Aecom (June 2010) DRAFT Severn Trent Water Resourcing Management Plan Habitat Regulations Assessment (Unpublished at time of writing)



- Gang Mine SAC an isolated site located approximately 50km north west of Melton and within the East Midland Water Management Resource Zone (serving Melton). conceivable pathway was identified. The absence of hydraulic pathways confirmed in the draft HRA of Severn Trent WRMP14.
- 2.8.5 In addition, following preliminary consultation with Natural England 15 and Newark and Sherwood District Council 16, consideration was given to Sherwood Forest prospective pSPA (possible SPA) which is currently being considered for pSPA status due to its populations of breeding woodlark (Lullula arborea) and nightjar (Caprimulgus europaeus). This prospective pSPA is located approximately 25km north east of Melton Borough at the closest point and has been identified by Natural England as meeting Criterion 1 of the SPA guidelines. However, this prospective pSPA has not to date been given official pSPA or SPA status, so the Habitat Regulations do not (currently) apply. Newark and Sherwood Council confirmed that, at present, the exact geographical extent of any pSPA or requirements for future protection have not been confirmed. As this prospective pSPA is located over 25km from the Melton Borough Council, no realistic pathway has been identified from Melton Borough Core Strategy. This prospective pSPA has therefore not been considered further in this report. This consultation is included in Appendix 3.
- 2.8.6 All baseline data relating to these European sites including interest features and vulnerabilities presented in subsequent sections of this Report is taken from the Joint Nature Conservancy Council website (JNCC) unless otherwise stated.

2.9 The 'in combination' scope

- 2.9.1 It is a requirement of the Habitat Regulations that the impacts and effects of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question.
- 2.9.2 In practice, in combination assessment is of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential. For the purposes of this assessment, we have determined that, due to the nature of the identified impacts, the key other plans and projects that require consideration in this HRA/AA are:

Core Strategies of Local Authorities Adjacent to Melton

• e.g. core strategies for Rutland¹⁷; Harborough¹⁸; Charnwood; Rushcliffe; Newark and Sherwood¹⁹; South Kesteven²⁰; Nottingham City.

Core Strategies of Local Authorities adjacent to the European sites considered within this HRA/AA (not adjacent to Melton)

e.g. core strategies adjacent to Rutland Water SPA/Ramsar, Humber Estuary SAC/SPA/Ramsar, Grimsthorpe SAC

¹⁴ Aecom (June 2010) DRAFT Severn Trent Water Resourcing Management Plan Habitat Regulations Assessment (Unpublished at time of writing)

Email dated 28th July 2011 from Caroline Harrison (Natural England) to Leila Payne (URS Scott Wilson)

¹⁶ Email dated 1st August 2011 from Matthew Tubb

¹⁷ AMEC (2011) Rutland County Council Site Allocations and Development Plan Document Habitats Regulations Assessment

Supporting Information

18 Harborough District Council (2010) Harborough Local Development Framework Core Strategy Habitats Regulations Assessment Screening Report

WSP (2010) Newark and Sherwood Publication Core Strategy – Assessment under the Habitats Regulations

South Kesteven District Council (undated) Habitat Regulations Assessment for the Core Strategy Development Plan Document



Core Strategies of Local Authorities with hydraulic connections to Humber Estuary SPA/SAC/Ramsar

• e.g. core strategies of Local Authorities adjacent to the River Trent Corridor (and its tributaries), River Ouse Corridor (and its tributaries) and the Humber banks

Other Relevant Plans, Policies and Projects

- Low Carbon Energy Opportunities and Heat Mapping for Local Planning Areas Across the East Midlands: Final Report Prepared for East Midlands Councils by Land Use Consultants, Centre for Sustainable Energy and SQW (March 2011);
- East Midlands Regional Spatial Strategy²¹;
- Low Carbon Energy Opportunities and Heat Mapping for Local Planning Areas Across the East Midlands: Final Report Prepared for East Midlands Councils by Land Use Consultants, Centre for Sustainable Energy and SQW (March 2011);
- Transport Plans:
 - Leicestershire Local Transport Plan (LTP) 3²²;
- Renewable Energy Studies:
 - Leicestershire County Council forthcoming renewable energy strategy (due for consultation in early 2012)²³;
- Climate Change strategies:
 - Melton Climate Change Strategy²⁴;
 - Melton Planning for Climate Change Study²⁵;
 - Charnwood climate change strategy²⁶;
- Economic strategies:
 - Leicestershire Economic Strategy²⁷;
 - South Kesteven Economic Development Strategy²⁸;
 - Newark and Sherwood Economic Dev Strategy²⁹;
- Tourism strategies:
 - Humber Estuary Shoreline Management Plan³⁰;
 - Rutland Water Management Plan³¹;
 - Leicestershire Tourism Strategy (recently prepared by the joint LEP for Leicester and Leicestershire)³²;

²¹ http://www.gos.gov.uk/497296/docs/229865/East_Midlands_Regional_Plan2.pdf

²² http://www.leics.gov.uk/index/highways/transport_plans_policies/ltp/current_transport_plans.htm

²³ http://www.leics.gov.uk/index/environment/sustainability/approach/renewable_energy.htm

²⁴ http://www.melton.gov.uk/pdf/Melton%20Climate%20Change%20Strategy.pdf

²⁵ http://www.melton.gov.uk/environment_and_planning/planning/planning_policy/planning_for_climate_change.aspx

²⁶ http://www.charnwood.gov.uk/files/documents/climate_chnage_strategy_2010_2013/C_C_Strategy_2010_13%20draft.pdf

²⁷ http://www.lsep.co.uk/uploads/leicestershire2020economicstrate.pdf

²⁸ http://www.southkesteven.gov.uk/CHttpHandler.ashx?id=892&p=0

²⁹ http://www.newark-sherwooddc.gov.uk/ppimageupload/holding/Image14901.PDF

³⁰ http://www.hull.ac.uk/coastalobs/media/pdf/hesmp.pdf

³¹ Anglian Water (2009-2014) Rutland Water Management Plan

³² http://mediafiles.thedms.co.uk/Publication/LM/cms/pdf/Draft%20Leicestershire%20Tourism%20Strategy.pdf



- Water Resources Management Plan;
- Severn Trent Water Resources Management Plan³³; and
- Anglian Water Resources Management Plan³⁴.
- 2.9.3 It should be noted that, while the broad potential impacts of these other projects and plans will be considered, we do not propose carrying out HRA on each of these plans - we will, however, draw upon existing HRA work that has been carried out.

³³ http://www.stwater.co.uk/server.php?show=nav.6186
³⁴ http://www.anglianwater.co.uk/environment/water-resources/resource-management/



3 Pathways of Impact

3.1 Introduction

- 3.1.1 In carrying out Habitats Regulations Assessment, it is important to avoid confining oneself to effectively arbitrary boundaries (such as Local Authority boundaries) and to instead use an understanding of the various ways in which land use plans can affect on European sites to follow the pathways along which development can be connected with European sites, in some cases many kilometres distant. Briefly defined, pathways are routes by which a change in activity associated with a development can lead to an effect upon a European site. It is also important to bear in mind CLG guidance which states that the AA should be 'proportionate to the geographical scope of the [plan policy]' and that 'an AA need not be done in any more detail, or using more resources, than is useful for its purpose' (CLG, 2006, p.6³⁵).
- 3.1.2 The following indirect pathways of impact are considered relevant to the HRA of the Core Strategy.

3.2 Disturbance

- 3.2.1 Habitat Regulation Assessments of Core Strategies tend to focus on recreational sources of disturbance as a result of new residents or an increasingly ageing population with more leisure time available. In the case of Melton, future demographics have been predicted based on the East Midlands Regional Plan. The population of Melton is predicted to rise from 48,900 in 2009 to 52,400 in 2026. The largest increase change will be seen in the proportion of the population who are aged over 65 which is anticipated to double, with a significant increase in the proportion aged 75+. This is the section of the population with the greatest amount of leisure time.
- 3.2.2 The other source of disturbance considered in this report relates to the development of onshore wind farms. As there are no European sites within the Core Strategy area itself, other sources of disturbance are not considered applicable.

Mechanical/abrasive damage and nutrient enrichment

- 3.2.3 Most types of terrestrial European site can be affected by trampling, which in turn causes soil compaction and erosion. Walkers with dogs contribute to pressure on European sites through nutrient enrichment via dog fouling and also have potential to cause greater disturbance to fauna as dogs are less likely to keep to marked footpaths and also tend to move in a more erratic manner. Motorcycle scrambling and off-road vehicle use can cause serious erosion, as well as disturbance to sensitive species. Boats can also cause some mechanical damage to intertidal habitats through grounding.
- 3.2.4 There have been several papers published that empirically demonstrate that damage to vegetation in woodlands and other habitats can be caused by vehicles, walkers, horses and cyclists:

³⁵ Department for Communities and Local Government. 2006. *Planning for the Protection of European sites: Appropriate Assessment.* http://www.communities.gov.uk/index.asp?id=1502244



- Wilson & Seney (1994)³⁶ examined the degree of track erosion caused by hikers, motorcycles, horses and cyclists from 108 plots along tracks in the Gallatin National Forest, Montana. Although the results proved difficult to interpret, it was concluded that horses and hikers disturbed more sediment on wet tracks, and therefore caused more erosion, than motorcycles and bicycles.
- Cole et al (1995a, b)³⁷ conducted experimental off-track trampling in 18 closed forest, dwarf scrub and meadow and grassland communities (each tramped between 0 and 500 times) over five mountain regions in the US. Vegetation cover was assessed two weeks and one year after trampling, and an inverse relationship with trampling intensity was discovered, although this relationship was weaker after one year than two weeks indicating some recovery of the vegetation. Differences in plant morphological characteristics were found to explain more variation in response between different vegetation types than soil and topographic factors. Low-growing, mat-forming grasses regained their cover best after two weeks and were considered most resistant to trampling, while tall forbs (non-woody vascular plants other than grasses, sedges, rushes and ferns) were considered least resistant. Cover of hemicryptophytes and geophytes (plants with buds below the soil surface) was heavily reduced after two weeks, but had recovered well after one year and as such these were considered most resilient to trampling. Chamaephytes (plants with buds above the soil surface) were least resilient to trampling. It was concluded that these would be the least tolerant of a regular cycle of disturbance.
- Cole (1995c)³⁸ conducted a follow-up study (in 4 vegetation types) in which shoe type (trainers or walking boots) and trampler weight were varied. Although immediate damage was greater with walking boots, there was no significant difference after one year. Heavier tramplers caused a greater reduction in vegetation height than lighter tramplers, but there was no difference in effect on cover.
- Cole & Spildie (1998)³⁹ experimentally compared the effects of off-track trampling by hiker and horse (at two intensities - 25 and 150 passes) in two woodland vegetation types (one with an erect forb understory and one with a low shrub understory). Horse traffic was found to cause the largest reduction in vegetation cover. The forb-dominated vegetation suffered greatest disturbance, but recovered rapidly. Higher trampling intensities caused more disturbance.
- 3.2.5 The total volume of dog faeces deposited on European sites can be surprisingly large. For example, at Burnham Beeches SAC, over one year, Barnard⁴⁰ estimated the total amounts of urine and faeces from dogs as 30,000 litres and 60 tonnes respectively. The specific impact on this SAC has not been quantified from local studies; however, the fact that habitats for which the SAC is designated appear to already be subject to excessive nitrogen deposition⁴¹. suggests that any additional source of nutrient enrichment (including uncollected dog faeces) will make a cumulative contribution to overall enrichment. In European sites that are heavily

³⁶ Wilson, J.P. & J.P. Seney. 1994. Erosional impact of hikers, horses, motorcycles and off road bicycles on mountain trails in Montana. Mountain Research and Development 14:77-88

Cole, D.N. 1995a. Experimental trampling of vegetation. I. Relationship between trampling intensity and vegetation response. Journal of Applied Ecology 32: 203-214

Cole, D.N. 1995b. Experimental trampling of vegetation. II. Predictors of resistance and resilience. Journal of Applied

Ecology 32: 215-224

38 Cole, D.N. 1995c. Recreational trampling experiments: effects of trampler weight and shoe type. Research Note

INT-RN-425. U.S. Forest Service, Intermountain Research Station, Utah.

39 Cole, D.N., Spildie, D.R. 1998. Hiker, horse and llama trampling effects on native vegetation in Montana, USA. Journal of Environmental Management 53: 61-71

⁴⁰ Barnard, A. (2003) Getting the Facts - Dog Walking and Visitor Number Surveys at Burnham Beeches and their Implications for the Management Process. Countryside Recreation, 11, 16 - 19 ⁴¹UK Air Pollution Information System. www.apis.ac.uk



used by dog walkers, degradation of valuable habitat types near car parks, entrance points and tracks can be seen that is attributable to nutrient enrichment. Such enrichment is visible near the main car parks around Chobham Common NNR in Surrey, for example, where heathland is lost and coarse grasses predominates. Any such contribution must then be considered within the context of other recreational sources of impact on European sites.

Recreational disturbance of wildlife

3.2.6 Animals for which internationally important European sites considered in this report are designated comprise birds and fish. The fish species included in the Humber Estuary Ramsar criteria are river lamprey and sea lamprey which are unlikely to be disturbed by recreational disturbance (they are more vulnerable to changes in habitat and water quality). Birds are more prone to recreational disturbance and are discussed in this section.

Breeding Birds

3.2.7 Concern regarding the effects of disturbance on birds stems from the fact that they are expending energy unnecessarily and the time they spend responding to disturbance is time that is not spent feeding⁴². Disturbance therefore risks increasing energetic output while reducing energetic input, which can adversely affect the condition and ultimately survival of the birds. In addition, displacement of birds from one feeding site to others can increase the pressure on the resources available within the remaining sites, as they have to sustain a greater number of birds⁴³. Moreover, the more time a breeding bird spends disturbed from its nest, the more its eggs are likely to cool and the more vulnerable they, or any nestlings, are to predators.

Wintering Birds

- 3.2.8 The potential for disturbance may be less in winter than in summer, in that there are often a smaller number of recreational users. In addition, the consequences of disturbance at a population level may be reduced because birds are not breeding. However, winter activity can still cause important disturbance, especially as birds can be particularly vulnerable at this time of year due to food shortages. Several empirical studies have, through correlative analysis, demonstrated that out-of-season recreational activity can result in quantifiable disturbance:
 - Tuite et al⁴⁴ found that during periods of high recreational activity, bird numbers at Llangorse Lake decreased by 30% as the morning progressed, matching the increase in recreational activity towards midday. During periods of low recreational activity, however, no change in numbers was observed as the morning progressed. In addition, all species were found to spend less time in their 'preferred zones' (the areas of the lake used most in the absence of recreational activity) as recreational intensity increased.
 - Underhill et al⁴⁵ counted waterfowl and all disturbance events on 54 water bodies within the South West London Water Bodies Special Protection Area and clearly correlated disturbance with a decrease in bird numbers at weekends in smaller sites and with the movement of birds within larger sites from disturbed to less disturbed areas.

⁴² Riddington, R. *et al.* 1996. The impact of disturbance on the behaviour and energy budgets of Brent geese. *Bird Study* 43:269-279

⁴³ Gill. LA. Sutherland, W. L. & Norris, K. 1998. The consequences of human disturbance for actuaring birds. *BSDi*

⁴³ Gill, J.A., Sutherland, W.J. & Norris, K. 1998. The consequences of human disturbance for estuarine birds. *RSPB Conservation Review* 12: 67-72

Tuite, C. H., Owen, M. & Paynter, D. 1983. Interaction between wildfowl and recreation at Llangorse Lake and Talybont Reservoir. South Wales. *Wildfowl* 34: 48-63

Reservoir, South Wales. *Wildfowl* 34: 48-63

⁴⁵ Underhill, M.C. *et al.* 1993. *Use of Waterbodies in South West London by Waterfowl. An Investigation of the Factors Affecting Distribution, Abundance and Community Structure*. Report to Thames Water Utilities Ltd. and English Nature. Wetlands Advisory Service, Slimbridge



- Evans & Warrington⁴⁶ found that on Sundays total water bird numbers (including shoveler and gadwall) were 19% higher on Stocker's Lake LNR in Hertfordshire, and attributed this to observed greater recreational activity on surrounding water bodies at weekends relative to week days. However, in this study, recreational activity was not quantified in detail, nor were individual recreational activities evaluated separately.
- Tuite et al⁴⁷ used a large (379 site), long-term (10-year) dataset (September March species counts) to correlate seasonal changes in wildfowl abundance with the presence of various recreational activities. They found that shoveler was one of the most sensitive species to disturbance. The greatest impact on winter wildfowl numbers was associated with sailing/windsurfing and rowing.
- More recent research has established that human activity including recreational activity can be linked to disturbance of wintering waterfowl populations 48 49.

Other activities causing disturbance (including windfarms)

- 3.2.9 Human activity can affect birds either directly (e.g. through causing them to flee) or indirectly (e.g. through damaging their habitat). The most obvious direct effect is that of immediate mortality such as death by shooting, but human activity can also lead to behavioural changes (e.g. alterations in feeding behaviour, avoidance of certain areas etc.) and physiological changes (e.g. an increase in heart rate) that, although less noticeable, may ultimately result in major population-level effects by altering the balance between immigration/birth and emigration/death^{50.}
- 3.2.10 The degree of impact that varying levels of noise will have on different species of bird is poorly understood except that a number of studies have found that an increase in traffic levels on roads does lead to a reduction in the bird abundance within adjacent hedgerows - Reijnen et al (1995) examined the distribution of 43 passerine species (i.e. 'songbirds'), of which 60% had a lower density closer to the roadside than further away. By controlling vehicle usage they also found that the density generally was lower along busier roads than guieter roads⁵¹.
- 3.2.11 Activities other than recreation may also lead to disturbance of wildlife; for example, noise and visual disturbance from airports, and disturbance from wind farms. Disturbance and displacement from feeding and roosting areas has been demonstrated with regard to wintering geese⁵², curlew and hen harriers⁵³.
- 3.2.12 The sensitivity of wildlife to the noise of roads and aircraft varies greatly from species to species. However road and airport/aircraft noise can cause some wildlife - notably a range of grassland and woodland birds - to avoid areas near them, reducing the density of those populations⁵⁴. Elsewhere, reduced breeding success has been recorded.

⁴⁶ Evans, D.M. & Warrington, S. 1997. The effects of recreational disturbance on wintering waterbirds on a mature gravel pitlake near London. International Journal of Environmental Studies 53: 167-182

Tuite, C.H., Hanson, P.R. & Owen, M. 1984. Some ecological factors affecting winter wildfowl distribution on inland waters in England and Wales and the influence of water-based recreation. *Journal of Applied Ecology* 21: 41-62 ⁴⁸ Footprint Ecology. 2010. Recreational Disturbance to Birds on the Humber Estuary

Footprint Ecology, Jonathan Cox Associates & Bournemouth University. 2010. Solent disturbance and mitigation project – various reports. ⁵⁰ Riley, J. 2003. Review of Recreational Disturbance Research on Selected Wildlife in Scotland. Scottish Natural Heritage.

⁵¹ Reijnen, R. et al. 1995. The effects of car traffic on breeding bird populations in woodland. III. Reduction of density in relation to the proximity of main roads. Journal of Applied Ecology 32: 187-202

Langston, R.H.W & Pullan, J.D. (2003). Effects of Wind Farms on Birds: Nature and Environment No. 139. Council of Europe.

⁵³ Madders, M. & Whitfield, D.P. 2006. Upland raptors and the assessment of wind farm impacts. Ibis 148 (Suppl. 1), 43-56.

⁵⁴ Kaseloo, P. A. and K. O. Tyson. 2004. Synthesis of Noise Effects on Wildlife Populations. FHWA Report.



- 3.2.13 Disturbing activities are on a continuum. The most disturbing activities are likely to be those that involve irregular, infrequent, unpredictable loud noise events, movement or vibration of long duration. Birds are least likely to be disturbed by activities that involve regular, frequent, predictable, quiet patterns of sound or movement or minimal vibration. The further any activity is from the birds, the less likely it is to result in disturbance.
- 3.2.14 The factors that influence a species' response to a disturbance are numerous, but the three key factors are species sensitivity, proximity of disturbance sources and timing/duration of the potentially disturbing activity.
- 3.2.15 The distance at which a species takes flight when approached by a disturbing stimulus is known as the 'tolerance distance' (also called the 'escape flight distance') and differs between species to the same stimulus and within a species to different stimuli. These are given in Table 2, which compiles 'tolerance distances' from across the literature. It is reasonable to assume from this that disturbance is unlikely to be experienced more than a few hundred metres from the birds in question.

Table 3.1: Tolerance distances of 21 water bird species to various forms of recreational disturbance, as described in the literature. All distances are in metres. Single figures are mean distances; when means are not published, ranges are given. ¹ Tydeman (1978), ² Keller (1989), ³ Van der Meer (1985), ⁴ Wolff et al (1982), ⁵ Blankestijn et al (1986). ⁵⁵

	Type of disturbance			
Species	Rowing boats/kayak	Sailing boats	Walking	
Little grebe		60 – 100 ¹		
Great crested grebe	50 – 100 ²	20 – 400 1		
Mute swan		3 – 30 1		
Teal		0 – 400 1		
Mallard		10 – 100 ¹		
Shoveler		200 – 400 1		
Pochard		60 – 400 ¹		
Tufted duck		60 – 400 ¹		
Goldeneye		100 – 400 1		
Smew		0 – 400 1		
Moorhen		100 – 400 1		
Coot		5 – 50 ¹		
Curlew			211 ³ ; 339 ⁴ ; 213 ⁵	
Shelduck			148 ³ ; 250 ⁴	
Grey plover			124 ³	

⁵⁵ Tydeman, C.F. 1978. *Gravel Pits as conservation areas for breeding bird communities*. PhD thesis. Bedford College Keller, V. 1989. Variations in the response of Great Crested Grebes *Podiceps cristatus* to human disturbance - a sign of adaptation? *Biological Conservation* 49:31-45

Van der Meer, J. 1985. De verstoring van vogels op de slikken van de Oosterschelde. Report 85.09 Deltadienst Milieu en Inrichting, Middelburg. 37 pp.

Wolf, W.J., Reijenders, P.J.H. & Smit, C.J. 1982. The effects of recreation on the Wadden Sea ecosystem: many questions but few answers. In: G. Luck & H. Michaelis (Eds.), Schriftenreihe M.E.L.F., Reihe A: Agnew. Wissensch 275: 85-107
Blankestijn, S. et al. 1986. Seizoensverbreding in de recreatie en verstoring van Wulp en Scholkester op hoogwatervluchplaatsen op Terschelling. Report Projectgroep Wadden, L.H. Wageningen. 261pp.



	Type of disturbance			
Species	Rowing boats/kayak	Sailing boats	Walking	
Ringed plover			121 ³	
Bar-tailed godwit			107 ³ ; 219 ⁴	
Brent goose			105 ³	
Oystercatcher			85 ³ ; 136 ⁴ ; 82 ⁵	
Dunlin			71 ³ ; 163 ²	

3.3 Atmospheric pollution

3.3.1 The main pollutants of concern for European sites are oxides of nitrogen (NO_x), ammonia (NH₃) and sulphur dioxide (SO₂). NOx can have a directly toxic effect upon vegetation. In addition, greater NO_x or ammonia concentrations within the atmosphere will lead to greater rates of nitrogen deposition to soils. An increase in the deposition of nitrogen from the atmosphere to soils is generally regarded to lead to an increase in soil fertility, which can have a serious deleterious effect on the quality of semi-natural, nitrogen-limited terrestrial habitats.

Table 3.2: Main sources and effects of air pollutants on habitats and species

Pollutant	Source	Effects on habitats and species
Acid deposition	SO ₂ , NO _x and ammonia all contribute to acid deposition. Although future trends in S emissions and subsequent deposition to terrestrial and aquatic ecosystems will continue to decline, it is likely that increased N emissions may cancel out any gains produced by reduced S levels.	Can affect habitats and species through both dry and wet deposition (acid rain). Some European sites will be more at risk than others, depending on soil type, bedrock geology, weathering rate and buffering capacity.
Ammonia (NH ₃)	Ammonia is released following decomposition and volatilisation of animal wastes. It is a naturally occurring trace gas, but levels have increased considerably with expansion in numbers of agricultural livestock. Ammonia reacts with acid pollutants such as the products of SO ₂ and NO _x emissions to produce fine ammonium (NH ₄ +)- containing aerosol, which may be transferred much longer distances (can therefore be a significant trans-boundary issue.)	Adverse effects are as a result of nitrogen deposition leading to eutrophication. As emissions mostly occur at ground level in the rural environment and NH ₃ is rapidly deposited, some of the most acute problems of NH ₃ deposition are for small relict nature reserves located in intensive agricultural landscapes.
Nitrogen oxides NO _x	Nitrogen oxides are mostly produced in combustion processes. About one quarter of the UK's emissions are from power stations, one-half from motor vehicles, and the rest from other industrial and domestic combustion processes.	Deposition of nitrogen compounds (nitrates (NO ₃), nitrogen dioxide (NO ₂) and nitric acid (HNO ₃)) can lead to both soil and freshwater acidification. In addition, NO _x can cause eutrophication of soils and water. This alters the species composition of plant communities and can eliminate sensitive species.



Pollutant	Source	Effects on habitats and species
Nitrogen (N) deposition	The pollutants that contribute to nitrogen deposition derive mainly from NO_X and NH_3 emissions. These pollutants cause acidification (see also acid deposition) as well as eutrophication.	Species-rich plant communities with relatively high proportions of slow-growing perennial species and bryophytes are most at risk from N eutrophication, due to its promotion of competitive and invasive species which can respond readily to elevated levels of N. N deposition can also increase the risk of damage from abiotic factors, e.g. drought and frost.
Ozone (O ₃)	A secondary pollutant generated by photochemical reactions from NO _x and volatile organic compounds (VOCs). These are mainly released by the combustion of fossil fuels. The increase in combustion of fossil fuels in the UK has led to a large increase in background ozone concentration, leading to an increased number of days when levels across the region are above 40ppb. Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.	Concentrations of O ₃ above 40 ppb can be toxic to humans and wildlife, and can affect buildings. Increased ozone concentrations may lead to a reduction in growth of agricultural crops, decreased forest production and altered species composition in semi-natural plant communities.
Sulphur Dioxide SO ₂	Main sources of SO ₂ emissions are electricity generation, industry and domestic fuel combustion. May also arise from shipping and increased atmospheric concentrations in busy ports. Total SO ₂ emissions have decreased substantially in the UK since the 1980s.	Wet and dry deposition of SO ₂ acidifies soils and freshwater, and alters the species composition of plant and associated animal communities. The significance of impacts depends on levels of deposition and the buffering capacity of soils.

- 3.3.2 Sulphur dioxide emissions are overwhelmingly influenced by the output of power stations and industrial processes that require the combustion of coal and oil, as well (particularly on a local scale) as shipping.
- 3.3.3 Ammonia emissions are dominated by agriculture, with some chemical processes also making notable contributions. As such, it is unlikely that material increases in SO₂ or NH₃ emissions will be associated with Local Development Frameworks. NOx emissions, however, are dominated by the output of vehicle exhausts (more than half of all emissions). Within a 'typical' housing development, by far the largest contribution to NOx (92%) will be made by the associated road traffic. Other sources, although relevant, are of minor importance (8%) in comparison⁵⁶. Emissions of NOx could therefore be reasonably expected to increase as a result of greater vehicle use as an indirect effect of the LDF.
- 3.3.4 According to the World Health Organisation, the critical NOx concentration (critical threshold) for the protection of vegetation is 30 μ gm⁻³; the threshold for sulphur dioxide is 20 μ gm⁻³. In

⁵⁶ Proportions calculated based upon data presented in Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. http://www.airquality.co.uk/archive/index.php



addition, ecological studies have determined 'critical loads' 57 of atmospheric nitrogen deposition (that is, NOx combined with ammonia NH₃).

- The National Expert Group on Transboundary Air Pollution (2001)⁵⁸ concluded that: 3.3.5
 - In 1997, critical loads for acidification were exceeded in 71% of UK ecosystems. This was expected to decline to 47% by 2010.
 - Reductions in SO₂ concentrations over the last three decades have virtually eliminated the direct impact of sulphur on vegetation.
 - By 2010, deposited nitrogen was expected to be the major contributor to acidification, replacing the reductions in SO₂.
 - Current nitrogen deposition is probably already changing species composition in many nutrient-poor habitats, and these changes may not readily be reversed.
 - The effects of nitrogen deposition are likely to remain significant beyond 2010.
 - Current ozone concentrations threaten crops and forest production nationally. The effects of ozone deposition are likely to remain significant beyond 2010.
 - Reduced inputs of acidity and nitrogen from the atmosphere may provide the conditions in which chemical and biological recovery from previous air pollution impacts can begin, but the timescales of these processes are very long relative to the timescales of reductions in
- Grice et al^{59 60} do, however, suggest that air quality in the UK will improve significantly over the 3.3.6 next 15 years, due primarily to reduced emissions from road transport and power stations.

Localised air pollution

- 3.3.7 As the Core Strategy does not have policies that encourage coal or oil fired power stations, shipping or greater air travel this HRA does not consider further SO₂ emissions. This HRA focuses on atmospheric nitrogen deposition.
- 3.3.8 According to the Department of Transport's Transport Analysis Guidance, "Beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant⁶¹.
- 3.3.9 This is therefore the distance that has been used throughout this HRA in order to determine whether European sites are likely to be significantly affected by traffic generated by development under the Core Strategy.
- 3.3.10 No European Sites are located within the Borough of Melton, however key access routes to Melton including A6006 and A606 are located immediately adjacent to Rutland SPA/Ramsar.

⁵⁷ The critical load is the rate of deposition beyond which research indicates that adverse effects can reasonably be expected to

National Expert Group on Transboundary Air Pollution (2001) Transboundary Air Pollution: Acidification, Eutrophication and Ground-Level Ozone in the UK.

Grice, S., T. Bush, J. Stedman, K. Vincent, A. Kent, J. Targa and M. Hobson (2006) Baseline Projections of Air Quality in the UK for the 2006 Review of the Air Quality Strategy, report to the Department for Environment, Food and Rural Affairs, Welsh Assembly Government, the Scottish Executive and the Department of the Environment for Northern Ireland.

⁶⁰ Grice, S., J. Stedman, T. Murrells and M. Hobson (2007) Updated Projections of Air Quality in the UK for Base Case and Additional Measures for the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007, report to the Department for Environment, Food and Rural Affairs, Welsh Assembly Government, the Scottish Executive and the Department of the Environment for Northern Ireland.

www.webtag.org.uk/archive/feb04/pdf/feb04-333.pdf



While the transport policies in the Melton Core Strategy do not specifically seek to make greater use of these roads, growth within Melton Mowbray was considered to have the potential to increase traffic within the Borough and potentially outside the Borough at specific locations. To investigate this, traffic modelling was undertaken; the results are discussed in detail in section 4.4.28 et seq.

- 3.3.11 The Core Strategy also identifies the potential for energy generation from dry biomass and biogas from cattle. In accordance with the Environment Agency guidance for identifying sensitive receptor sites for air emissions and complying with environmental permits⁶² any European Sites within 10km of a biomass facility should be screened in for assessment (this is 15km for coal or oil fired power stations). As Rutland Water SPA/Ramsar is located within 5km of the Melton Borough Boundary, depending on the location of further biomass facilities, there is potential that Rutland Water would be located within the 10km buffer zone.
- 3.3.12 Localised air pollution is therefore considered with respect to pathways relating to traffic and energy production to Rutland Water SPA/Ramsar.

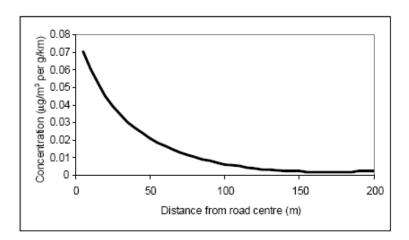


Figure 4. Traffic contribution to concentrations of pollutants at different distances from a road (Source: DfT)

Diffuse air pollution

3.3.13 In addition to the contribution to local air quality issues, 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). In July 2006, when this issue was raised by Runnymede District Council in the South East, Natural England advised that their Local Development Framework 'can only be concerned with locally emitted and short range locally acting pollutants' as this is the only scale which falls within a local authority remit. It is understood that this guidance was not intended to set a precedent, but it inevitably does so since (as far as we are aware) it is the only formal guidance that has been issued to a Local Authority from any Natural England office on this issue.

⁶² How to comply with your environmental permit Additional Guidance for Horizontal Guidance Note H1 (Annex F) available from http://publications.environment-agency.gov.uk/PDF/GEHO0410BSIL-E-E.pdf

⁶³ English Nature (16 May 2006) letter to Runnymede Borough Council, 'Conservation (Natural Habitats &c.) Regulations 1994, Runnymede Borough Council Local Development Framework'.

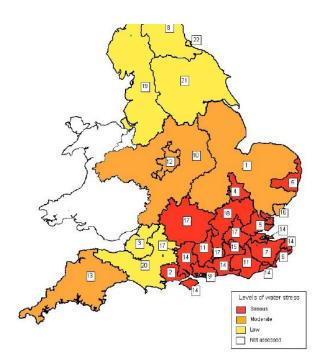


3.3.14 In the light of this and our own knowledge and experience, it is considered reasonable to conclude that it must be the responsibility of higher-tier plans⁶⁴ to set a policy framework for addressing the cumulative <u>diffuse</u> pan-authority air quality impacts, partly because such impacts stem from the overall quantum of development within a region (over which individual districts have little control), and since this issue can only practically be addressed at the highest pan-authority level. Diffuse air quality issues will not therefore be considered further within this HRA.

3.4 Water resources

3.4.1 The Midlands is generally an area of moderate water stress (see Figure 5).

Figure 5: Areas of water stress within England. It can be seen from this map that Melton is classified as being of Moderate Water Stress (coded orange).⁶⁵



Initial investigation indicates that Melton is located within Severn Trent's East Midlands Water Resource Zone (WRZ6), which serves almost 3 million people (see Figure 6). There are eight European sites located within the geographical area of the WRZ6⁶⁶ (these are listed in Chapter 2). Conceivable hydraulic pathways between European sites and sources of water abstraction for Melton have been considered in the physical scope of this HRA Screening Report (Chapter 2). Only Humber Estuary SAC/Ramsar and Humber Flats, Marshes and Coast SPA share hydraulic pathways to sources of water abstraction for Melton. This is described in greater detail below.

agency.gov.uk/pdf/GEHO0107BLUT-e-e.pdf
666 http://www.stwater.co.uk/upload/pdf/Final_WRMP_2010.pdf

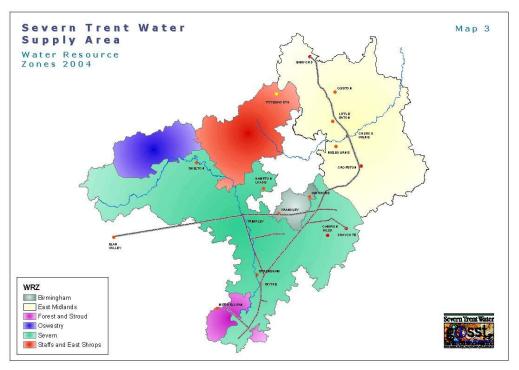
⁶⁴ Whilst the current Government has stated its intention to abolish Regional Spatial Strategies, they have, at the time of writing, not yet been formally revoked. Consequently, the RSS and its accompanying HRA remain technically valid at the current time. Treweek Environmental Consultants and Environ (2009) Habitats Regulations Assessment of the East Midlands Plan.

Figure adapted from Environment Agency. 2007. Identifying Areas of Water Stress. http://publications.environment-



Consultation with Severn Trent Water, ⁶⁷ and review of the 2010 Water Resources Management Plan (WRMP) ⁶⁸ indicates that Melton currently obtains its potable water from surface water sources in South Derbyshire. The key abstraction sources are the River Derwent and The River Dove (both of which pass in close proximity to the Peak District Dales and South Pennine Moors SAC/SPA); Carrington Reservoir (located between the Rivers Derwent and Dove approximately 5km south of the Peak District Dales SAC) and Charnwood Reservoir (located in Loughborough apparently isolated from European Sites). The River Derwent shares hydraulic connections to the Humber Estuary SAC/SPA/Ramsar approximately 100km downstream. Both the Rivers Derwent and the Dove flow into the River Trent downstream of the confluence of the River Mease SAC. These key watercourses are included in Figure 3.

Figure 6: Melton is located within the East Midlands Water Resource Zone for Severn Trent Water 69



- 3.4.4 The 2010 Severn Trent WRMP sets out the strategy for water resource management between 2010-2035. This timeframe encompasses the lifespan of the Core Strategy (until 2026). The assessment of the water supply and demand balance throughout the region is based on long term projections of:
 - housing and population growth;
 - changes in water use capabilities;
 - future performance of the asset base; and
 - risks to existing water resources and supply.

⁶⁷ Email received from Peter Davies 'Melton Borough Council Potable and Waste Water' dated 11th August 2011.

⁶⁸ http://www.stwater.co.uk/upload/pdf/Final_WRMP_2010.pdf

⁶⁹ http://www.stwater.co.uk/upload/pdf/Final_WRMP_2010.pdf



3.4.5 With respect to meeting the increases in demand within the East Midlands Water Resource Zone, expenditure in Severn Trent's spending cycle (AMP 5) includes a key component to duplicate a section of the Derwent Valley Aqueduct in order to increase its capacity to deploy water from a number of existing treatment works (Kings Corner to Hallgate referred to as 'Scheme 14'). This is located in Derby, approximately 10km south (downstream) of the Peak District Dales/South Pennine Moors SAC/SPAs, and would therefore not result in any hydraulic change to those European sites. The spending cycle also seeks to obtain river support from Milton groundwater sources) (located between Derby and Litchfield referred to as Scheme 153). The strategy for this zone also focuses on continuing leakage reduction and water efficiency activity in order to reduce the demand for water including compulsory metering un measured households. An HRA Screening was undertaken on the Severn Trent WRMP in 2010 which is currently in draft and unpublished at the time of writing⁷⁰. It was identified that neither of these schemes would result in hydraulic pathways to the European Sites located within the East Midland Water Resource Zone, however a potential pathway was identified arising form the Scheme 14 to the Humber Estuary SAC/Ramsar and Humber Flats, Marshes and Coast SPA located approximately 100km downstream of Melton. The pathway was identified as 'This scheme would utilise abstractions along the Rivers Trent and Derwent which are hydraulically connected to this European Site'. The WRMP⁷¹ makes reference to the HRA Conclusions:

As good practice, we have taken the WRMP through the process that would be required for a stage 1 screening Habitats Regulations Assessment (HRA). The HRA screening report is available separately and accompanies this WRMP document.

The HRA has identified that based on the current level of detail available for the final WRMP schemes, it is unlikely that there will be any significant impact on Natura 2000 or Ramsar sites. However, all schemes that were identified within the HRA screening process as having the potential to have a significant effect will be subject to further screening at project design to determine whether, based on the additional design information, the scheme could have a likely significant effect. Any scheme that could have an adverse effect on the integrity of a European or International site will not be in accordance with the objectives of our WRMP and will not be taken forward (p224)

3.4.6 It should be noted that the projected housing growth in the WRMP is based largely on projections laid out in the Regional Spatial Strategies (RSS) for East and West Midlands ⁷². The Melton Core Strategy uses housing figures drawn from the East Midlands Regional Plan (stated in section 4.3 of the Draft Core Strategy). The projected housing growth used in the WRMP is therefore comparable to projected housing growth used in the Melton Core Strategy. The conclusions reached in the WRMP and associated HRA Screening are therefore applicable to Melton Core Strategy with respect to pathways arising from housing growth including future water abstraction requirements, i.e. that a potential pathways of effect exists from water abstraction in Melton to the Humber Estuary SAC/SPA/Ramsar. This is discussed in greater detail in Chapter 6.

⁷⁰ Aecom (June 2010) Draft Severn Trent Water Resourcing Management Plan Habitat Regulations Assessment (unpublished at time of writing)

⁷¹ http://www.stwater.co.uk/upload/pdf/Final_WRMP_2010.pdf

⁷² Projections between 2010-2014 are based on recent new connection activity with the Regional Spatial Strategies (RSS) for East and West Midlands projections from 2015-2035 (p37).



3.5 Water quality

- 3.5.1 Increased amounts of housing or business development can lead to reduced water quality of rivers and estuarine environments. Sewage and industrial effluent discharges can contribute to increased nutrients on European sites leading to unfavourable condition. In addition, diffuse pollution, partly from urban run-off, has been identified during an Environment Agency Review of Consents process as being a major factor in causing unfavourable condition of European sites.
- 3.5.2 The quality of the water that feeds European sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts:
 - At high levels, toxic chemicals and metals can result in immediate death of aquatic life, and can have detrimental effects even at lower levels, including increased vulnerability to disease and changes in wildlife behaviour. Eutrophication, the enrichment of plant nutrients in water, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication, increase turbidity and decrease light penetration. The decomposition of organic wastes that often accompanies eutrophication deoxygenates water further, augmenting the oxygen depleting effects of eutrophication. In the marine environment, nitrogen is the limiting plant nutrient and so eutrophication is associated with discharges containing available nitrogen; in the freshwater environment, phosphorus is usually a principal cause of eutrophication;
 - Some pesticides, industrial chemicals, and components of sewage effluent are suspected to
 interfere with the functioning of the endocrine system, possibly having negative effects on
 the reproduction and development of aquatic life, and subsequently bird life;
 - Increased discharge of treated sewage effluent can result both in greater scour (as a result
 of greater flow volumes) and in high levels of macroalgal growth, which can smother the
 mudflats of value to SPA birds.
- 3.5.3 For wastewater treatment works close to capacity, further development may increase the risk of effluent escape into aquatic environments. In many urban areas, sewage treatment and surface water drainage systems are combined, and therefore a predicted increase in flood and storm events could increase pollution risk.
- 3.5.4 However, it is also important to note that the situation is not always simple for European sites designated for waterfowl, a WwTW discharge can actually be a useful source of food and birds will often congregate around the outfall. In addition, while nutrient enrichment does cause considerable problems on the south coast (particularly in the Solent) due to the resulting abundance of smothering macroalgae, it is not necessarily a problem in other areas where the macroalgae are broken up by tidal wave action and where colder and more turbid water limit the build-up in the first place.
- 3.5.5 Consultation with Severn Trent Water⁷³ identifies that Wastewater Treatment Works (WwTW) that serve Melton generally discharge into the River Wreake. WwTW deal with sewage as well as industrial discharge and other foul water flows so would have obvious implications for European Designated Sites downstream. A review of OS basemapping indicates that the River Wreake flows west through Melton into the River Soar and subsequently north into the River Trent (as illustrated in Figure 3). As the River Trent is downstream from the River Derwent and River Dove (located adjacent to the Peak District Dales South Pennine Moors SAC/SPAs) and

⁷³ Email received from Peter Davies 'Melton Borough Council Potable and Waste Water' dated 11th August 2011.



downstream from the River Mease SAC, the water quality of River Trent does not affect these European sites.

- 3.5.6 With respect to European sites downstream of Melton, the Humber Estuary SAC/Ramsar and Humber Flats, Marshes and Coast SPA are located approximately 100km downstream of the River Trent (where the River Soar adjoins the Trent). The water quality of the Humber Estuary depends not only on the water quality of the River Trent (and its tributaries), it also depends on the water quality of the River Ouse (and its tributaries). The contribution that the Borough of Melton is likely to make to water quality in the Humber Estuary through discharge of WwTW or surface water runoff into the River Wreake is therefore considered negligible, but a conceivable pathway exists with respect to in combination effects.
- 3.5.7 The HRA of the East Midlands Plan⁷⁴ identified the potential for such adverse 'in combination' effect. It was identified that increases in development upstream of the Trent is likely to reduce water quality of the river Trent. Whilst much of the Trent corridor is chemically good quality, biological quality is over much of the corridor is only 'fairly good' or worse (EA river water quality information). Whilst the majority of water quality problems on the Humber estuary system come from industrial discharges from the Humber banks (on the north bank of the river Humber), low water quality in the Trent is likely to exacerbate this. Many of the contributory rivers in the Yorkshire and Humberside region are also classed as having poor biological quality or worse (EA river water quality information).
- 3.5.8 Water quality as a pathway is therefore considered in the HRA Screening Report with respect to in combination effects on the Humber Estuary SAC/Ramsar and Humber Flats, Marshes and Coast SPA. Figure 3 includes key water courses applicable to Melton Core Strategy. This is discussed in greater detail in Chapter 6.

3.6 Supporting Habitat

- 3.6.1 Qualifying bird species of SPA/Ramsar sites may use land outside of the designated boundary as supporting habitat. This may comprise either adjacent land, or areas of semi natural habitat or agricultural land within the Borough. The closest SPA/Ramsar site is Rutland Water, located 5-10km south east of Melton Borough.
- 3.6.2 Consultation with the County Bird Recorder for Leicestershire and Rutland identified one site within Melton Borough that may be significantly linked with Rutland Water in terms of qualifying bird movements⁷⁵: Priory Water (Leicestershire Wildfowlers Association reserve at Kirkby Bellars/Asfordby). The Priory Water (also known as Priory Wildlife and Water Park) is a small developing nature reserve established on private land that was once occupied as gravel workings⁷⁶. It is located on the River Wreake approximately 5km east of Melton Mowbray. Wigeon, gadwall and shoveler use Priory Water in the winter, and this may possibly involve birds moving to and from Rutland Water; however, there is no direct evidence of this. There have been occasions when individual birds e.g. an escaped red-breasted goose have been seen at both sites soon after each other.
- 3.6.3 A review of aerial photography, OS Mapping, the Environment Agency website⁷⁷ and the Leicestershire Wildfowlers Association website indicates that Priory Water is located in a

⁷⁴ Treweek Environmental Consultants and Environ (March 2007) Habitats Regulations Assessment of the East Midlands Regional Plan (RSS) Prepared for: Government Office East Midlands
⁷⁵ Pers Comms Steve White (West Lancashire County Bird Recorder), 1st September 2011 swhite@lancswt.org.uk

⁷⁷ http://www.environment-agency.gov.uk/homeandleisure/37837.aspx

⁷⁸ http://www.leicswa.org/about/conservation/



floodplain with relatively poor road access, is in private ownership and is actively managed for ornithological interest. It is highly unlikely that this site would be selected in the allocations of the Core Strategy for purposes such as housing, economic development or gypsy and traveller communities. Therefore no 'loss of supporting habitat' pathway has been identified in this HRA.

- 3.6.4 However, it is conceivable that policies encouraging recreation along the River Wreake corridor, or those encouraging in a rise in population in villages immediately adjacent and therefore walking distance to Priory Water (e.g. Asfordby and Kirby Bellars) could result in greater recreational pressure on Priory Waters, although it is noted that the scale of development proposed in this area is likely to be very small only 20% of the 3,400 homes proposed for the Borough will be outside Melton Mowbray itself. As a precaution, therefore, recreational pressure on habitats supporting qualifying features of Rutland Water SPA/Ramsar have therefore been identified in this HRA with respect to Rutland SPA/Ramsar (discussed in Chapter 4).
- 3.6.5 Consultation with the County Bird Recorder identified other sites in Melton Borough that hold appreciable numbers of wildfowl: Knipon Reservoir, Belvoir Castle fishing lakes and Melton Country Park. However, the County Bird Recorder has received few records from any of these and the numbers of the key species are small and apparently unconnected with Rutland Water SPA/Ramsar. These sites are therefore not considered in this HRA/AA report.
- 3.6.6 There is no evidence of other sites within Melton Borough supporting qualifying bird species of Rutland Water SPA/Ramsar.



4 Rutland Water SPA/Ramsar

4.1 Introduction

4.1.1 Figure 3 shows the location of Rutland Water SPA/Ramsar with respect to Melton Borough. It is located 5-10km south west of Melton. Rutland Water is a man-made pump storage reservoir created by the damming of the Gwash Valley in 1975 and is the largest reservoir in the United Kingdom. In general the reservoir is drawn down in the summer and filled during the autumn and winter months when river levels are high. The main habitats are open water and a mosaic of lagoons, reedswamp, marsh, old meadows, scrub and woodland. The lagoons are one of the most important areas for wintering wildfowl⁷⁹. Qualifying features, existing vulnerabilities and pressures, conservation objectives & factors affecting site integrity are summarised in Table 4.1. The HRA Screening is also summarised in Table 4.1 with identified pathways (as described in Chapter 3), aspects of the Core Strategy resulting in these pathways (with identification of Core Strategy policies) and other plans and policies that might act in combination.

4.2 Potential Pressures from Melton

- 4.2.1 Table 4.1 indicates that Rutland Water SPA/Ramsar is screened in therefore requiring Appropriate Assessment. From the environmental requirements that have been identified in Table 4.1 it can be determined that development in Melton could theoretically affect the environmental requirements and processes of the SPA/Ramsar in the following manner:
 - population growth within Melton, particularly amongst those age groups with greater leisure time, resulting in potential 'in combination' recreational pressure effects on Rutland Water SPA/Ramsar when combined with predicted population growth in Peterborough, Leicester and other nearby large towns;
 - population growth within rural areas of Melton including villages adjacent to Priory Water, coupled with a focus of recreational activities along the River Wreake corridor (including this area) resulting in potential recreational disturbance to qualifying bird species which use Priory Water as supporting habitat (whilst population growth in these areas will be on a small scale, the potential for effects on Priory Water is considered in combination with other potential impacts);
 - depending on locations, wind turbine development within the Borough could disturb the flight
 path of qualifying bird species. This is likely to be 'in combination' with other renewable
 energy policies; and
 - depending in location of future biomass incineration plants, atmospheric nitrogen deposition
 has the potential to affect habitat features of Rutland Water on which qualifying bird species
 of depend. This is likely to be 'in combination' with other low carbon energy policies.
- 4.2.2 The Appropriate Assessment therefore concentrates on evaluating whether these impacts are likely to occur, whether they are have the potential to affect the integrity of the Rutland Water SPA/Ramsar and what amendments to policy may be required to avoid or minimise such impacts.

⁷⁹ http://jncc.defra.gov.uk/pdf/SPA/UK9008051.pdf



Summary of HRA Screening for Rutland Water SPA/Ramsar 4.3

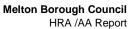
Table 4.1: HRA Screening Table for Rutland Water SPA/Ramsar

Site Details	Qualifying Features	Vulnerability and Pressures (Where Melton may contribute to these pressures, text is highlighted in bold)	Conservation Objectives & Factors affecting Site Integrity (Where Melton may affect these conditions text is highlighted in bold)
Rutland Water SPA/ Ramsar 1556.87ha Located 10-20km south east of Melton Borough	The main habitats are open water and a mosaic of lagoons, reedswamp, marsh, old meadows, scrub and woodland. The lagoons are one of the most important areas for wintering wildfowl ⁸⁰ . Qualifying features include: SPA Article 4.2 (79/409/EEC) ⁸¹ Over winter the area regularly supports (population given in brackets): Shoveler Anas clypeata(1.3% in North-western/Central Europe); Gadwill Anas strepera (3.9% in North-western Europe); Teal Anas crecca (1% of GB population); Wigeon Anas penelope (1.5% of GB population); Tufted duck Aythya fuligula (3.8% of GB population); Goldeneye Bucephala clangula (2.3% of GB population);	The SPA is vulnerable to pressures from: Recreation. The site is one of the most popular tourist attractions in the East Midlands. Fishing, walking, water sports and cycling currently take place and the reservoir has been zoned to allow this to take place. Management of the site for its SPA interests is currently compatible with these recreation uses except in periods of drawdown. A revised strategy with Anglian Water Services (AWS) is intended to address this problem. Nutrient Inputs The reservoir is filled from the Rivers Nene and Welland. In the past, phosphate levels have led to algal blooms. Although these have	The conservation objective for Rutland Water SPA is to maintain, in favourable condition, subject to natural change, the habitats for the internationally important populations of the regularly occurring migratory bird species, with particular reference to open water and surrounding marginal habitats. This includes overwintering populations of gadwall and shoveler, plus the qualifying birds) 85 The following conditions are required 86:

⁸⁰ http://jncc.defra.gov.uk/pdf/SPA/UK9008051.pdf

^{81 5} year peak mean 1991/92-1995/96

RPS (2005) Rutland Water Mitigation Scheme: To Inform Appropriate Assessment
 HRA of East Midlands RSS (2009) http://www.gos.gov.uk/497296/docs/229865/HRA_complete-small.pdf





- Mute swan Cygnus olor (1.1% of GB population);
- Eurasian coot Fulica atra (3.5% of GB population);
- Goosander Mergus merganser 0.5% of GB population); and
- Great crested grebe Podiceps cristatus (7.8% of GB population)

Assemblage qualification: A wetland of international importance. Over winter, the area regularly supports 23,501 individual waterfowl (5 year peak mean 1991/2 - 1995/6) including: Lapwing *Vanellus vanellus*, Coot *Fulica atra*, Goldeneye *Bucephala clangula*, Tufted Duck *Aythya fuligula*, Pochard *Aythya ferina*, Teal *Anas crecca*, Wigeon *Anas penelope*, Cormorant *Phalacrocorax carbo*, Great Crested Grebe *Podiceps cristatus*, Little Grebe *Tachybaptus ruficollis*, Shoveler *Anas clypeata*, Gadwall *Anas strepera*.

Ramsar Qualifying Features⁸²⁸³

Ramsar Criterion 5: assemblages of international importance:

Species with peak counts in winter: 19274 waterfowl

Ramsar criterion 6: species/populations occurring at levels of international importance. Species with peak counts in spring/autumn:

- Gadwall, Anas strepera strepera, NW Europe 1014 individuals, representing an average of 1.6% of the population
- Northern shoveler, Anas clypeata, NW & C Europe 619 individuals, representing an average of 1.5% of the population

Species/populations identified subsequent to designation for possible future consideration under criterion 6. Mute swan , *Cygnus olor*, Britain 563 individuals, representing an average of 1.5% of the population

currently had little visible effects on the wildfowl, continued eutrophication could lead to an algal dominated system and affect food availability for wildfowl. Phosphate inputs are being tackled through implementation of the Urban Waste Water Treatment Directive in the Nene catchment, which contributes the major phosphate load to the reservoir. If necessary, monitoring will be introduced to show whether the reduction in phosphate level is adequate and to investigate the contribution of agricultural sources to this problem.

Changes in water level.

Rutland water is a major source of urban water supply. Increased abstraction in the summer up to the current licensed limit may cause further and more extensive periods of drawdown which can affect populations of invertebrates on which some species depend, whilst rapid filling can render other food sources unavailable for dabbling ducks. Drawdown may also increase disturbance through recreation uses. These issues will be tackled through discussions with AWS and the Environment Agency.

Tree Regeneration⁸⁴

Tree regeneration ability has been reduced through deer browsing although this is now being managed through appropriate fencing.

Maintenance of the current extent, connectivity and quality of feeding habitats with areas of open water of varying sizes and depths, suitable levels of benthic, aquatic and surface invertebrates, a fish presence which does not impact upon the dominant macrophyte assemblages, and open habitats incorporating suitable feeding pastures within 50m of the water.

Maintenance of characteristic water quality and quantity is important with seasonal changes in levels occurring slowly.

Maintenance and extent of roosting habitat including mature trees and areas of scrub.

Levels of disturbance should be maintained within necessary levels.

⁸² http://jncc.defra.gov.uk/pdf/RIS/UK11062.pdf

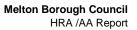
^{83 (5} year peak mean 1998/99-2002/2003)

⁸⁴ HRA of East Midlands RSS (2009) http://www.gos.gov.uk/497296/docs/229865/HRA_complete-small.pdf



Screening	Aspect of Core Strategy	Pathways Identified
In	Recreational pressure arising from a growth in population, particular the portion with greater leisure and recreation time (post retirement age). This could be encouraged by the following policies: Policy CS2 Development at Melton Mowbray Policy CS7 Employment and Economic Development	Recreational Pressure Rutland Water is one of the most popular tourist attractions in the East Midlands. Fishing, walking water sports and cycling currently take place and the reservoir has been zoned to allow this to take place. The Management of the site currently allows this to take place, except during periods of draw down.
	 Policy CS12 Melton Mowbray Town Centre Policy CS23 Melton Mowbray Sustainable Urban Extension Policy CS24 Melton Mowbray Employment Growth Area Recreational pressures on Supporting Habitat (Priory Water) arising from the following policies: Policy CS2 Rural Centres (in particular with respect to growth in Asfordby) CS3: Sustainable Villages (with respect to growth at Asfordby and Kirby Bellars) 	Respondents to the England Leisure Day Visits Survey ⁸⁸ indicated that on average, they would travel 30km to countryside locations. OS mapping indicates that Rutland Water SPA/Ramsar is approximately 20km from Melton Mowbray by road (A506). It is therefore well within the average travelling distance to recreational areas. Policies within the Core Strategy that encourage a growth in population including growth in Melton Mowbray particularly the portion with greater leisure time (above retirement age) could exacerbate existing recreational pressures through disturbance to qualifying wintering and breeding birds when considered in combination with predicted population growth in large towns such as Peterborough and Leicester which also lie within 30km of Rutland Water.
	 CS9 Rural Economic Development (with respect to growth around Asfordby) CS15: Strategic Green Infrastructure Disturbance to qualifying bird species through wind turbine development in Melton arising from the following policy: CS20 Energy Supply Atmospheric nitrogen deposition arising from the following policies: CS20 Energy Supply (with respect to biomass plants located within 10km of Rutland Water SPA/Ramsar) 	Other policies within the Core Strategy that seek to enhance growth in rural areas of Melton, in particular in the vicinity of Asfordby, and encourage recreation along the River Wreake Corridor have the potential to result in a rise in recreational disturbance to Priory Water Wildfowl Reserve which has been identified as providing potential supporting habitat to qualifying bird species of Rutland SPA/Ramsar ⁸⁹ (see 'Supporting Habitat' Chapter 3). Whilst the scale of development in these areas will be small, the potential effect has been included in the assessment to allow any in-combination effects to be assessed. Wind Turbine Disturbance Development of wind energy within Melton, depending on its location, may have the potential to result in the disturbance of a flight path of qualifying

http://www.naturalengland.org.uk/Images/dayvisitssummary_tcm6-4954.pdf
 Pers Comms Steve White (West Lancashire County Bird Recorder), 1st August 2011 swhite@lancswt.org.uk





CS2; CS7; CS12; CS23; CS24 (growth in population at Melton Mowbray see recreational pressure) resulting in greater use of roads

Other plans and policies

Anglian Water's Water Resources Management Plan (WRMP) has recently created an area of new shallow wetlands adjacent to the reservoir to ensure that designated interest features are not affected when water levels fluctuate in the main body of the reservoir. Options to develop Rutland Water are likely to become increasingly constrained in the future as in combination effects with neighbouring regions on water resources are expected to continue to increase⁸⁷

bird species of Rutland Water SPA/ Ramsar.

Local Air Quality- Biomass incineration

In accordance with the Environment Agency⁹⁰ guidance for identifying sensitive sites for air emissions, any European Sites within 10km of an emitter should be screened in for assessment. Depending on the location of future biomass incineration plants, Rutland Water SPA/Ramsar may fall within this 10km buffer zone.

⁸⁷ HRA of East Midlands RSS (2009) http://www.gos.gov.uk/497296/docs/229865/HRA_complete-small.pdf

⁹⁰ How to comply with your environmental permit Additional Guidance for Horizontal Guidance Note H1 (Annex F) available from http://publications.environmentagency.gov.uk/PDF/GEHO0410BSIL-E-E.pdf



4.4 Appropriate Assessment

Recreation and Disturbance to Qualifying Bird Species

Appropriate Assessment

- 4.4.2 Tourism websites describe Rutland Water as having developed an international reputation as a water sporting location including sailing, windsurfing canoeing, as well as fishing and cycling ⁹¹. The JNCC website identifies that Rutland Water is one of the most popular tourist attractions in the East Midlands, identifying that management of the site including reservoir zoning allows recreational activities to take place except during periods of draw down.
- 4.4.3 The potential in combination effect of disturbance to qualifying bird species resulting from regional housing growth (and therefore population growth), coupled with an increase in the promotion of outdoor activities was identified in the HRA of the East Midlands Regional Plan^{92.} The HRA identified that whilst a successful management plan is currently implemented, the value of the site could deteriorate in the absence of management in the future.
- 4.4.4 According to the England Leisure Day Visits Survey⁹³ on average visitors are prepared to travel approximately 30km to countryside locations. Rutland Water is located approximately 20km from Melton Mowbray, easily accessibility by road (A606). The potential for Melton Borough to contribute to visitor pressures, however small compared to other growth points in the East Midlands (Leicester, north Northants) and East of England (Peterborough), thus needs to be considered.
- In order to evaluate current visitor management at Rutland Water and the capacity for the site to accommodate additional visitors and future recreational pressure, the Rutland Water Management Plan⁹⁴ was reviewed and further consultation was undertaken with Rutland Water Visitor Operations Manager⁹⁵. The following measures are currently in place to manage visitors at Rutland Water (some of which are illustrated in Figure 7 taken from the Rutland Water Management Plan):
 - Spatial zoning of recreational activities: The more sensitive areas of the site for qualifying bird species are located to the west and based around Egleton and Lyndon Nature Reserves (jointly managed by the Leicestershire and Rutland Wildlife Trust). Passive ecologically based recreational activities including bird hides are permitted in this area.. Active recreational activities that are most likely to disturb qualifying bird species (e.g. sailing, dog walking, fishing, children's play area, Rutland Belle boat ride and the surfaced track (to encourage more walking etc)) is based around the eastern side of Rutland Water. The peak time for these activities is during the summer months. During other times of year, when bird numbers are at their peak, birds are noted using other areas of Rutland Water in greater numbers.
 - Dogs: To safeguard qualifying bird species (as well as grazing sheep) dogs are not allowed on the Egleton side of the Reserve. At Lyndon, dogs are allowed, but they must be kept on a lead. Dogs are permitted to use the western areas of Rutland Water provided they are kept under control on a lead except in the designated dog walking area at Sykes Lane where dogs are permitted to run free.

⁹¹ http://lakes.around-england.co.uk/rutland.php

⁹² HRA of East Midlands RSS (2009) http://www.gos.gov.uk/497296/docs/229865/HRA_complete-small.pdf

⁹³ http://www.naturalengland.org.uk/Images/dayvisitssummary_tcm6-4954.pdf

⁹⁴ Anglian Water (2009-2014) Rutland Water Management Plan

⁹⁵ Pers Comms Kevin Appleton (Anglian Water Visitor Operations Manager) 3rd October 2011



- Permits: Visitor permits are required to visit Lyndon and Egleton Nature reserves and access the 27 bird hides (which includes car parking costs). This cost is currently £5.20 adults, £12.60 family tickets. This cost serves to limit visitor numbers within the sensitive areas of the site and encourage visitors to use the western areas.
- Screening: Visitors within the Lyndon and Egleton Nature reserve effectively screened to minimise disturbance to bird species. Walkways between bird hides are screened with vegetation planting, and bird hides themselves are hidden within the landscape. Access is not permitted beyond the walkways and bird hides)
- Consultation: The sensitive areas of the reserve are managed in consultation with Anglian Water, Natural England, the Environment Agency, and the Leicestershire and Rutland Wildlife Trust. Ongoing monitoring of the effectiveness of visitor management on reducing disturbance to qualifying bird species is in place.

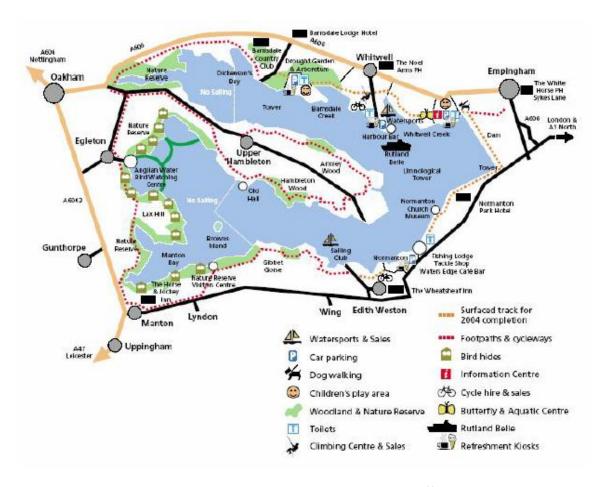


Figure 7: Visitor Management and Rutland Water SPA/Ramsar⁹⁶

4.4.6 At present, these measures effectively manage recreational pressures and avoid significant disturbance to qualifying bird species. This is confirmed by the findings of the HRA of the Anglian Water Wetland creation scheme which found that the use of hides and the reduced number of visitors during weekdays made the disturbance of wildfowl by simple human

⁹⁶ Anglian Water (2009-2014) Rutland Water Management Plan



presence a scarce event. Recreational fishing was also found to have a very limited impact through the longstanding restriction of boats from the western end of Rutland Water⁹⁷.

- 4.4.7 Personal communication with the Rutland Water Visitor Operations Manager⁹⁸ identified that there are an estimated 70-80,000 visitors per year to Egleton and Lyndon Nature, and that current approaches to visitor management could allow this number to increase without detrimental effect on qualifying bird species.
- 4.4.8 Whilst current management strategies indicate a capacity to accommodate a rise in visitor numbers without detriment to qualifying bird species, should other pressures on Rutland Water SPA/Ramsar develop in the future (e.g. pressures that result in an increase in periods of drawdown or reduction in water quality), the capacity to accommodate an increase in visitor numbers may be reduced. In this sense, recreational pressure should be considered in combination with other plans and policies. The following pathways and associated policies are considered to have the potential to result in in-combination pressures on Rutland Water SPA/Ramsar:
 - Recreational policies: Core strategies of other Boroughs within an approximate 30km radius of Rutland Water, the Leicestershire tourism strategy and Rutland County Tourism Strategy have the potential to contribute to recreational pressures at Rutland Water SPA/Ramsar;
 - Water abstraction: The combined recreational disturbance effect is likely to be exacerbated during periods of drawdown. Rutland Water is the largest public supply reservoir in the Anglian Region and is used as a strategic resource for the growing water demand within the area. Water pumped from the River Welland and neighbouring River Nene is used to sustain water levels in the reservoir. Potential effects have been identified due to increases in demand for water resources by the HRA of the East Midland Plan 99. Maintenance of characteristic water quality and quantity is important for designated interest features, with seasonal changes in levels occurring slowly. Anglian Water's main water supply scheme during the current planning period is to abstract and treat additional water from Rutland Water reservoir. This includes creation of new shallow wetlands adjacent to the reservoir to ensure that designated interest features are not affected when water levels fluctuate in the main body of the reservoir 100. The Anglian Water Resources Management Plan (WRMP) suggest that target headroom needs to double over 25 years to ensure that secure water supplies can be maintained throughout the planning period. Options to develop Rutland Water are likely to become increasingly constrained in the future as in combination effects with neighbouring regions on water resources are expected to continue to increase. Therefore potential in combination effects are therefore present with the Anglian WRMP¹⁰¹;
 - Nutrient levels: Excessive water abstraction (noted above) could affect water quality.
 Other potential pathways identified by the HRA of the East Midland Plan¹⁰² included fishery management (namely that bream (*Abramis brama*) do not become established since this fish species affects sediment suspension and the colonisation and growth of aquatic plant species), and appropriate phasing of new water and water treatment

⁹⁷ RPS (2005) Rutland Water Mitigation Scheme: A Study to inform Appropriate Assessment

⁹⁸ Pers Comms Kevin Appleton (Anglian Water Visitor Operations Manager) 3rd October 2011

⁹⁹ HRA of East Midlands RSS (2009) http://www.gos.gov.uk/497296/docs/229865/HRA_complete-small.pdf

¹⁰⁰ An HRA was undertaken to inform this wetland creation scheme concluding that no direct significant effects were identified (RPS (2005) Rutland Water Mitigation Scheme: A Study to Inform Appropriate Assessment)

HRA of East Midlands RSS (2009) http://www.gos.gov.uk/497296/docs/229865/HRA_complete-small.pdf
 HRA of East Midlands RSS (2009) http://www.gos.gov.uk/497296/docs/229865/HRA_complete-small.pdf



infrastructure arising from development in adjacent Boroughs. Potential in combination effects have therefore been identified with fisheries management of Rutland Water (Rutland Water Management Plan¹⁰³), and the Rutland Core Strategy (with respect to waste water discharge and surface water run off).

- 4.4.9 Clearly, the contribution in visitor numbers arising from Melton and associated recreational pressures should be considered in the context of and in combination with other plans and policies that contribute to the above pressures on qualifying features of Rutland Water SPA/Ramsar.
- 4.4.10 Also of note is the potential for policies within the Core Strategy to enhance growth, albeit on a limited scale, in rural areas of Melton (in particular in the vicinity of Asfordby) and encourage greater recreational use of the River Wreake Corridor including Priory Water. Such aspects of the Core Strategy could have the potential to result in a rise in recreational disturbance to Priory Water which has been identified as providing potential supporting habitat to qualifying bird species of Rutland SPA/Ramsar¹⁰⁴ (see 'Supporting Habitat' Chapter 3).
- 4.4.11 To explore this further, consultation was undertaken with the reserve manager for Priory Water Wildfowl Reserve¹⁰⁵ to evaluate how visitors are currently managed and the capacity for the reserve to accommodate additional visitors and future recreational pressure:
 - Current management: Priory Water is a private reserve (owned by the Leicestershire Wildfowlers' Association) which is not open to the public, however there is a footpath that runs through the reserve (the causeway). There is an existing pressure of dog walkers disturbing large numbers of wading birds, in particular, wigeon, when using the footpath. A willow screen has recently been planted along both sides of the footpath through the causeway, which seems to have reduced this impact; however the willow screen is not dog proof, and dogs do still occasionally access the reserve and disturb birds. There is a privately owned field to the south, and there have also been cases of dog walkers disturbing birds when accessing the site at this end through e.g. throwing sticks into the waters. Recreational users of adjacent footpaths and of the field to the south cause an existing pressure on bird species within Priory Water;
 - Future capacity: If recreational use of the surrounding footpaths were to increase, this pressure could also increase. There may be scope to reduce this pressure through greater visitor management including an increase in fencing and signage and potentially more screen planting. Such measures would need careful consultation with the reserve managers in order to be successful. For example, installing too much screening may reduce the value of the site for bird species by reducing their 360° view around the site. Previous signage asking footpath users to keep off the site has been vandalised, so a new approach would be required. Any such measures would need to be agreed with the Association and any affected private landowner(s).
- 4.4.12 The potential disturbance of birds within Priory Water needs to be considered within the context of Rutland Water SPA/Ramsar. As the evidence of Priory Water providing supporting habitat for qualifying bird species for Rutland Water SPA/Ramsar is anecdotal, it is not possible to confirm quantitatively the proportion of the qualifying bird population which could be affected by recreational use of the Priory Water area. It is unlikely that Priory Water is a vital site in maintaining the integrity of qualifying bird populations at Rutland Water SPA/Ramsar per se,

¹⁰⁵ Pers Comms Tim Goodlife (Priory Water Reserve Manager) 2nd October 2011.

¹⁰³ Anglian Water (2009-2014) Rutland Water Management Plan

Pers Comms Steve White (West Lancashire County Bird Recorder), 1st September 2011 swhite@lancswt.org.uk



however, potential disturbance to qualifying birds within Priory Water as a result of future recreational pressure may be one of many contributing factors that have the potential to affect site integrity in combination with the other policies and pressures listed above.

Recommendation for amendments to policy

- 4.4.13 The HRA of the East Midlands Plan¹⁰⁶ identified that monitoring should be implemented with respect to the effectiveness of measures to manage recreational disturbance and ensure that adequate controls are in place. Melton could amend its Biodiversity and Geodiversity Policy to include a specific reference to Rutland Water SPA/Ramsar site and reflect this for monitoring purposes by also including a specific reference in the Core Strategy Monitoring Framework Plan..
- 4.4.14 With respect to mitigating for potential recreational disturbance at Priory Water within Melton which provides supporting habitat for Rutland SPA/Ramsar, it is noted that Policy CS15 Strategic Green Infrastructure seeks to encourage recreational use of the River Wreake corridor. Following recommendations made during the HRA process, the Council has incorporated the following mitigation into Policy CS15.
- 4.4.15 "We will protect green infrastructure assets identified through our Open Space, Sport and Recreation Study and Green Infrastructure Strategy for their recreational, environmental, visual, and nature conservation value. This includes the Borough's sites of Special Scientific Interest; habitats which support Special Protection Areas/Ramsar; our nature reserves; wildlife sites; key biodiversity areas; and priority habitats."
- 4.4.16 Natural England have commented that this approach should also cover Special Areas of Conservation and also potential and candidate designations. The policy wording could be amended to use the phrase "European sites" in order to cover all such designations.
- 4.4.17 Policy CS15 also commits the Council to "manage recreational impacts on those parts of green infrastructure network which are sensitive to recreational pressures".
- 4.4.18 Should it not be possible to direct recreation away from the footpaths which goes through Priory Water, the Core Strategy could make a commitment that the Council will financially support future visitor management strategies at Priory Water. This should be headed by the Priory Water Reserve Manager for the reasons listed in the previous section (see Appendix 3 for correspondence and contact details).
- 4.4.19 With these amendments in place, it is concluded that the Core Strategy contains an adequate policy framework to enable Melton to deliver its share of measures to protect the European sites such that likely significant effects will not occur.

Wind Turbine Development and Disturbance to Qualifying Bird Species

Appropriate Assessment

4.4.20 There is evidence that wigeon, gadwall and shoveler, which are qualifying bird species of Rutland Water SPA/Ramsar fly through the Borough of Melton to access Priory Water 107. It

¹⁰⁶ HRA of East Midlands RSS (2009) http://www.gos.gov.uk/497296/docs/229865/HRA_complete-small.pdf

Pers Comms Steve White (West Lancashire County Bird Recorder), 1st September 2011 swhite@lancswt.org.uk



was therefore identified as part of HRA Screening that the development of wind turbines within Melton (depending on location) has the potential to disrupt the flight paths of these species.

- 4.4.21 Of the qualifying bird species for Rutland Water SPA/Ramsar, it is mute swan and great crested grebe which have been identified by RSPB as being the sensitive to impacts of wind turbines 108, both species being vulnerable to disturbance with mute swan also vulnerable to collision. Neither of these species were noted by the County bird recorder as being known to use Melton Borough in any significant numbers.
- The Low Carbon Energy Opportunities and Heat Mapping for Local Planning Areas Across the 4.4.22 East Midlands: Final Report (March 2011) 109 identified the potential for onshore commercial wind generation and produced an onshore wind energy opportunity plan for the Borough of Melton. This was informed by the RSPB sensitivity map 110 and excluded European Designated Sites. The RSPB sensitivity map includes one 'high sensitive bird area' within the Borough of Melton, but this is associated with Knipton Reservoir and Belvoir Castle Fishing Lake to the north east of the Borough. Consultation with the County Bird Recorder identified that these two sites in Melton Borough hold appreciable numbers of wildfowl but of the records that have been received, the birds at these sites are apparently unconnected with Rutland Water¹¹¹. It would therefore appear that the RSPB sensitivity map does not identify any high or moderately sensitive areas for birds within the Borough of Melton that are connected with Rutland Water SPA/Ramsar. It should be noted that whilst the recommended application of the RSPB guidance is to indicate at a national level the regions where bird sensitivities in relation to wind farm development are most likely to be encountered, the guidance is clear on limitations and caveats due to data deficiency and gaps in survey coverage. The guidance states that some sensitivities may come to light during an EIA and would need to be dealt with accordingly, applying the same criteria as presented here. (p24).
- 4.4.23 With respect to the potential for 'in combination' impacts of multiple wind farms, this is most likely to have a particularly severe impact in situations involving birds that move between different European sites along the coast. These European sites form a chain of stepping stones for migratory species: their geographical position and size means that they have become vital stop-off and refuelling points for large numbers of birds from a number of migratory species. As such, problems at one site may negate other efforts over their whole geographical range¹¹². However some species also move from coastal to inland sites. Movement patterns at regional level are not sufficiently well understood to determine the likely significance of effects on populations at individual sites 113.
- 4.4.24 Whilst there is no clear evidence to suggest the construction of wind turbines within Melton could result in adverse effects on qualifying bird species of Rutland Water SPA/Ramsar, the . lack of knowledge on movement patters on regional levels have been highlighted by the RSPB along with caveats of their existing sensitivity maps. As such, a precautionary approach is proposed, and recommendations for amendments to policy wording are given below.

¹⁰⁸ Information from Langston & Pullan (2002) Windfarms and birds: an analysis of the effects of windfarms on birds, and guidance on environmental assessment criteria and site selection issues. BirdLife report to the Convention on the Conservation of European Wildlife and Natural Habitats

ttp://www.emcouncils.gov.uk/write/Emids-low-carbon-energy-opportunities-Final-Report-07-2011-update.pdf

http://www.rspb.org.uk/Images/EnglishSensitivityMap_tcm9-237359.pdf

Pers Comms Steve White (West Lancashire County Bird Recorder), 1st September 2011 swhite@lancswt.org.uk

RSPB/JNCC (1992) Important bird areas in the United Kingdom including the Channel Islands and the Isle of Man. Compiled by A.M. Dodd, A.J. Stones / editors D.E. Pritchard ... (et al.) / principal contributors A. Henderson, T.M. Reed. Royal Society for the Protection of Birds: Bedfordshire.

113 HRA of East Midlands RSS (2009) http://www.gos.gov.uk/497296/docs/229865/HRA_complete-small.pdf



Recommendation for amendments to policy

4.4.25 Following recommendations made during the HRA process, the Council has incorporated the following into Policy CS20 Energy Supply in order to mitigate the potential for renewable development to have effects on disturbance to SPA bird species:

"We will only allow new renewable developments which respect the surrounding environment, (including the integrity of European Sites and their settings), landscape, residents, and land uses."

4.4.26 The following supporting text is included after paragraph 11.24:

"In assessing the potential ecological impacts of wind turbines as part of an EIA, developers will be expected to consider the regional patterns of bird movements and how this may affect the integrity of European Sites."

4.4.27 With these amendments in place, it is concluded that the Core Strategy contains an adequate policy framework to enable Melton to deliver its share of measures to protect the European sites such that likely significant effects will not occur.

Air Quality Impacts from Biomass/ Biogas Incineration and Traffic

- 4.4.28 There are no general or site-specific estimates of critical load for nitrogen deposition for eutrophic standing waters, nor for waterfowl species or assemblages. This is because the ratio between nitrogen and phosphorus is considered more important in determining ecosystem effects. Studies have shown that nitrogen limitation is quite common and that, in fact, phosphate levels typically determine the potential biomass of phytoplankton in standing waters. As such, control of phosphate levels is the key factor in reducing the likelihood of damaging algal blooms at Rutland Water (see Table 4.1 above). In fact, APIS reports that "Deposition of ammonia, nitrate and other forms of nitrogen from the atmosphere is unlikely to be the largest source of this nutrient to eutrophic standing waters and, therefore, in general, N deposition is unlikely to be very harmful to eutrophic standing waters, even when close to sources."
- 4.4.29 There are also no estimates for the critical load for nitrogen deposition for mesotrophic standing waters. The most similar habitat for which a critical load has been estimated is alkaline fen / reedbed; this is given as a range of 10 30 kg/N/ha/yr. It should be noted that Rutland Water, as a eutrophic standing water, is likely to be much less sensitive to nitrogen deposition than alkaline fen.

Road transport

- 4.4.30 The current nitrogen deposition at Rutland Water is 16.9kgN/ha/yr, well within the upper limit of the critical load. In 2005, road transport accounted for 2.52kgN/ha/yr (16.2%) of the nitrogen source, probably because of the close proximity of the A606 and A6003. In 2020, nitrogen deposition is predicted to be 10.92kgN/ha/yr, of which 0.84kg/N/ha/yr (8.3%) is accounted for by road transport. The predicted decrease in total deposition attributed to road transport is due to several factors:
 - Improvements in vehicle design;
 - Increasingly stringent regulation of operating emissions through the MOT process;

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 $\label{lem:http://www.apis.ac.uk/cgi_bin/habpollutant_result.pl?pollutant_choice=N+deposition\&habResult=Eutrophic+standing+waters\&choice=allHabs\&haborspec=habitat\&submit.x=29\&submit.y=10$



- Loss of older, more polluting, vehicles from the population.
- 4.4.31 The Core Strategy has the potential to affect deposition rates due to changes in traffic levels: Policy CS10 Sustainable Travel is aimed at reducing traffic, but Policy CS11 Strategic Road Infrastructure at Melton Mowbray could have the effect of increasing traffic. In order to understand the likely effects, Melton Borough Council commissioned a traffic modelling study. The study assessed various scenarios, including the preferred option which has been taken forward in the Core Strategy a northern urban extension to Melton Mowbray coupled with a bypass linking roads in the northern half of the town. Whilst the study did not include modelling of the change on the A606 immediately adjacent to Rutland Water, it did include modelling of the change on the A606 at Burton Lazars south of Melton Mowbray.
- 4.4.32 The study predicted that traffic levels on the A606 at Burton Lazars will decrease by between 1 and 9% (see Appendix 4). Consequently, nitrogen deposition at Rutland Water attributable to road traffic is likely to decrease as a result of the proposals in the Core Strategy. It is therefore considered highly unlikely that future changes in traffic levels as a result of Core Strategy policies would result in exceedance of the critical load.

Biomass incineration

4.4.33 With respect to evaluating the potential effect of future biomass incineration sites, the existing nitrogen deposition of incineration sites is included within 'other sources' and account for less than 5% of nitrogen deposition at Rutland Water. Depending on locations of future biomass incineration sites (included within Policy CS20 Energy Supply), and biogas combustion sites (biogas arising from 'Anaerobic Digestion' of pig and cattle slurry in Policy CS20), there is a potential for these policies to increase the atmospheric nitrogen deposition at Rutland Water SPA/Ramsar, however it is highly unlikely to result in an exceeding the critical load. However these sources of nitrogen oxides have the potential to act in combination with other plans and policies which will contribute to nitrogen deposition in Rutland Water SPA/Ramsar (e.g. regional transport strategies and other regional renewable energy and climate change strategies that may support biomass listed in Chapter 2 of this HRA/AA Report).

Recommendation for amendments to policy

4.4.34 Following recommendations made during the HRA process, the Council has incorporated the following mitigation into Policy CS20 Energy Supply in order to mitigate the potential for renewable development to have effects on air quality at Rutland Water SPA/Ramsar:

We expect development proposals for biomass and/or biogas to be accompanied by an air quality assessment that meets the requirements of the Environment Agency. This is particularly important for any proposals which may be located within 10km of Rutland Water (a Special Protection Area / Ramsar to establish whether there are any significant ecological effects.

4.4.35 With these amendments in place, it is concluded that the Core Strategy contains an adequate policy framework to enable Melton to deliver its share of measures to protect the European sites such that likely significant effects will not occur.

Melton Borough Core Strategy HRA /AA Report

¹¹⁵ AECOM (2011) Leicester and Leicestershire Integrated Transport Model: Melton Mowbray Core Strategy



5 Grimsthorpe SAC

5.1 Introduction

- 5.1.1 Figure 3 shows the location of Grimsthorpe SAC with respect to Melton Borough. It is located 15km west of the Melton Borough boundary. This site consists of Elsea Pit, a small former limestone quarry within the grounds of Grimsthorpe Park. The site comprises semi-natural dry grasslands and scrubland on calcareous substrates.
- 5.1.2 Qualifying features, existing vulnerabilities and pressures, conservation objectives & factors affecting site integrity are summarised in Table 5.1. The HRA Screening is also summarised in Table 5.1, identifying aspects of the Core Strategy which have been considered, and other plans and policies that might act in combination.

5.2 Potential Pressures from Melton

- 5.2.1 As indicated in Table 15.1, no realistic pathway was identified from Melton Core Strategy to Grimsthorpe SAC.
- 5.2.2 No policies of the Melton Core Strategy have been screened in with respect to identified pathways to Grimsthorpe SAC. An Appropriate Assessment is therefore not required with respect to Grimsthorpe SAC.



5.3 Grimsthorpe SAC

Table 5.1 HRA Screening Table for Grimsthorpe SAC

Site Details	Qualifying Features ¹¹⁶	Vulnerability and Pressures	Conservation Objectives& Factors affecting Site Integrity
Grimsthorpe SAC 0.35ha Located 15km south east of Melton Borough Boundary	 Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia) Annex II species that are a primary reason for selection of this site: Early gentian (Gentianella anglica) Grimsthorpe is the most northerly outpost for early gentian, with 2–3 colonies totalling several hundred plants in old oolitic limestone quarries. 	The entire parkland, including Elsea Pit, is managed under the terms of a Management Agreement with English Nature. The site is on the northern limit for <i>Gentianella anglica</i> in the UK, but not all of the site provides suitable conditions and there is little scope for increasing the area of suitable habitat here. Scrub encroachment is a potential problem although a light grazing regime is proposed Arrangements are in hand to enable the erection of electric fencing around the site so that it will be possible for light grazing with sheep or cattle to take place.	To maintain the designated interest features in a favourable condition. The following is required: Grassland: sward structure and composition provide a valuable indication of habitat quality; maintaining appropriate grazing or rotational cutting may be used to retain the presence of positive indicator species and prevent domination by rank grasses and scrub, though some scrub can be ecologically beneficial Early gentian: maintenance of the calcareous bare ground micro-habitats through grazing, which prevents this species being shaded out by more common species.

 $^{^{116}\} http://jncc.defra.gov.uk/protected sites/sacselection/n2kforms/UK0030043.pdf$



Screening	Aspect of Core Strategy	Pathways Identified
Out	Recreation	None Identified.
	Respondents to the England Leisure Day Visits Survey ¹¹⁷ indicated that on average, they would travel 30km to countryside locations on a day out. OS mapping indicates that Grimsthorpe SAC is located approximately 30km as the crow flies from Melton Mowbray, where the great majority of the population of Melton Borough resides. However, by road the distance is approximately 50km. Whilst Grimsthorpe Park is a popular visitor attraction, it is considered too far a distance from the Melton Borough to be subject to a significant visitor pressures arising from the Borough of Melton. Furthermore recreational pressures are not identified as an existing pressure to qualifying features of interest.	Whilst this site had been considered in HRA Screening due to being located within 20km of Melton Borough, no conceivable pathways have been identified.
	Hydraulic connections	
	The site is not hydraulically connected to Melton (see Chapter 3)	
	Other Plans and Policies	
	The HRA of the East Midlands Plan ¹¹⁸ identified only Minerals extraction as a potential pathway of effect, however this would be subject to its own HRA, and is outside of the scope of the Melton Core Strategy.	

http://www.naturalengland.org.uk/Images/dayvisitssummary_tcm6-4954.pdf
 HRA of East Midlands RSS (2009) http://www.gos.gov.uk/497296/docs/229865/HRA_complete-small.pdf



6 Humber Estuary SAC/Ramsar; Humber Flats, Marshes and Coast SPA

6.1 Introduction

- 6.1.1 Figure 3 shows the location of the Humber Estuary SAC/Ramsar and Humber Flats, Marshes and Coast SPA (collectively known as Humber Estuary SAC/SPA/Ramsar) in this Chapter.
- The Humber is the second largest coastal plain estuary in the UK, and the largest coastal plain estuary in the east coast of Britain. The estuary of muddy and macro-tidal estuary which is fed by the River Ouse, Trent and Hull, Ancholme and Graveney. The estuary drains a catchment of some 24,240 sq kilometres and provides the largest single input of freshwater from Britain to the north sea. The estuary has the second highest tidal range in Britain and approximately 1/3 of the estuary is exposed as mud or sand-flats at low tide. The confluence of the Rivers Ouse and Trent at Blacksoft Sands is the best representation of reedbeds and brackish saltmarsh communities within the system. The Humber supports a rich variety of habitats and species and is recognised as one of the most important estuaries in Europe for overwintering birds as well as supporting nine species if international importance.
- 6.1.3 The Humber Estuary is located approximately 68km from Melton, but shares hydraulic connections through the River Trent (see Chapter 3 Water Resources and Water Quality as a pathway)

6.2 Potential Pressures from Melton

- 6.2.1 Table 6.1 indicates that Humber Estuary SAC/SPA/Ramsar is screened in therefore requiring Appropriate Assessment. From the environmental requirements that have been identified in Table 6.1 it can be determined that development in Melton could theoretically interfere with the environmental requirements and processes on the SPA/Ramsar in the following manner:
 - Water Abstraction: Policies encouraging housing and economic growth (CS1, CS2, CS3, CS7, CS12, CS23, CS24) could increase water resource abstraction pressures from the River Trent. Taken together with increased abstraction from other tributaries of the Humber (from other plans and policies) there could be negative impacts on habitat quality in the Humber SAC/SPA/Ramsar. The quality of intertidal and shoreline habitats may be reduced through changes in salinity in particular this could affect the quality of habitats near the confluence of the Trent and Humber this is where the best reedbed/saltmarsh habitats are located.
 - Water Quality: Increases in development upstream of the Trent has the potential to reduce water quality of the Trent. Policies encouraging housing and economic growth (CS1, CS2, CS3, CS7, CS12, CS23, CS24) could contribute to this. As per water abstraction pressures above, this could affect the confluence of the Trent and Ouse which holds the best reedbed and brackish saltmarsh habitat on the SAC, also valuable habitat for qualifying SPA/Ramsar species. This should be considered in combination with other development along the banks of the Humber, the Trent/Ouse corridors, their tributaries.
- 6.2.2 The Appropriate Assessment will therefore concentrate on evaluating whether these impacts are likely to occur, whether they are have the potential to affect the integrity of the Humber Estuary SAC/SPA/Ramsar and what amendments to policy may be required to avoid or minimise Melton's contribution to such impacts.



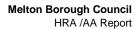
6.3 Humber Estuary SAC/Ramsar; Humber Flats, Marshes and Coast SPA

Table 6.1: HRA Screening Table for Humber Estuary SAC/Ramsar and Humber, Flats, Marshes and Coast SPA

Site Details	Qualifying Features ¹¹⁹	Vulnerability and Pressures (Where Melton contribute to these pressures text is highlighted in bold)	Conservation Objectives& Factors affecting Site Integrity (Where Melton may affect these conditions text is highlighted in bold)
Humber Estuary SAC/ Ramsar Humber Flats, Marshes and Coast SPA Located 68km north east of Melton, 15202.53 (SPA) 36657.15 (SAC) 37987.8	SAC feature: Annex I Habitats that are a primary reason for selection: Estuaries; Atlantic salt meadows; Sandbanks which are slightly covered by sea water at all time; Mudflats and sandflats not covered by sea water at low tide; Salicornia and other annuals colonising mud and sand; Coastal lagoons; River lamprey (Lampetra fluviatilis) and Sea Lamprey (Petromyzon marinus) Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: Embryonic shifting dunes; shifting dunes along the shoreline with Ammophilia arenaria (white dunes); fixed dunes with herbaceous vegetation (grey dunes); Dunes with Hippophae rhamnoides. Annex II Species present as a qualifying feature, but not a primary reason for site selection: Sea lamprey (Petromyzon marinus) River lamprey (Lampetra fluviatilis), Grey seal (Halichoerus grypus) SPA Article 4.2 (79/409/EEC) Annex I qualifying species During the breeding season: Little Tern (Sterna albifrons), Marsh Harrier (Circus aeruginosus) and over winter	 Key issues include coastal squeeze, impacts on the sediment budget and geomorphological structure and function of the estuary (due to sea level rise, flood defence works, dredging, and the construction, operation and maintenance of ports, pipelines and other infrastructure), changes in water quality and flows, pressure from additional built development, and damage and disturbance arising from access, Recreation (e.g. off-road vehicles, dog walkers, jet skiing, parasailing resulting in disturbance of waterbirds and 	The overall aim of the Humber Management Scheme is "Subject to natural change, maintain the favourable condition of the site through the sustainable management of activities" A management scheme is in place to which aim to sustainably manage the Humber Estuary and protect its current conservation status. Bird usage of the site varies seasonally, with different areas being favoured over others at certain times of year. Bird communities are highly mobile and exhibit patterns of activity related to

 $^{{\}color{red}^{119}}\ http://jncc.defra.gov.uk/protected sites/sacselection/n2kforms/UK0030031.pdf$

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(Ramsar)

Bar-tailed Godwit (*Limosa Iapponica*), Bittern (*Botaurus stellaris*), Golden Plover (*Pluvialis apricaria*), Hen Harrier (*Circus cyaneus*)

qualifying species: migratory species on passage, Redshank (*Tringa tetanus*), Sanderling (*Calidris alba*) and over winter, Dunlin (*Calidris alpina alpina*), Knot (*Calidris canutus*), Redshank

(Tringa totanus), Shelduck (Tadorna tadorna).

Ramsar

Ramsar criterion 1: The site is a representative example of a nearnatural estuary with the following component habitats: Dune system and humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, coastal brckish / saline lagoons.

Ramsar criterion 3: Supports a breeding colony of grey seals

Ramsar criterion 5 Assemblages of international importance: waterfowl (non-breeding season)

Ramsar Criterion 6: Species / populations occurring at levels of international importance, Eurasian golden plover, Red knot, Dunlin Blacktailed godwit Common redshank Common Bar-tailed godwit Common redshank

Ramsar criterion 8: The Humber Estuary acts as an important migration route for both river lamprey and sea lamprey

habitats

 Fisheries e.g. cockle fishing affecting food sources for some waterbirds and causing disturbance to feeding/roosting

Coastal squeeze is being addressed through the development and implementation of the Humber Flood Risk Management Strategy. All proposals for flood defence, development, dredging, abstractions and discharges which require consent from any statutory body, and land use plans which may have impacts upon the site are subject HRA.

Diffuse pollution will be addressed through a range of measures including implementation of the Waste Water Framework Directive and Catchment Sensitive Farming initiatives.

Other issues are addressed via a range of measures including regulation of on-site land management activities and implementation of the Humber Management Scheme, developed by all relevant statutory bodies to assist in the delivery of their duties under the Habitats Regulations.

tidal water movements and many other factors. The most important factors are:

- Current extent and distribution of suitable feeding and roosting habitat.
- Sufficient prey availability.
- Maintenance of appropriately low levels of disturbance.
- Water quality and quantity



Screening	Aspect of Core Strategy / Policy	Pathways Identified
In	Increase in water abstraction, and a decline in water quality of the River Trent are key vulnerabilities, pressures and do not conform to the conservation objectives for the site. This could arise from housing and economic growth encouraged by the following policies: Policy CS1: Development at Melton Mowbray Policy CS2 Rural Centres Policy CS3: Sustainable Villages Policy CS7 Employment and Economic Development Policy CS12 Melton Mowbray Town Centre This could act in combination with other plans and policies that: support housing growth and therefore water abstraction in the East and West Midlands (i.e. policies arising from Core Strategies of all Boroughs within these two areas) support industrial development in the Yorkshire and Humberside where the rivers are of poor water quality and responsible for existing water quality problems in the Humber Estuary 120	Water Abstraction 121122 The Trent (one of the largest rivers feeding into the Humber estuary) is earmarked for greater levels of abstraction under the Severn Trent WRMP to meet growing water resource demands in the East Midlands Resource Zone (in which Melton is located). The Trent Corridor CAMS considers that much of the Trent has water available for abstraction. There is therefore a possibility of a decline in available water, particularly in combination with other plans and policies given levels of development proposed for the East Midlands and West Midlands. Taken together with increased abstraction from other tributaries of the Humber, there could be negative impacts on habitat quality in the Humber SAC/ SPA/ Ramsar. The quality of intertidal and shoreline habitats may be reduced through changes in salinity in particular this could affect the quality of habitats near the confluence of the Trent and Humber – this is where the best reedbed/ saltmarsh are located. Water Quality 123 Increases in development upstream of the Trent is likely to reduce water quality of the Trent. Whilst much of the Trent corridor is 'good' with respect to chemical quality, biological quality is over much of the corridor is only 'fairly good' or worse (EA river water quality information). Whilst the majority of water quality problems on the Humber estuary system come from industrial discharges from the Humber banks (on the north bank of the river Humber), lower water quality of the Trent is likely to exacerbate this. Many of the contributory rivers in the Yorkshire and Humberside region are also classed as having poor biological quality or worse (EA river water quality information). The confluence of the Trent and Ouse holds the best reedbed and brackish saltmarsh habitat on the SAC, also valuable habitat for qualifying

Treweek Environmental Consultants and Environ (March 2007) *HRA of the East Midlands Regional Plan (RSS)* Prepared for: Government Office East Midlands 121 Treweek Environmental Consultants and Environ (March 2007) *HRA of the East Midlands Regional Plan (RSS)* Prepared for: Government Office East Midlands 122 Aecom (June 2010) DRAFT Severn Trent Water Resourcing Management Plan Habitat Regulations Assessment (Unpublished at time of writing) 123 Treweek Environmental Consultants and Environ (March 2007) *HRA of the East Midlands Regional Plan (RSS)* Prepared for: Government Office East Midlands



Melton Borough Council HRA /AA Report

	This will be vulnerable to decline in water quality and of the Trent. Increased development upstream seems quality of the Trent
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6.4 Appropriate Assessment

Water Abstraction

Appropriate Assessment

- The potential for significant effects on Humber Estuary SAC/SPA/Ramsar arising from an increase in water abstraction as proposed by the Severn Trent Water Resources Management Plan (WRMP) has been identified in the draft HRA of the Severn Trent WRMP^{124.} The River Trent provides freshwater flow into the Humber Estuary. It not only has the effect of diluting the salinity, but also conveys any treated effluents into the estuary. Therefore the implication of increased abstraction above existing levels throughout the Trent catchment will have to be considered in relation to this European site. In particular the proposed duplication of the Kings Corner to Hallgates system (14 DVA) scheme included in the Severn Trent WRMP is identified as the scheme would use abstractions along the Rivers Trent and Derwent.
- 6.4.3 Policies within the Melton Core Strategy that could result in greater pressure on water resources and water abstraction from the River Trent could therefore contribute to this pressure, in combination with other policies identified in Table 6.3.
- 6.4.4 Whilst this pathway for potentially significant effects was identified in HRA screening, in exploring the issue in greater detail the Draft HRA of the Severn Trent WRMP concluded that the actual risk of significant impacts to the Humber Estuary SAC/SPA/Ramsar was considerably less as existing abstractions are currently not used to their full value (pp50):

"This scheme will utilise existing abstraction licences on the River Trent and Derwent which are hydrologically linked to the Humber Estuary to allow for the distribution of an additional 40Ml/d of deployable output into the Severn WRZ and additional deployable output into the East Midlands WRZ. The scheme itself will not require any increase in current abstraction licences from these rivers. Whist these abstractions are currently not fully utilised the full value of the licences was taken into account during the production of the Derwent CAMS and Lower Trent and Erewash CAMS therefore the operation of this scheme will not alter the status quo and no impact or in-combination effect has been identified on this site."

The draft HRA of the Severn Trent WRMP recommended a number of measures to account for the potential for a future increase in water abstraction requirement at a later stage and any new future abstractions from the Rivers Trent and Dove (currently not proposed). Assuming these measures are implemented it was concluded that there would be no likely significant effects on the Humber Estuary SPA/Ramsar/SAC as a result of water abstraction pressures in the Severn Trent WRZ. Whilst these measures should be included in the Severn Trent WRMP, there is scope for Melton Core Strategy to commit to efficient use of water resources, thus further mitigate its 'in-combination' contribution to this pressure. It already does so in Policy CS19 'Sustainable Development and Construction'. 'we will ensure that all new developments incorporate water conservation measures and sustainable urban drainage systems' (paragraph 11.12)

Recommendations to Amendments in Policy

6.4.6 Policy CS19 of the Core Strategy (Sustainable Development and Construction) already includes measures to minimise water use. No further recommended amendments to the Core Strategy are required.

¹²⁴ Aecom (June 2010) DRAFT Severn Trent Water Resourcing Management Plan Habitat Regulations Assessment (Unpublished at time of writing)



Water Quality

Appropriate Assessment

- 6.4.7 The HRA of the RSS¹²⁵ identified that water quality in the River Trent is likely to decline with increased discharges from development into the River Trent and its tributaries. The confluence of the Trent and Ouse holds the best reedbed and brackish saltmarsh habitat on the SAC. This would be vulnerable to a decline in water quality and alteration to hydrology of the Trent. Increased development upstream of this confluence (of both the River Trent and River Ouse) seems likely to reduce water quality at this point.
- 6.4.8 With respect to Melton, there is therefore the potential for discharges to River Wreake to enter the Trent system through the River Soar. However this contribution to the overall water quality of the Trent/Ouse confluence is considered to be minor with respect to other contributions along the Trent corridor.
- A recent draft report (June 2011) has indicated that Melton Mowbray sewage treatment works currently serves a population equivalent of around 57,200 and is operating within its 9,273m³/day Dry Weather Flow consent. Comparison of current measured dry weather flow against the consented dry weather flow indicates there is theoretical headroom to be able to accommodate approx 3,300 additional properties within the current DWF consent. The current treatment processes are performing well against its consented quality parameters. It is therefore envisaged that there will be adequate spare capacity to accommodate the development being proposed across Melton Mowbray.
- 6.4.10 The Regional Plan made a number of recommendations to avoid water quality impacts on the Humber Estuary SAC/SPA/Ramsar. Whilst the majority related to an integrated regional approach to ensure water quality issues are tackled in an integrated way, a recommendation was made for phasing of development to be carried out to ensure sufficient water treatment capacity is available before development is complete. It would be the responsibility of all each individual Borough to manage the phasing of development within its Borough through its own Core Strategy. The Melton Core Strategy alludes to this in meeting infrastructure requirements (e.g. in Policy CS5 Strategic Housing).

Recommendations to Amendments in Policy

Avoiding an adverse effect is largely in the hands of the water companies (through their investment in future sewage treatment infrastructure) and Environment Agency (through their role in consenting effluent discharges). However, local authorities can also contribute through ensuring that sufficient wastewater treatment infrastructure is in place prior to development being delivered through the Core Strategy. Following recommendations made during the HRA process, Policy CS 19 (Sustainable Development and Construction) has been amended to state that:

"Development should be phased to ensure sufficient water treatment capacity is available before development is complete."

6.5.1 Policy CS23 refers to promotion of an integrated water management plan; this could be delivered through a Water Cycle Study through interaction with other authorities (Severn Trent Water, the Environment Agency etc). It should also be noted that diffuse pollution is also being

¹²⁵ Treweek Environmental Consultants and Environ (March 2007) *HRA of the East Midlands Regional Plan (RSS)* Prepared for: Government Office East Midlands



addressed by implementation of the Water Framework Directive and Catchment Sensitive Farming initiative.

6.5.2 With these amendments in place, it is concluded that the Core Strategy contains an adequate policy framework to enable Melton to deliver its share of measures to protect the European sites such that likely significant effects will not occur.



7 HRA/AA Summaries and Conclusions

7.1 Summary of Screening

- 7.1.1 Although the Core Strategy was screened for likely significant effects upon Grimsthorpe SAC, SAC it was ultimately concluded that the Core Strategy was unlikely to lead to significant effects on this sites, even when considered in combination with other projects and plans.
- 7.1.2 The Core Strategy was screened in for Appropriate Assessment relating to likely significant effects 'in combination' with other projects and plans upon Rutland Water SAC/SPA/Ramsar and the Humber Estuary SAC/SPA/Ramsar.
- 7.1.3 The following policies were screened in therefore requiring appropriate assessment:
 - Policy CS1 Development at Melton Mowbray
 - Policy CS2 Rural Centres
 - Policy CS3 Sustainable Villages
 - Policy CS7 Employment and Economic Development
 - Policy CS9 Rural Economic Development
 - Policy CS12 Melton Mowbray Town Centre
 - Policy CS15 Strategic Green Infrastructure
 - Policy CS20 Energy Supply
 - Policy CS23 Melton Mowbray Sustainable Urban Extension
 - Policy CS24 Melton Mowbray Employment Growth Area

7.2 Summary of Appropriate Assessment

- 7.2.1 The Appropriate Assessment identified a number of possible impact pathways from the Melton Core Strategy to European Sites. Since the scale of development and population growth in Melton will be small compared to that of neighbouring areas such as Leicester, Nottingham and Peterborough, the assessment has primarily focused on the contribution that the Melton Core Strategy could make when considered 'in combination' with other projects and plans:
 - Rutland Water SPA/Ramsar Site:
 - disturbance to qualifying bird species from an increase in recreational pressures (both within Rutland Water SPA/Ramsar itself, and Priory Water Wildfowl Reserve which provides supporting habitat to qualifying bird species);
 - depending on location, disturbance to qualifying bird species from the construction of wind turbines;
 - an increase in atmospheric nitrogen deposition arising from changes in road traffic; and
 - depending on location, an increase in atmospheric nitrogen deposition arising from new biomass incineration plants.



- Humber Estuary SAC/SPA/Ramsar:
 - reduction in salinity/ greater concentration of water pollutants affecting the reedbed/saltmarsh a the Trent/Ouse confluence following greater water abstraction pressures of the River Trent; and
 - increase in water pollutants affecting the reedbed/saltmarsh are the Trent/Ouse confluence following greater waste water discharge into the River Trent (through discharge to the River Wreake).
- 7.2.2 Whilst a number of the Core Strategy policies were initially screened in, as part of the Appropriate Assessment it was identified that the wording of the following three policies is not considered to be sufficiently compliant with the Habitat Directive to avoid in-combination impacts on the qualifying features of these European sites:
 - Strategic Green Infrastructure CS15;
 - Sustainable Development and Construction CS19;
 - Energy Supply Policy CS20; and
- 7.3 Following recommendations for amendments to policy to enable the delivery of measures to avoid or adequately mitigate the adverse effects, the majority of these concerns have now been addressed. Remaining recommendations are set out below.

Appropriate Assessment: Recreational Pressure

- 7.3.2 The HRA of the East Midlands Plan¹²⁶ identified that monitoring should be implemented with respect to the effectiveness of measures to manage recreational disturbance and ensure that adequate controls are in place. Melton could amend its Biodiversity and Geodiversity Policy to include a specific reference to Rutland Water SPA/Ramsar site and reflect this for monitoring purposes by also including a specific reference in the Core Strategy Monitoring Framework Plan.
- 7.3.3 With respect to mitigating for potential recreational disturbance at Priory Water within Melton which provides supporting habitat for Rutland SPA/Ramsar, it is noted that Policy CS15 Strategic Green Infrastructure seeks to encourage recreational use of the River Wreake Policy wording amendments have now been incorporated into Policy CS15 Strategic Green Infrastructure as follows.
- 7.3.4 "We will protect green infrastructure assets identified through our Open Space, Sport and Recreation Study and Green Infrastructure Strategy for their recreational, environmental, visual, and nature conservation value. This includes the Borough's sites of Special Scientific Interest; habitats which support Special Protection Areas/Ramsar; our nature reserves; wildlife sites; key biodiversity areas; and priority habitats.
- 7.3.5 Natural England have commented that this approach should also cover Special Areas of Conservation and also potential and candidate designations. The policy wording could be amended to use the phrase "European sites" in order to cover all such designations.
- 7.3.6 The amended policy wording also commits the Council to managing recreational impacts on those parts of green infrastructure network which are sensitive to recreational pressures.

Melton Borough Core Strategy HRA /AA Report

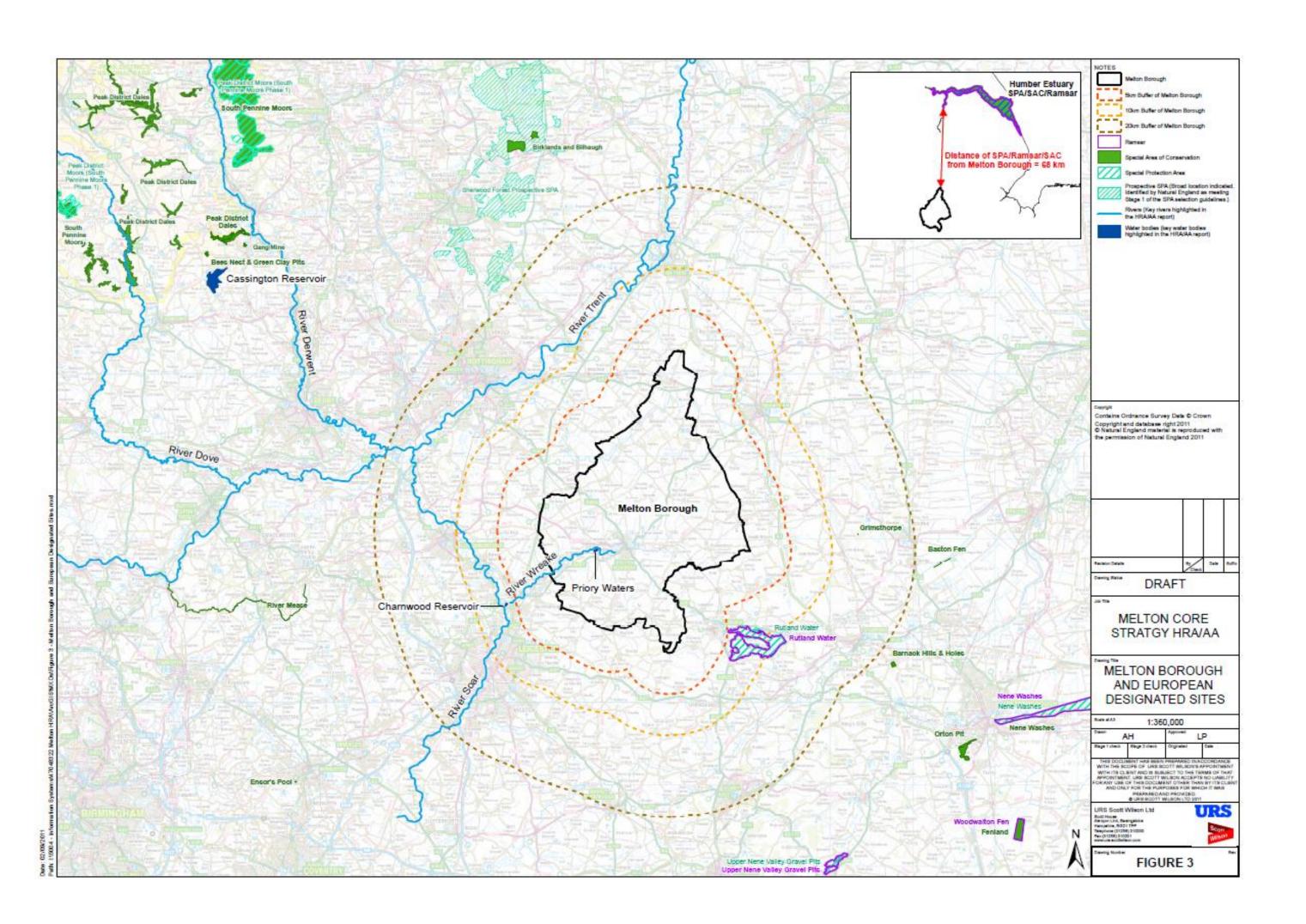
¹²⁶ HRA of East Midlands RSS (2009) http://www.gos.gov.uk/497296/docs/229865/HRA_complete-small.pdf



- 7.3.7 Should it not be possible to direct recreation away from the footpaths which goes through Priory Water, the Core Strategy could make a commitment that the Council will financially support future visitor management strategies at Priory Water. This should be headed by the Priory Water Reserve Manager for the reasons listed in the previous section (see Appendix 3 for correspondence and contact details).
- 7.3.8 With these amendments in place, it is concluded that the Core Strategy contains an adequate policy framework to enable Melton to deliver its share of measures to protect the European sites such that likely significant effects will not occur.



Figure 3 Melton Borough and European Designated Sites





Appendix 1: Screening tables for Core Strategy preferred approaches

Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are
		Screened In, Green Cells are Screened Out)



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
Spatial Vision	By 2026 residents of Melton will enjoy one of the best qualities of life in the most self-contained district in the region. Development will have been managed in a way which meets the needs of the local community, benefits the economy and improves the quality of the local environment. In particular: • the type, tenure and price of local housing will more closely reflect the housing needs of the whole community; • Melton will be home to a diverse, competitive and innovative range of businesses which will provide good job opportunities for local people and high levels of local employment; and • More people will have opportunities to improve their health and wellbeing from access to key services and facilities. Melton Mowbray will be the main social and economic focus for the Borough, but will retain its character as a historic English market town. Melton Mowbray will be a place where people want to live and work and its town centre will provide a high quality visitor experience with more and better shopping, markets, heritage and leisure attractions. It will reflect the strong brand image of Melton Mowbray and traffic congestion will be well managed. Our villages will be vibrant, each with its own distinct character and heritage. There will be more job opportunities and more homes for local people - especially affordable housing. Melton's beautiful and tranquil countryside will be valued and enjoyed by local people and visitors alike. The countryside will be supported by profitable and sustainable farming and land based activities. Melton will be well prepared for the impacts of climate change and playing its part in reducing greenhouse gas emissions.	The following elements of this policy has potential pathways (atmospheric emissions; water quality deterioration loss of supporting habitat; recreational disturbance) to the following European sites. New housing and employment development within the Borough contributing to a rise in population resulting in a • greater recreational pressure • increase water abstraction pressures The potential location of wind turbines within the Borough has the potential to result in disturbance. The Spatial Vision is Screened In therefore requiring Appropriate Assessment



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
Policy CS1 Development at Melton Mowbray	 80% of our total development needs will be delivered at Melton Mowbray by 2026. This will include: Approximately 2700 new homes, including a sustainable urban extension of around 1000 new homes A minimum of 14ha of new business land, rising to a total of 30ha where evidence shows how this will contribute to our Vision and objectives A minimum of 11,000sq metres of additional office floorspace Approximately 2,500sq m of non-food shopping floorspace, focused on the town centre We will positively plan for this growth by: Preparing an Area Action Plan for the Sustainable Urban Extension and a Land Allocations and Settlement Boundaries Development Plan Document for other allocated sites at Melton Mowbray Preparing an Area Action Plan for Melton Mowbray Town Centre Coordinating the planned delivery of infrastructure through a local Infrastructure Delivery Group Monitoring the provision and requirement for new homes and businesses through our Annual Monitoring Report 	Development in Melton Mowbray and associated rise in population could result in water abstraction pressures. A potential water abstraction pathway has been identified to Humber Estuary SAC/Ramsar Humber Flats, Marshes and Coast SPA (See 'Water Resources' in Chapter 3) The above could also contribute to a decline in water quality of the River Trent which discharges to the Humber Estuary SAC/Ramsar Humber Flats, Marshes and Coast SPA (See 'Water Quality' in Chapter 3) Development and growth within Melton Mowbray and associated rise in population, particularly the portion with a greater leisure and recreation time has the potential to result in greater visitor pressures in the Rutland Water SPA/Ramsar site (see 'Recreational disturbance, Chapter 3) Policy Area CS1 is Screened In therefore requiring Appropriate Assessment



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
Policy CS2 Rural Centres	By 2026 we will provide development at Asfordby, Bottesford, Long Clawson and Waltham on the Wolds to meet local need in a way which contributes to local priorities. We will do this by: Responding positively to development within the built form; Making land allocations to meet identified affordable housing need; Making land allocations to meet identified local employment needs (Bottesford and Long Clawson only); and Responding positively to development which contributes to local priorities as identified by a Neighbourhood Plan or similar robust, community-led strategy.	Limited rural development in the vicinity of Asfordby has the potential to result in a small rise in local population and increase recreational activity at Priory Water which has been identified as providing potential supporting habitat for qualifying bird species of Rutland Water SPA/Ramsar (see 'Supporting Habitat' Chapter 3) Growth of rural centres could to increase water abstraction pressures. A potential water abstraction pathway has been identified to Humber Estuary SAC/Ramsar Humber Flats, Marshes and Coast SPA. (See 'Water Resources' in Chapter 3) The above could also contribute to a decline in water quality of the River Trent which discharges to the Humber Estuary SAC/Ramsar Humber Flats, Marshes and Coast SPA (See 'Water Quality' in Chapter 3) Policy Area CS2 is Screened In therefore requiring Appropriate Assessment
CS3 Sustainable Villages	We will support new developments and safeguard existing services and facilities in the following Sustainable Villages: Ab Kettleby, Asfordby Hill, Buckminster, Croxton Kerrial, Frisby on the Wreake, Gaddesby, Great Dalby, Harby, Hose, Knipton, Nether Broughton, Old Dalby, Queensway, Redmile, Scalford, Sewstern, Somerby, Stathern, Twyford, and Wymondham.	Limited new development in the vicinity of Asfordby, Kirby Bellars has the potential to result in a rise in local population and increase recreational activity at Priory water which has been identified as providing potential supporting habitat for qualifying bird



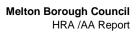
Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
Policy	 Key Features of Core Strategy Publication Draft We will do this by: Identifying opportunities for suitable small-scale infill development and protected open areas in a Land Allocations and Settlement Boundaries Development Plan Document or through Neighbourhood Plans Safeguarding existing services and facilities and supporting proposals for new services and facilities Supporting affordable housing developments in accordance with the Strategic Housing Policy We will safeguard existing services and facilities and react positively to sensitive, appropriate developments where they deliver an increase in services or facilities in the following villages: Asfordby Valley, Ashby Folville, Barkestone le Vale, Barsby, Belvoir, Bescaby, Branston, Brentingby, Brooksby, Burrough on the Hill, Burton Lazars, Chadwell, Cold Overton, Coston, Easthorpe, Eastwell, Eaton, Edmonthorpe, Freeby, Garthorpe, Goadby Marwood, Grimston, Harston, Hoby, Holwell, John O'Gaunt, Kirby Bellars, Knossington, Leesthorpe, Little Dalby, Muston, Normanton, Pickwell, Plungar, Ragdale, Rotherby, Saltby, Saxby, Saxelbye, Shoby, Sproxton, Stapleford, Stonesby, Thorpe Arnold, Thorpe Satchville, Wartnaby, Welby, Wycomb, and Wyfordby. We will provide for this where:	,
	 The aspirations that the community have for new services and facilities as identified by a robust and appropriate Neighbourhood Plan or similar process is met; and 	
	The development that takes place includes provision for the services and facilities	



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
	to be delivered	
Policy CS4 Making Effective Use of Land	By 2026 approximately 50% of new housing and business development will take place on brownfield land. We will support development on greenfield land where there is no alternative appropriate brownfield land available, taking into account its environmental quality. We will plan for the efficient use of land by: Preparing settlement boundaries and important open areas in our Land Allocations and Settlement Boundaries Development Plan Document; Promoting the efficient use of land through Neighbourhood Plans; and Proactively monitoring the land used for new developments through our Annual Monitoring Report.	No Brownfield land has been identified as providing supporting habitat for qualifying bird species of Rutland Water SPA/Ramsar (see 'Loss of Supporting Habitat, Chapter 3). Therefore no pathway has been identified. Policy CS4 is Screened Out therefore not requiring Appropriate Assessment
Policy CS5 Strategic Housing	 We will manage the delivery of 3,400 new homes to provide a balanced housing stock and increase the stock of affordable housing by 2026 by: Seeking an appropriate mix of dwelling types and sizes; having regard to the recognised housing needs of the Borough, any existing shortfall in supply, the requirements of the local area, and the size and nature of the site; Identifying the overall mix of dwelling types and sizes for allocated sites in an Area Action Plan for the Melton Mowbray Sustainable Urban Extension and a Land Allocations and Settlement Boundaries Development Plan Document for other allocated housing sites; Promoting accessible design and applying Lifetime Homes Standards where appropriate to ensure new dwellings are flexible and able to meet the housing 	This policy is concerned with the balance of housing stock rather than housing growth. No pathway has been identified. Policy Area CS5 is Screened Out therefore not requiring Appropriate Assessment



Policy	Key Features of Core Strategy Publication	Draft		Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
	needs of a wide section of society, including people with disabilities and older people;			
	 Seeking affordable housing contributions having regard to market conditions economic viability and other infrastructure requirements, in the following locations: 			
	Location	Threshold	Target	
	Melton Mowbray	6 dwellings or more	30%	
	(including the sustainable urban extension)	or 0.15 ha		
	Asfordby, Asfordby Hill & Asfordby Valley	6 dwellings or more	30%	
		or 0.20 ha		
	Rural Areas	1 dwelling or more	40%	
	 Seeking on site contributions on developments of 6 dwellings or more, but offering flexibility on smaller developments by accepting provision of affordable housing on an alternative site or by way of a commuted sum; Allowing a small scale affordable housing exceptions site development to meet identified local housing need in every rural settlement considered suitable for market housing; Updating our evidence on the housing market and providing guidance on the mix of houses needed to balance the stock of homes, affordable housing contributions, tenure and home sizes in our Supplementary Planning Document for Housing; and Monitoring affordable housing provision and housing mix in our Annual Monitoring Report and updating our evidence on the housing market. 		-	

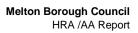




Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
Policy CS6 Gypsies and Travellers	 We will meet the needs of the Gypsy and Traveller Community by 2026 by: Allocating land through the Land Allocations and Settlement Boundaries Development Plan Document for two small residential sites (5-10 pitches) and one transit site (10 caravans) to meet our needs to 2016; Undertaking a further assessment to identify the need for future Gypsy and Traveller accommodation provision beyond 2016; and Supporting sites that are: within or adjacent to a sustainable settlement and on land considered suitable for market housing; do not cause significant detrimental impact to the existing community; are appropriate in scale; and relate well to local infrastructure and services. 	The only site within Melton that may support qualifying European Site species is Priory Water (see 'Supporting Habitat, Chapter 3). However this is located in a floodplain with relatively poor road access, is in private ownership and is actively managed for ornithological interest. It is highly unlikely that this site would be selected in the allocation of sites to gypsy and traveller communities. Therefore, no pathway is identified. Policy Area CS6 is Screened out therefore not requiring Appropriate Assessment.



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
Policy CS7 Employment and Economic Development	 By 2026 our economy will have grown to reflect the economic needs of the Borough. We will do this by: Encouraging a greater presence of high value and knowledge-based businesses; Providing opportunities for the food and drink industry to develop and expand in the Borough; Providing sustainable development opportunities for small-scale, high-quality business units and offices; Safeguarding existing employment sites which are identified as being important by our Employment Land Review, where appropriate and justified, taking into account the need for development; Positively responding to sustainable developments which improve skills and provide higher value jobs; Requiring employment developments to be accompanied by a Travel Plan; and Supporting the delivery of excellent electronic communication networks, including telecommunications and high speed broadband, where appropriate. 	Growth in employment and associated economic development in Melton has the potential to place greater pressures on water resources. A potential water abstraction pathway has been identified to Humber Estuary SAC/Ramsar Humber Flats, Marshes and Coast SPA (See 'Water Resources' in Chapter 3). The above could also contribute to a decline in water quality of the River Trent which discharges to the Humber Estuary SAC/Ramsar Humber Flats, Marshes and Coast SPA (See 'Water Quality' in Chapter 3) Development and growth within Melton and associated rise in population, particularly the portion with a greater leisure and recreation time has the potential to result in greater visitor pressures in the Rutland Water SPA/Ramsar site (see 'Recreational disturbance, Chapter 3) Policy Area CS7 is Screened In therefore requiring Appropriate Assessment.

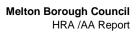




Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
Policy CS8 Strategic Employment Land Provision	 We will allow 11,000 sqm of offices, 5ha of industrial land and 9ha of warehousing and upto 16ha of additional employment land to meet the economic needs of the Borough by 2026. We will do this by: Delivering an Employment Growth Area to provide a high-quality business park environment through our Land Allocations and Settlement Boundaries document; Focusing office developments at our strategic regeneration opportunities through our Melton Mowbray Town Centre Area Action Plan; and We will only consider releasing a further 16ha of additional land where it will directly lead to a significant reduction in out-commuting and provide knowledge-based, high value employment. 	This policy is concerned with provision of land for employment rather than employment growth. The only site within Melton that may support qualifying species is Priory Water (see 'Supporting Habitat, Chapter 3). However this is located in a floodplain with relatively poor road access, is in private ownership and is actively managed for ornithological interest. It is highly unlikely that this site will be selected in the allocation of employment land. Therefore no pathway is identified. Policy CS8 is Screened out therefore not requiring Appropriate Assessment



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
Policy CS9 Rural Economic Development	 We will support and help regenerate our rural economy by: Providing up to 5ha of employment land at both Bottesford and Long Clawson with a total assumed supply of 6ha; Allowing small-scale expansion or intensification of businesses in the countryside which are not detrimental to their rural location; Responding positively to small-scale developments to meet local needs in the remaining villages; Supporting the re-use of rural buildings for small-scale business activities suitable for the location; Supporting appropriate farm diversification schemes which are compatible with their location; Responding positively to the development of live/work units where the intensity of business use is greater than the residential element and will reduce transport use compared to alternative locations; and Supporting tourism and leisure activities, including equine businesses, which are sensitive to the character of the area. 	If rural economic development occurs in the vicinity of Asfordby, this policy has the potential to result in a greater local population around Priory Water, a site which may support qualifying bird species for Rutland Water SPA/Ramsar (see 'Supporting Habitat, Chapter 3). Whilst this is likely to have a minor effect, if at all, the policy does have the potential to increase recreational pressures on Priory Water. As a precaution, Policy CS9 is Screened In so that any in-combination effects with other policies can be considered, therefore requiring Appropriate Assessment

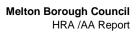




Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
CS10: Sustainable Travel	 We want to see a step change in behaviour towards smarter travel choices, away from the private car, by 2026. We expect new developments to contribute to at least a 6% shift in modal choice by: Providing access by walking, cycling and public transport to key facilities and services; Supporting the provision of effective and efficient walking, cycling and public transport networks throughout the Borough in accordance with CS25: Delivering Infrastructure; Contributing to achieving modal shift targets by maximising travel choice for non-car modes; and Assessing their travel impacts through Transport Assessments and Travel Plans. 	There are no European Sites within the Borough of Melton, so a shift away from car use to walking and cycling short distances is unlikely to result in effects on European Sites. A shift of 6% towards public transport for longer journeys would be expected to result in improved air quality alongside major routes into and out of the Borough, for example the A606 and A6003, which pass immediately adjacent to Rutland Water SAC/SPA/Ramsar. This could potentially have positive effects on the European Site. Policy CS10 is Screened In therefore requiring Appropriate Assessment

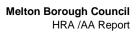


Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
CS11: Strategic Road Infrastructure at Melton Mowbray	 We will make a significant contribution to delivering road infrastructure linking the A607 Leicester Road and the A607 Thorpe Road by 2026. We will do this by: Providing for new road infrastructure between Nottingham Road and Melton Spinney Road as part of the sustainable urban extension to Melton Mowbray; Exploring opportunities for funding of new road infrastructure between Melton Spinney Road and Thorpe Road; Exploring opportunities for funding of new road infrastructure between Asfordby Road and Nottingham Road; and Providing for new road infrastructure between Leicester Road and Asfordby Road as part of the Employment Growth Area to the west of Melton Mowbray. 	The focus of this policy is a new bypass around Melton Mowbray. As there are no European Sites within the Borough of Melton, the bypass would have no direct effects on European Sites. However, the presence of a bypass is likely to alter traffic patterns in the wider area; journey times for through traffic are likely to improve, which may encourage increased traffic. A606 and A6003 are access routes to the south east of the Borough and pass immediately adjacent to Rutland Water SAC/SPA/Ramsar. It is therefore possible that this policy could result in increased traffic on these routes which could have an adverse effect on the air quality at the European Site. Policy CS11 is Screened In therefore requiring Appropriate Assessment





Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
Policy CS12 Melton Mowbray Town Centre	By 2026 Melton Mowbray will be distinguished as a quality setting for its shopping, markets, residents, businesses, visitors, heritage and leisure attractions. It will have a strong brand image reinforced through a quality physical and business environment that is recognised as the 'Rural Capital for Food'. The Town Centre will serve a healthy catchment as an accessible and integral part of the wider area. We will provide a positive framework for this by preparing a Melton Mowbray Town Centre Area Action Plan to deliver our strategic regeneration opportunities and activities including: • Strategic redevelopment of the Cattle Market; • Strategic redevelopment of the Wilton Road/ Brooksby College area; • Strategic redevelopment of the Burton Road area; • Strategic redevelopment of the Nottingham Road site; • a comprehensive Public Realm Strategy • a Green Infrastructure Strategy for the town centre We expect developments that attract a large number of people, especially retail, leisure and office uses, to be located in our town centre and to be informed by evidence of need. We will expect new developments to have a positive impact on the range and type of activities provided for visitors and the community, increase the proportion of people travelling to the town centre by walking, cycling and public transport and positively increase competition.	Development in Melton Mowbray and associated rise in population could result in water abstraction pressures. A potential water abstraction pathway has been identified to Humber Estuary SAC/Ramsar Humber Flats, Marshes and Coast SPA (See 'Water Resources' in Chapter 3). The above could also contribute to a decline in water quality of the River Trent which discharges to the Humber Estuary SAC/Ramsar Humber Flats, Marshes and Coast SPA (See 'Water Quality' in Chapter 3) Development and growth within Melton and associated rise in population, particularly the portion with a greater leisure and recreation time could result in greater visitor pressures in the Rutland Water SPA/Ramsar site (see 'Recreational disturbance, Chapter 3). This policy is Screened In, therefore requiring Appropriate Assessment.

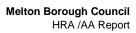




Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
Policy CS13 Countryside	 We will support and protect our countryside by: Supporting the rural economy by promoting economic activities and development which have a strong relationship with the operational requirements of agriculture, forestry and other land based industries and contribute to a low carbon economy; Supporting rural communities by allowing housing development for local needs in accordance with the Strategic Affordable Housing Policy and the development of essential local services and facilities as identified by the local community in a Neighbourhood Plan or equivalent evidence base; Protecting the rural environment by requiring development to be of a high standard which respects the character of its location; surroundings, and setting. The form and appearance of development should reinforce its sense of place and take into account the Melton Landscape Character Assessment; Requiring new development to take into account and mitigate its impact on remoteness or tranquillity and the quiet enjoyment of the countryside; and Development should be located on land with the least environmental value where appropriate land is not available or suitable. 	There is no conceivable pathway identified to European Sites. Policy CS13 is Screened Out therefore not requiring Appropriate Assessment



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
CS14 Biodiversity and Geodiversity	We expect new development to protect and enhance our most ecologically sensitive areas, including the River Wreake Valley. We will require new developments to contribute towards the retention or re-establishment of wildlife and the natural environment. Development proposals will be expected to demonstrate that they will not adversely affect or result in the loss of features of importance, including: • Important trees and species rich hedgerows; • Broadleaf and ancient woodlands; • Sites of Special Scientific Interest (SSSI); • Regionally and locally important Geodiversity Sites; • Local Wildlife Sites (Sites of Importance for Nature Conservation (SINC)); • Local and UK Biodiversity Action Plan Habitats; • River Corridors; and • Any other sites which are designated or have the potential to be designated for the purpose of conserving wildlife and their associated habitats, for example a potential Special Area of Conservation (pSAC). We will expect new development to maintain ecological corridors such as watercourses, important hedge/tree lines and disused railways for biodiversity as well as other green infrastructure and recreational uses. We will only consider development that results in the loss of ecological features in exceptional circumstances where replacement provision is made that is considered to be of equal or greater value and potential than that which will be lost and which is likely to result in a net gain in biodiversity.	The focus of this policy is protection of biodiversity and geodiversity. As such, no impact pathways to European Sites have been identified and this policy is Screened Out as not requiring Appropriate Assessment.





Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
Policy CS15 Strategic Green Infrastructure	We will protect green infrastructure assets identified through our Green Infrastructure Strategy for their recreational, environmental, visual, and nature conservation value. This includes the Borough's sites of Special Scientific Interest; habitats which support Special Protection Areas/Ramsar; our nature reserves; wildlife sites; key biodiversity areas; and priority habitats. We will manage recreational impacts on those parts of green infrastructure network which are sensitive to recreational pressure. Where deficits have been identified, new facilities should be provided and enhanced in line with our Green Infrastructure Strategy. We will focus on enhancing the following Green Infrastructure assets: River Wreake and River Eye Strategic River Corridor; Jubilee Way; Melton Country Park; SUE Green Corridor; Grantham Canal; The Wolds Escarpment; Burrough on the Hill Country Park; and Newark to Market Harborough Disused Railway Line. We will maintain the spatial character and setting of the countryside which separates the following settlements to provide Green Wedges as part of our Green Infrastructure network: Melton Mowbray and Burton Lazars; Melton Mowbray and Thorpe Arnold;	Whilst this policy seeks to retain features of biodiversity value, the River Wreake Strategic River Corridor has been identified as a Key Green Infrastructure Asset. Enhancing recreation in this area could result in recreational pressures at Priory Water which may provide supporting habitats for qualifying bird species at Rutland Water SPA/Ramsar (see 'Supporting Habitat' Chapter 3). With the above in mind, this Policy CS15 is Screened In therefore requiring Appropriate Assessment



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
	Asfordby and Asfordby Valley;	
	Asfordby Hill and Asfordby Valley; and	
	Bottesford and Easthorpe.	
	We will set out precise boundaries for these areas in the Land Allocations and Settlement Boundaries Development Plan Document and the Sustainable Urban Extension Area Action Plan.	
	Where communities wish to prepare Neighbourhood Plans which include Green Wedges, we will require them to be part of a wider green infrastructure network based upon evidence.	
	All new development should seek to retain important green infrastructure elements such as:	
	Watercourses (including ditches);	
	Woodland, orchards, mature trees, hedgerows;	
	 Local and UKBAP Habitats and those supporting Local and UK BAP Priority Species; 	
	Access Routes (PROW and Permitted Routes);	
	Existing Public Green Space, including sports pitches; and	
	Areas of geological and archaeological interest	
	Where a loss of green infrastructure is unavoidable or impractical, off site provision should be provided and result in a net-gain in green infrastructure.	



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
CS16 Strategic Open Space	 We will meet the strategic open space needs of our community by 2026. We will do this by: Working in partnership to deliver: A 10ha extension of the Melton Country Park; Local Nature Reserve designation for those areas of the Melton Country Park which are of ecological value; Local Equipped Area for Play and Neighbourhood Equipped Area for Play provision at the Melton Sustainable Urban Extension; A 2ha allotment facility at the Melton Sustainable Urban Extension; Approximately 2ha park and garden facility at Bottesford; Approximately 0.5ha greenspace facility at Harby; and Appropriate LAP facilities at Wymondham, Great Dalby, Frisby on the Wreake and Stonesby. Seeking long term management and investment plans for existing or replacement facilities in partnership with The Town Estate, Leicestershire County Council, Parish Councils and other partners; and Responding positively to development which contributes to open space, sport and recreation provision identified through a Neighbourhood Plan or similar robust, community-led strategy. 	A number of policies have been screened in due to potential adverse effects through recreational pressure at Priory Water which may provide supporting habitats for qualifying bird species at Rutland Water SPA/Ramsar (see 'Supporting Habitat' Chapter 3). This policy could result in positive effects through attracting recreational pressure away from Priory Water to other sites such as Melton Country Park. As such, this policy has been Screened In to the Appropriate Assessment.



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)	
CS17 Sports Pitches and Playing Fields	 We will meet demand for sport pitches and playing fields by 2026. We will do this by: Seeking to retain our existing playing fields; Developing long term management and investment plans for existing or replacement facilities in partnership with Sport England, the relevant sports clubs their governing bodies, the Town Estate, Parish Councils and other partners; and Supporting our communities who wish to deliver sports pitches or playing fields through a Neighbourhood Plan or other community-led plan. 	This policy only affects sites within Melton and so, as such, is unlikely to have any direct effects on European Sites. In terms of supporting habitat within the Borough, Priory Water may provide supporting habitats for qualifying bird species at Rutland Water SPA/Ramsar. However, it is highly unlikely that the Priory Water site would be selected for sports pitch or playing field development, as it is in private ownership and actively managed for its ornithological interest. As such, this policy has been Screened Out and does not require Appropriate Assessment.	
CS18 Indoor Sport and Recreation Facilities	 We will meet demand for sport and recreation facilities by 2026. We will do this by: Seeking to retain our existing sports, recreation, swimming, community and village halls; Seeking the provision of a new recreation facility as part of a dual use primary school and community facility at the Melton Sustainable Urban Extension; Developing long term management and investment plans for existing or replacement facilities in partnership with Sport England, the relevant sports clubs, their governing bodies, the Town Estate, Parish Councils and other partners; and Supporting our communities who wish to deliver sports, community or village halls through a Neighbourhood Plan or other community-led plan. 	This policy only affects sites within Melton and so, as such, is unlikely to have any direct effects on European Sites. In terms of supporting habitat within the Borough, Priory Water may provide supporting habitats for qualifying bird species at Rutland Water SPA/Ramsar. However, it is highly unlikely that the Priory Water site would be selected for indoor sport or recreation facilities, as it is in the flood plain, in private ownership and actively managed for its ornithological interest. As such, this policy has been Screened Out and does not require Appropriate Assessment.	



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
CS19 Sustainable Development and Construction	We will adapt to and mitigate against the impacts of climate change by applying sustainable design principles and encouraging best practice in sustainable design and construction, unless it would make the development unviable. All new development proposals will be required to demonstrate how: Design mitigates and adapts to the likely effects of climate change; Effective use is made of resources and materials; Sustainable transport is promoted; Energy and water use are minimised; Decentralised and renewable or low carbon energy generation are, if feasible, incorporated; Design reflects current nationally prescribed sustainable building standards; The built and historic environment and the character of the countryside is protected; Building resources and materials will be used effectively to increase recycling on site and reduce the removal of waste to landfill Development should be phased to ensure sufficient water treatment capacity is available before development is complete; and, Excellent electronic communication networks are provided, where appropriate.	No conceivable pathway of effect has been identified with this policy. Policy CS19 is Screened Out therefore not requiring Appropriate Assessment



Policy	Key Fea	tures of Core S	Strategy Publication	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)		
CS20 Energy Supply	work tow targets: Wind (MW) 12 1 Cattle a 2 Solar p 3 Biomas We will a environn landscap We will a from on- feasible,	Anaerobic Digestion¹ (MW) 0.5 to 1 and pig slurry hotovoltaics and sign selection only allow new rement (including the period of the historic electron of the historic electron only allow new rement (including the period of the historic electron only allow new rement (including the period of the historic electron only allow new development of the historic electron only allow new	Straw and annual energy crops (MW) I micro wind water hearing and genewable developmente integrity of Europenvironment, communent proposals to see intralised sources whents of 10 or more	Building Integrated renewables² (MW electric) 12 ground source heatents which respectean sites and their nity, and other land their appropriate are dwellings, or other	their surrounding settings), the wider	This policy may result in wind turbine development within the Borough of Melton. Depending on the location, this may have the potential to disrupt the flight path of qualifying bird species in particular from Rutland Water SPA/Ramsar some of which are thought to fly through the Borough (see 'Supporting Habitat' Chapter 3). The policy also identifies the potential for dry biomass and biogas from cattle. In accordance with the Environment Agency any European Sites within 10km of a biomass emitter should be screened in for assessment. As Rutland Water SPA/Ramsar is located within 5km of the Melton Borough Boundary, depending on the location of further biomass emitters, there is a potential that atmospheric nitrogen deposition to affect Rutland Water SPA/Ramsar. (See 'Local Air Pollution, Chapter 3). This policy is therefore Screened In requiring Appropriate Assessment.



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)				
CS21	We will locate the majority of development on land with the lowest risk of	This policy seeks to avoid future flooding.				
Flood Risk	flooding (Zone 1). We will retain land at risk from flooding (Zones 2 and 3a) as multifunctional floodplains. Only in exceptional cases will we allow development to take place in Zones 2 and 3a where it can be demonstrated that:	Priory water is located on the floodplain of the River Wreake and may support qualifying bird species of Rutland Water SPA/Ramsar. This policy seeks to protect this site from flooding.				
	 Appropriate land at lower risk is not available or suitable and there are exceptional reasons for the development to take place in that location; and 	However the qualifying bird species at wetland birds and are unlikely to be affected				
	 The risk can be fully mitigated through careful design and engineering methods whilst ensuring that the development does not exacerbate flooding elsewhere in Melton or beyond our boundary. 	an increase in flooding was to occur. No conceivable pathway is identified. This policy is Screened Out therefore not				
	We will safeguard the Functional Floodplain (Flood Zone 3b). The only development we will allow will be water-compatible uses and essential infrastructure.	requiring Appropriate Assessment.				
	Detailed Flood Risk Assessments should be submitted to the satisfaction of the Environment Agency. The assessment should identify the necessary mitigation and adaptation measures which should:					
	Aim to avoid or mitigate the risk of flooding and harm from it;					
	Manage surface run off with no net increase in the amount of surface water above current Greenfield run off;					
	 Where appropriate include suitable habitat creation and not cause detriment to existing habitats or species; and 					
	Demonstrate how such measures form an intrinsic part of the overall development.					
	Wherever possible we will support proposals which reinstate the functional floodplain.					



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
CS22 Better Design	 We will ensure that the design of all development makes a positive contribution to Melton. Melton Mowbray, the individual villages and Melton's countryside will be places known for new developments of high quality and inclusive design. New development will be designed to: Promote high quality architecture which makes a positive contribution to the Borough and is locally distinctive; Integrate successfully into established settlements or rural areas without harming their character, appearance or setting; Make the most effective use of land having regard to the form, pattern, scale and character of the area; Provide safe environments and protect residential amenity; and Protect important heritage assets located within the Borough. We will assess proposals for new housing development of 10 or more dwellings against Building for Life standards. We will seek a "very good" rating (16 out of 20) under this guidance, unless it can be demonstrated that this is not viable for a specific site when weighed against the benefit of the development proposed. We expect Neighbourhood Plans to include design policies which reflect the architectural and design requirements of the area they cover and provide for the efficient use of land, reflecting their distinct and unique character. 	This policy seeks to make efficient use of land for development rather than encouraging growth. No conceivable pathway is therefore identified. This policy is Screened Out therefore not requiring Appropriate Assessment.
CS23 Melton Mowbray Sustainable Urban Extension	We will make a significant contribution to meeting our housing needs by 2026 through the delivery of a sustainable urban extension to the north of Melton Mowbray. We will identify land for around 1,000 new homes with supporting and strategic infrastructure. We require a comprehensive, integrated development, that is consistent with our Direction of Growth for a sustainable urban extension between Nottingham Road and	Development in Melton Mowbray and associated rise in population could result in water abstraction pressures. A potential water abstraction pathway has been identified to Humber Estuary SAC/Ramsar Humber Flats, Marshes and Coast SPA (See 'Water



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
	Melton Spinney Road.	Resources' in Chapter 3).
	The sustainable urban extension will:	The above could also contribute to a decline
	Create a balanced community and a safe, high quality and accessible environment;	in water quality of the River Trent which discharges to the Humber Estuary
	 Integrate development with the landscape and neighbouring areas to minimise community, landscape and visual impacts; 	SAC/Ramsar Humber Flats, Marshes and Coast SPA (See 'Water Quality' in Chapter 3)
	 Provide high quality green infrastructure within its site boundaries for multi functional recreation, sport, biodiversity, allotments and open space; 	Development and growth within Melton and associated rise in population, particularly the
	 Provide exemplars and demonstration projects in the design, management and operation of housing, public realm and green space; 	portion with a greater leisure and recreation time could have the potential to result in greater visitor pressures in the Rutland Water
	 Provide for a net increase in local biodiversity through the implementation of a biodiversity action and management plan; 	SPA/Ramsar site (see 'Recreational disturbance, Chapter 3).
	 Promote an integrated water management plan which seeks to reduce water consumption per household, minimise pollution from surface water run off; minimise environmental affects by protecting existing ponds and water courses; and establish a sustainable urban drainage strategy; 	This policy is Screened In , therefore requiring Appropriate Assessment.
	 Provide a range of housing size and type in accordance with policy CS5; 	
	 Provide a gypsy and travellers site as described in policy CS6; 	
	 Provide at least 10% of its energy requirements from on site decentralised renewable energy as prescribed in policy CS20; 	
	 Ensure the local historic built/landscape environment is protected and if possible enhanced; 	
	 Include a primary school with dual use community and recreational facilities; 	
	 Provide a local centre, including small scale retail and employment opportunities; 	





Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
	 Include provision to support waste reduction and promote recycling through neighbourhood waste management facilities; 	
	 Reduce reliance on private car use by increasing accessibility to local and town centre services and facilities by walking, cycling and public transport; 	
	 Contribute to the provision of a strategic east/west green infrastructure corridor; and 	
	Contribute to a new east/west link road to the north of Melton Mowbray linked to the phasing and delivery of housing.	



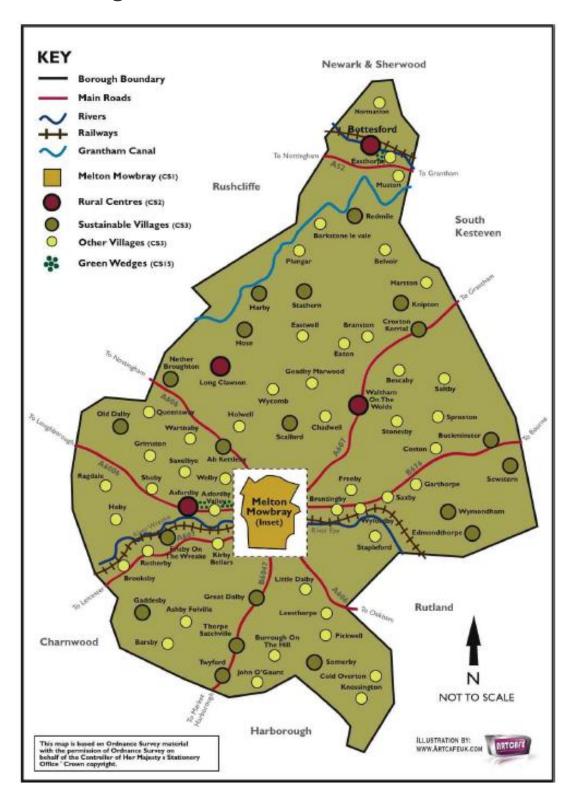
Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
CS24 Melton Mowbray Employment Growth Area	 We will deliver 14ha of high quality, sustainable employment land by 2026 and up to 30ha where it makes a strong contribution to our Vision and objectives as an Employment Growth Area to the West of Melton Mowbray. The Employment Growth Area will: Make a contribution to the provision of road infrastructure; Provide a stock of business accommodation to meet local employment needs. We want a mix of size, type and tenure of land and buildings, to include both speculative and "design and build" development. It needs to meet the needs of existing local businesses and new businesses moving in, particularly those in the growth sectors such as finance, high technology manufacturing and research; Be easily accessible and well-connected to public transport. The development should provide for high frequency bus services, cycle and walking routes to the town centre and residential areas. A travel plan will be required which encourages workers to use alternatives to single car-use; All spaces being safe, accessible and user-friendly; Be well integrated with the neighbouring area in terms of scale, density, layout and access. The new development must adjoin existing business areas and safeguard the amenities of existing residential areas; A significant proportion of the energy supply must be gained on-site and renewably and/or from a decentralised, renewable or low-carbon energy supply; Taking a design-led approach to the provision of car-parking space, which is well-integrated with high quality public areas, and a layout that is pedestrian, cycle and vehicle friendly; Creating a distinctive character that relates well to the surroundings and supports a sense of local pride and civic identity; and Provides for the retention or re-establishment of wildlife and natural habitat; and 	Growth in employment and associated economic development in Melton has the potential to place greater pressures on water resources. A potential water abstraction pathway has been identified to Humber Estuary SAC/Ramsar Humber Flats, Marshes and Coast SPA (See 'Water Resources' in Chapter 3). The above could also contribute to a decline in water quality of the River Trent which discharges to the Humber Estuary SAC/Ramsar Humber Flats, Marshes and Coast SPA (See 'Water Quality' in Chapter 3) Development and growth within Melton and associated rise in population, particularly the portion with a greater leisure and recreation time has the potential to result in greater visitor pressures in the Rutland Water SPA/Ramsar site (see 'Recreational disturbance, Chapter 3) Policy Area CS24 is Screened In therefore requiring Appropriate Assessment.
Melton Borough Core	Include provision to support waste reduction and promote recycling. Strategy HRA /AA Report January 2012	



Policy	Key Features of Core Strategy Publication Draft	Screening Decision (Amber cells are Screened In, Green Cells are Screened Out)
CS25 Delivering Infrastructure	By 2026 there will be significant progress towards the delivery of strategic infrastructure as set out in our Infrastructure Schedule and the direct, local impact of development proposals will have been mitigated through developer contributions. We will do this by: • Implementing the Community Infrastructure Levy to provide funding for strategic infrastructure needed to deliver growth and respond to known deficits; • Entering into legal agreements where it is necessary to mitigate against the direct local impact of a development proposal; • Entering into negotiations for "off site" (commuted) contributions only where it is not possible to mitigate local impacts through "on site" infrastructure contributions; • Relating the type, amount and phasing of contributions to the form and scale of the development, its potential impact on the site and surrounding area and the levels of existing infrastructure and community facilities; • Considering the financial viability of development for the application of a Community Infrastructure Levy and planning obligations; • Pooling commuted contributions prior to the implementation of the Community Infrastructure Levy for the delivery of strategic infrastructure where this is consistent with the Community Infrastructure Levy Regulations; • Establishing an Infrastructure Delivery Group, which includes representatives from partner organisations, to identify the need for new infrastructure and oversee its funding and delivery; and	This policy relates to the ways in which the Council will obtain contributions from developers to fund essential infrastructure needs in the Borough. As such, it has no development implications in and of itself, and has been Screened Out as not requiring Appropriate Assessment.



Appendix 2: Plan of Melton Borough showing towns and villages mentioned in text





Appendix 3: HRA/AA Consultation Responses

- Natural England (3rd January 2012)
 Natural England (28th July 2011)
 Newark and Sherwood District Council (1st August 2011)
 Severn Trent Water (17th August 2011)
 Priory Water Wildfowl Reserve (2nd October 2011)
 Rutland Water Visitor Operations Manager (4th October 2011)



Date: 3 January 2012

Our ref: 39949-Statement to Inform HRA Screening & AA of Melton Borough Council CS

Gail Quartly-Bishop URS Scott-Wilson By Email Consultation Service Hornbeam House Electra Way Crewe Business Park Crewe CW1 6GJ T: 0300 060 3900

Dear Gail,

Statement to Inform Habitat Regulations Assessment Screening and Appropriate Assessment of Melton Borough Council Core Strategy (Publication Draft)

Thank you for your consultation on the above, which was received by Natural England on 29 November.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Overall Natural England supports the findings of this HRA report. However, we recommend further investigation into the adverse effect that has been identified on the Humber Estuary SAC/Ramsar and Humber Flats, Marshes and Coast SPA.

Our detailed considerations are as follows:

Rutland Water SPA/Ramsar

The HRA report highlights potential adverse impacts as a result of recreational disturbance, disturbance from wind turbines and atmospheric nitrogen deposition from incineration. Natural England agrees with the identification of these potential impacts.

We support the mitigation proposed, which is in the form of policy safeguards. In summary:

- Amend the Biodiversity and Geodiversity policy to include a specific reference to Rutland Water SPA/Ramsar site and reflect this with a specific reference in the Core Strategy Monitoring Framework;
- Amend policy CS 15 Strategic Green Infrastructure to include more specific references to nature conservation value and habitats which support SPA/Ramsar. This point should also cover SAC, cSAC and pSPA, therefore the LPA could alternatively consider using the term European sites.
- Amend the supporting text for policy CS 15 Strategic Green Infrastructure to include points on the management of recreational impacts for sensitive parts of the GI network, with a specific reference to the LPA providing financial support for visitor management at Priory Water if required;
- Amend policy CS 20 Energy Supply to include specific references to European sites;
- Amend policy CS 20 Energy Supply to clarify the requirement for air quality assessments in relation to biomass/biomass proposals within 10km of Rutland Water SPA/Ramsar.

These amendments should be integrated into the Core Strategy.



Humber Estuary SAC/Ramsar & Humber Flats, Marshes and Coast SPA

The HRA report identifies the potential for discharges to the River Wreake to contribute to the water quality of the Trent/Ouse confluence, some 100km downstream. The report then states that avoiding an adverse effect on integrity (AEOI) is largely in the hands of the water companies and the Environment Agency and recommends generic mitigation around ensuring that sufficient water treatment capacity is available prior to developing. Whilst this approach is logical to a point, the LPA does need to have confidence that their Core Strategy can be delivered without having adverse effects on the Humber Estuary sites. Additional information is required in order to justify this reliance on the discharge licensing regime.

Given the distance between Melton Borough and the Humber Estuary sites (over 100km) with the dilution which will occur as a result of other inputs along the rivers, a conclusion of adverse effects on integrity is extremely precautionary. By building-in additional information and justification, it may be possible to conclude no adverse effects on integrity.

We advise that your HRA includes further information on the current and future discharge licensing scenarios. This should include information on whether Melton's development aspirations can be delivered within existing discharge licences, or whether extensions to licences or new point source discharges would be required. This information should be available from the Environment Agency and the water company. In particular, we advise that you contact the Environment Agency regarding their Review of Consents (RoC). The EA's RoC should have considered the potential impacts of existing discharge licences on European sites, when used to their full capacity. If adverse effects on integrity were identified, then changes should have been made to avoid the identified impact. Therefore if the proposed development can be accommodated within existing licence headroom, the EA's RoC gives the LPA confidence that the Core Strategy would not result in adverse effects on the integrity of the Humber Estuary European sites.

If Melton's development would require extensions to existing licences or new point source discharges, further consideration would be required in order to provide confidence that the development proposed could be delivered without resulting in adverse effects on integrity, or that the potential AEOI identified could be avoided through tailored mitigation.

The HRA report currently proposes mitigation in the form of amending policy CS 20 Sustainable Development and Construction to state "Development should be phased to ensure sufficient water treatment capacity is available before development is complete". Phasing development would only provide a useful means of mitigation in situations where it would allow improvements necessary to avoid adverse effects on integrity to take place; for example, fitting filters to remove phosphates. The EA or the water company should be able to provide information on any specific improvements which are planned/required. If the LPA has information which shows that additional improvements are due to take place within the Core Strategy timeframe then this will provide evidence to support their conclusions, and therefore a phased housing approach, which the Core Strategy must ensures ties in with the water treatment improvement programme.

Other points

Paragraph 7.2.2 contains a small mistake, in that it states that four policies are not considered to be sufficiently compliant with the Habitats Directive but then only lists three policies. I hope that this response is of assistance.

For any correspondence or queries relating to this consultation only, please contact Hayley Pankhurst using the details given below. For all other correspondence, please contact the address above or email consultations@naturalengland.org.uk.



From: Harrison, Caroline (NE) [mailto:Caroline.Harrison@naturalengland.org.uk]

Sent: 28 July 2011 13:01

To: Leila Payne

Subject: FW: 2011-07-28 27427 Melton Borough Core Strategy (Melton)

Dear Leila

Thank you for forwarding on the Figure 1 draft relating to Natura 2000 sites around Melton Mowbray. I believe you have covered all sites designated.

However, I would like to draw your attention to a situation that is currently under review, and that is a possible PSPA – this is not designated at present, in Nottinghamshire (Sherwood Forest area). I have attached a statement produced by Natural England and also a map of the area identified by Notts Wildlife Trust which was presented at a recent public enquiry.

You may want to contact Newark and Sherwood District Council who have recently produce their HRA including the possible PSPA with the documentation.

I hope this is of help to you and should you require any further information, or would like to meet and discuss further, please do not hesitate to contact me.

Kind regards

Caroline

Please find attached a Natural England consultation form, which I would appreciate you completing please

Kind regards Caroline

Caroline Harrison
Planning and Conservation Adviser
Land Use - Midlands Team
Natural England
Block 7, Government Buildings
Chalfont Drive
Nottingham
NG8 3SN

Tel: 0300 0600730 Mob: 07900 608041

From 1 April please send consultations to Natural England by email to consultations@naturalengland.org.uk. Or, if it is not possible to consult us electronically then consultations should be sent to the postal address below.

Natural England
Consultation Service
Hornbeam House
Electra Way
Crewe Business Park
Crewe
Cheshire



CW1 6GJ

Please be advised that we will respond to your query within our statutory response timeframe and Customer Service standards .

If you are a Local Planning Authority and this request is in relation to Development Management, we will respond within 21 days from the receipt of your email. If it relates to Forward Planning, we will respond to your query within your specified timeframe.

If you are a member of the public, we will respond to your query within 10 working days from receipt of your email.

www.naturalengland.org.uk

We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

In an effort to reduce Natural England's carbon footprint, I will, wherever possible, avoid travelling to meetings and attendvia audio, video or web conferencing.

From: Leila Payne [mailto:] Sent: 07 July 2011 13:19 To: Consultations (NE)

Subject: NE Consultation for HRA Screening Melton Borough Core Strategy

Dear Sir/Madam

URS Scott Wilson has been commissioned to undertake and HRA Screening of Melton Borough Core Strategy. As the first step of the 'Evidence Gathering' stage we have identified a 'Long List' of European Sites within and outside of the Core Strategy Plan area that have the potential to be affected. As part of our methodology, our preliminary consultation includes consult with yourselves regarding this 'Long List' and our proposed outline methodology for undertaking the HRA assessment.

I have attached our draft Figure 1 which indicates all Natura 2000 sites within an approximate 40km distance from Melton which have been considered for the assessment. It should be noted that there are no Natura 2000 sites with the Core Strategy Area itself, as such we have considered potential pathways to Natura 2000 sites outside of the plan area relating to air quality, direct disturbance, loss of supporting habitat and hydraulic connections. As such we propose that the HRA be focused on the following Natura 2000 sites:

- Rutland Water SPA/Ramsar Located between 10-20km south east of Melton Borough Boundary. It is conceivable that qualifying bird species could be affected by development within the Borough Boundary
- Grimsthorpe SAC
 Located 15km east of Melton Borough. Designated for Annex 1 habitats and botanical species
- Barnack Hills and Holes SAC
 Located just over 20km south east of Melton, designated for its Annex 1 habitats
- Baston Fen SAC



Located just over 20km south east of Melton, designated for its spined loach (Annex II species)

River Mease SAC
 Located approximately 30km west of Melton Borough, designated for its Annex II species (spined loach and bullhead). Further investigation is proposed relating to hydraulic connections to Melton.

Consideration has been given to all other Natura 2000 sites within a 40km distance from Melton (as indicated in Figure 1), however we are currently minded to scope them out from further assessment due to no conceivable pathway being identified. We are also working with Melton Borough Council to identify future water abstraction sources, consideration will be given to any additional Natura 2000 sites that arise as a result of this.

We are not aware of any pSPA pRamsar or cSAC within a 40km radius from Melton Borough Area. Please let me know if there are any such sites, so that these may be considered in our assessment.

I have also cut and paste an extract our proposed methodology at the bottom of this email. This is in accordance with principles outlined by the Department for Communities and Local Government (DCLG) issued guidance (2006) 'Planning for the Protection of European Sites: Appropriate Assessment of Regional Spatial Strategies and Local Development'.

I would be grateful if you could confirm the 'Long List' of Natura 2000 sites outlined for this assessment, and our proposed methodology is reasonable and appropriate to this HRA Screening assessment.

We anticipate the draft HRA report to be completed on 22nd August 2011. We will issue this to yourselves and the Environment Agency for comments.

Please let me know if you have any further queries.

I would grateful for your response within 21days of receipt of this email (by Thursday 28th July 2011) so that your comments can be incorporated in our assessment.

Best Regards

Leila Payne

Ecologist CEnv MIEEM AIEMA URS/Scott Wilson I Environment and Natural Resources Sector Brunel House, 54 Princess St, Manchester, M1 6HS, United Kingdom

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From: matthew.tubb@newark-sherwooddc.gov.uk [mailto:matthew.tubb@newark-sherwooddc.gov.uk]

Sent: 01 August 2011 13:05

To: Leila Payne

Subject: RE: Possible prospective SPA

Hi Leila,

Yeah that's fine with me.

Thanks,

Matthew

Matthew Tubb
Planning Officer (Policy)
Planning Policy and Landscape
Planning Services
Newark & Sherwood District Council
01636 655850

From: Leila Payne [mailto:Leila.Payne@scottwilson.com]

Sent: 01 August 2011 12:50

To: matthew tubb

Subject: RE: Possible prospective SPA

Thank you Mattew, your email and attachment are useful.

I note the areas are over 20km from Melton. I'll include a broad consideration of the prospective SPA in the report, and reference the WSP report and communication with yourself if that's ok?

thanks

Leila

From: matthew.tubb@newark-sherwooddc.gov.uk [mailto:matthew.tubb@newark-sherwooddc.gov.uk]

Sent: 01 August 2011 10:03

To: Leila Payne

Subject: RE: Possible prospective SPA

Dear Leila,

The issue of the possible PSPA arose through a Public Enquiry regarding a planning application in Rainworth and it relates to the Sherwood Forest habitats of Wood Larks and Nightjars. Nottinghamshire Wildlife Trust believes that large areas of land in the West of the District could be considered for SPA status but my understanding, and I'm sure that Caroline has mentioned this, is that Natural England are of the opinion that as no pSPA or SPA has been identified that the Habitats Regulations do not currently apply.

We don't know what the exact extent of any SPA or what the requirements for protection of the habitat would be, so alongside the Habitats Regulation Screening work that the District Council has undertaken for the Birklands & Bilhaugh SAC, a 'Risk Assessment' was also undertaken on the Core Strategy's Policies to identify any potential issues which may arise if a SPA for Woodlark and Nightjar was to become a 'Potential' designation. This work also informed the development of a specific policy in the publication version of the Core Strategy (Core Policy 12B Prospective Special Protection Area) which set out that we would review appropriate elements of our LDF to check whether there were any conflicts between the



policy approaches and the designation and if so that we would seek to resolve those as soon as was practical.

However the Inspector leading our Core Strategy Examination struck Core Policy 12B out of the plan, and was of the opinion that whilst it was right that the Habitats Regulation Screening to take the prospective SPA into account in informing the development of the Core Strategy that it was not necessary to have the Core Policy within the plan. This was due to the area having not been identified by Natural England, the possible extent and protection requirements not being known, the selection process with the EU having not been commenced and that the Core Policy merely committed the Council to actions which we would have to undertake any way if the SPA was identified.

I have attached a copy of the HRA of the Publication Core Strategy for you.

Kind regards,

Matthew

Matthew Tubb
Planning Officer (Policy)
Planning Policy and Landscape
Planning Services
Newark & Sherwood District Council
01636 655850

From: Leila Payne [mailto:Leila.Payne@scottwilson.com]

Sent: 29 July 2011 10:57

To: matthew tubb

Subject: RE: Possible prospective SPA

Hello Matthew

Thank you for getting back to me.

I'm undertaking an HRA Screening of the Melton Core Strategy on behalf of Metlon Borough Council. In consultation with Natural England, Caroline Harrison drew my attention to a a possible PSPA – which is not designated at present, in Nottinghamshire (Sherwood Forest area). She asked me to contact someone within Newark and Sherwood District Council as I understand an HRA has recently been produced including possible PSPA with the documentation.

In particular I'm interested in:

- Site boundary/map
- qualifying features
- conservation objectives
- current management of the area.

Do you have this information?

Best Regards

Leila Payne

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From: matthew.tubb@newark-sherwooddc.gov.uk [mailto:matthew.tubb@newark-sherwooddc.gov.uk]

Sent: 28 July 2011 15:37

To: Leila Payne

Subject: Possible prospective SPA

Dear Leila,

I believe that you spoke to one of my colleagues earlier regarding the possible prospective SPA in the Sherwood area. Unfortunately I've not got a number to call you on to discuss this but if you could let me know what information you require I'm sure that I'll be able to assist you.

Regards,

Matthew

Matthew Tubb
Planning Officer (Policy)
Planning Policy and Landscape
Planning Services
Newark & Sherwood District Council
01636 655850



From: Tim and Andrea [mailto:tim.goodlife@virgin.net]

Sent: 02 October 2011 00:30

To: Leila Payne

Subject: Re: Priory Waters - summary of existing recreational pressures

Hello Leila

Everything seems fine to me except that I got my bearings wrong and the problems are on a privately owned field to the south not the north as I told you on the phone, my mistake.

Also my concern was with additional planting rather than fencing along the southern shore that might interupt the skyline for the birds.

Otherwise I am happy to agree with your report.

Many thanks for your interest, If I can help you any further please do not hesitate to call.

Tim

---- Original Message -----

From: Leila Payne
To: Tim and Andrea

Sent: Friday, September 30, 2011 2:06 PM

Subject: Priory Waters - summary of existing recreational pressures

Hello Tim,

Please could you confirm that this is an accurate understanding of our telephone conversation:

Priory Waters is a private reserve which is not open to the public, however there is a footpath that runs through the reserve (the causeway). There is an existing pressure of dog walkers disturbing large numbers of wading birds, in particular wigeon when using the footpath. Recent efforts to plant a willow screen along both sides of the footpath through the causeway seems to have reduced this impact, however the willow screen is not dog proof, and dogs do still occasionally access the reserve and disturb bird species. There is a privately owned field to the north, and there have also been cases of dog walkers disturbing bird species when accessing the site at this end through e.g. throwing sticks into the waters.

It is fair to say that recreational users of adjacent footpaths cause an existing pressure on bird species within priory water. Should recreational use of the surrounding footpaths increase, this pressure may also increase. There may be scope reduce this pressure through greater visitor management including an increase in fencing and signage and potentially more screen planting. Such measures would need careful consultation with the reserve managers in order to be successful. Installing too much fence may reduce the value of the site for bird species by reducing their 360 view around the site. Previous signage asking footpath users to keep off the site has been vandalised so a new approach would be required (perhaps different types/tone of signage?). Additionally private land owners to the north would need to agree to any visitor management measures affecting his land.

If you are happy with this summary I will reference our correspondence in the HRA/AA report, along with your contact details.

If you have any other comments/queries please do not hesitate to contact me

Best Regards

Leila Payne

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From: Walker, Helen [mailto:Helen.Walker@severntrent.co.uk]

Sent: 17 August 2011 15:11

To: Davies, Peter Cc: Leila Payne

Subject: RE: Melton Borough Council - Potable and Waste Water

Hi Leila

We are in the process of finalising the draft report which should be published in the next 2-3 months which will include the updates made due to consultation on the document. I am not sure how this fits with your timescales but if not then you are ok to continue with using the draft report and referencing it but it will be finalised shortly

Many Thanks Helen Walker Demand Analyst Water Strategy

Email: helen.walker@severntrent.co.uk

From: Peter.Davies@severntrent.co.uk [mailto:Peter.Davies@severntrent.co.uk]

Sent: 15 August 2011 13:27

To: Walker, Helen

Subject: Fw: Melton Borough Council - Potable and Waste Water

Hi Helen,

Could you please confirm that we have no objections to Leila making reference to the draft HRA as mentioned below.

Many thanks,

Peter Davies

Senior Commercial Development Advisor

Severn Trent Water (07771 938817

- * peter.davies@severntrent.co.uk
- * growth.development@severntrent.co.uk

----- Forwarded by Peter Davies/CommServ/STW/STPLC on 15/08/2011 13:21 -----

Leila Payne

<Leila.Payne@scottwilson.com>To 15/08/2011 13:01

"Peter.Davies@severntrent.co.uk" <Peter.Davies@severntrent.co.uk>

CC

Subject RE: Melton Borough Council - Potable and Waste Water

Hi Peter

Thank you for the CD, I received it this morning and have been working through the document.



Some of the conclusions are very valid to the HRA Screening of the Melton Core Strategy and I would like to reference them if possible. This is with respect to the European Sites that may be affected by updates to the East Midlands WRZ (which provides water for Melton).

Can I reference this 'draft' report? I presume the conclusions are unlikely to change?

thanks

Leila Payne
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Leila Payne <Leila.Payne@scottwilson.com> Leila Payne <Leila.Payne@scottwilson.com> 11/08/2011 12:37

Tο

"Peter.Davies@severntrent.co.uk" <Peter.Davies@severntrent.co.uk>

CC

"smark@melton.gov.uk" <smark@melton.gov.uk>

Subject

Re: Melton Borough Council - Potable and Waste Water

Hello Peter

Shaza has forwarded this onto me. I am completing the HRA Screening of the Melton Core Strategy so thank you for the information.

I have been looking through the Severn Trent WRMP (June 2010) pdf which states:

As good practice, we have taken the WRMP through the process that would be required for a stage 1 screening Habitats Regulations Assessment (HRA). The HRA screening report is available separately and accompanies this WRMP document.

The HRA has identified that based on the current level of detail available for the final WRMP schemes, it is unlikely that there will be any significant impact on Natura 2000 or Ramsar sites. However, all schemes that were identified within the HRA screening process as having the potential to have a significant effect will be subject to further screening at project design to determine whether, based on the additional design information, the scheme could have a likely significant effect. Any scheme that could have an adverse effect on the integrity of a European or International site will not be in accordance with the objectives of our WRMP and will not be taken forward.

http://www.stwater.co.uk/upload/pdf/Final WRMP 2010.

I have been unable to locate the HRA Screening Report that accompanies the WRMP document, are you



able to send it to me?

Best Regards

Leila Payne

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From: Shaza Mark [mailto:smark@melton.gov.uk]

Sent: 11 August 2011 12:32

To: Leila Payne

Subject: FW: Melton Borough Council - Potable and Waste Water

Leila

Please see below an email from Peter Davies (Severn Trent) regarding water abstraction.

Please let me know if you require any further, more specific information. Or alternatively, please contact Peter directly.

Kind regards

Shaza

From: Peter.Davies@severntrent.co.uk [mailto:Peter.Davies@severntrent.co.uk]

Sent: 11 August 2011 12:13

To: Shaza Mark

Subject: Re: Melton Borough Council - Potable and Waste Water

Shaza,

My apologies for not getting back to you before now. In answer to your questions:-

· Where does Melton Currently obtain its potable water from?

The supply to Melton originates from surface water sources in South Derbyshire and treated at the Melbourne Water Treatment Works. From the works treated water is distributed to the Melton area and stored in service reservoirs that serve the Melton area at Ab Kettleby, Scalford Road and Burrough Hill.

· Is the location likely to change in the future?

Melbourne Treatment Works is not likely to change as a source of supply, however due to operational reasons there may be changes from time to time that may determine the service reservoir certain areas of Melton are supplied from.

· Where do the Waste Water Treatment Works that serve Melton Discharge to? The receiving water course is the River Wreake.

I hope the above information is sufficient for you.



Regards,

Peter

Peter Davies Senior Commercial Development Advisor Severn Trent Water

(07771 938817

* peter.davies@severntrent.co.uk

^{*} growth.development@severntrent.co.uk



From: Leila Payne

Sent: 04 October 2011 15:54 **To:** 'kAppleton@anglianwater.co.uk'

Subject: Re: Query on Rutland Water Visitor Management Strategy (to inform Melton Core Strategy HRA)

[Filed 04 Oct 2011 15:54]

Thanks Kevin - this change has been implemented

Best Regards

Leila Payne

From: Appleton Kevin [mailto:kAppleton@anglianwater.co.uk]

Sent: 03 October 2011 18:05

To: Leila Payne

Subject: RE: Query on Rutland Water Visitor Management Strategy (to inform Melton Core Strategy HRA)

Leila, Sorry but we have just found an error in the detail on dogs.

Can you amend the section again to read.

 2, Dogs: To safeguard qualifying bird species (as well as grazing sheep) dogs are not permitted in the nature Reserve areas at all. Dogs are permitted at Rutland Water provided they are kept under control on a lead and covered under the Water Park Bylaws. A designated dog walking area is provided at Sykes Lane where dogs are permitted to run free.

Thanks

Regards Kevin Appleton Visitor Operations Manager Tel: 01572 653017

Mobile: 07801 680137 Mobex: 811780

From: Leila Payne [mailto:Leila.Payne@scottwilson.com]

Sent: 03 October 2011 16:32

To: Appleton Kevin

Subject: RE: Query on Rutland Water Visitor Management Strategy (to inform Melton Core Strategy HRA)

Thank you Kevin,

I've written the following section for inclusion within the HRA/AA report based on our conversation this morning, and the management plan you sent through. Could you please confirm by return that I have understood correctly? (please add/change any text you wish)

I have referenced our communication as

Pers Comms Kevin Appleby (Anglian Water Visitor Operations Manager) 3rd October 2011

Best Regards

Leila Payne



In order to evaluate current visitor management at Rutland Water and the capacity for the site to accommodate additional visitors and future recreational pressure, the Rutland Water Management Plan^[1] was reviewed and further consultation was undertaken with Rutland Water Visitor Operations Manager^[2]. The following measures are currently in place to manage visitors at Rutland Water (some of which are illustrated in Figure 4 taken from the Rutland Water Management Plan):

- Spatial zoning of recreational activities: The more sensitive areas of the site for qualifying bird species are located to the west and based around Egleton and Lyndon Nature Reserves (jointly managed by the Leicestershire and Rutland Wildlife Trust). Passive ecologically based recreational activities including bird hides are permitted in this area.. Active recreational activities that are most likely to disturb qualifying bird species (e.g. sailing, dog walking, fishing, children's play area, Rutland Belle boat ride and the surfaced track (to encourage more walking etc)) is based around the eastern side of Rutland Water. The peak time for these activities is during the summer months. During other times of year, when bird numbers are at their peak, birds are noted using other areas of Rutland Water in greater numbers.
- Dogs: To safeguard qualifying bird species (as well as grazing sheep) dogs are not allowed on the Egleton side of the Reserve. At Lyndon, dogs are allowed, but they must be kept on a lead. Dogs are permitted and encouraged to use the western areas of Rutland Water.
- Permits: Visitor permits are required to visit Lyndon and Egleton Nature reserves and access the 27 bird hides (which includes car parking costs). This cost is currently £5.20 adults, £12.60 family tickets. This cost serves to limit visitor numbers within the sensitive areas of the site and encourage visitors to use the western areas.
- Screening: Visitors within the Lyndon and Egleton Nature reserve effectively screened to minimise disturbance to bird species. Walkways between bird hides are screened with vegetation planting, and bird hides themselves are hidden within the landscape. Access is not permitted beyond the walkways and bird hides)
- Consultation: The sensitive areas of the reserve are managed in consultation with Anglian Water, Natural England, the Environment Agency, and the Leicestershire and Rutland Wildlife Trust. Ongoing monitoring of the effectiveness of visitor management on reducing disturbance to qualifying bird species is in place.

These measures manage the effects of recreational disturbance on qualifying bird species within Rutland Water SPA/Ramsar. This is confirmed by the findings of the HRA of the Anglian Water Wetland creation scheme which found that the use of hides and the reduced number of visitors during weekdays made the disturbance of wildfowl by simple human presence a scarce event. Recreational fishing also had a very limited impact through the longstanding restriction of boats from the western end of Rutland Water^[3].

Personal communication with the Rutland Water Visitor Operations Manager^[4] identified that that is an estimated 70-80,000 visitors per year to Egleton and Lyndon Nature, and that current approaches to visitor management could allow this number to increase without a detrimental effect on qualifying bird species.

^[1] Anglian Water (2009-2014) Rutland Water Management Plan

Pers Comms Kevin Appleby (Anglain Water Visitor Operations Manager) 3rd October 2011

^[3] RPS (2005) Rutland Water Mitigation Scheme: A Study to inform Appropriate Assessment

^[4] Pers Comms Kevin Appleby (Anglain Water Visitor Operations Manager) 3rd October 2011



From: Appleton Kevin [mailto:kAppleton@anglianwater.co.uk]

Sent: 03 October 2011 12:07

To: Leila Payne

Subject: RE: Query on Rutland Water Visitor Management Strategy (to inform Melton Core Strategy HRA)

Leila.

As per our phone conversation I have attached the Rutland management plan. If you have any questions then please let me know.

Regards Kevin Appleton Visitor Operations Manager Tel: 01572 653017

Mobile: 07801 680137 Mobex: 811780

From: Leila Payne

Sent: 25 August 2011 14:56

To: 'kAppleton@anglianwater.co.uk' **Cc:** 'jWilliams@anglianwater.co.uk'

Subject: Rutland Water Visitor Management Strategy (to inform Melton Core Strategy HRA) [Filed 25 Aug

2011 14:56]

Hello

I've been given your names by one of your colleagues as the best person to help me.

I've been commissioned by Melton Borough Council to undertaken a Habitat Regulations Assessment (HRA) on their forthcoming Core Strategy. This assessment involves identifying European Designated Sites that could be affected by forthcoming policies. Rutland SPA/Ramsar has been identified as being potentially sensitive to rise in visitor numbers and associated disturbance to qualifying bird species. To investigate the situation further, quantify this risk and identify appropriate mitigation strategies, I'm hoping you could send me your Rutland Water visitor management strategy or recreation strategy (if equivalent documentation that details how visitors are managed at Rutland Water. I am particular keen to know:

- How visitor numbers are managed (e.g. is there a limit in the car park numbers? access/permit requirements to visit certain sensitive areas of the site?)
- How visitor access to sensitive areas are managed (e.g. zoning?, access restrictions?)
- How visitor access I managed during sensitive times of year
- Any measures in place to protect birds from visitors (e.g. I see no dogs are allowed in certain areas?)

I understand from the JNCC website that current management of the site includes reservoir zoning, and I understand from Julia (one of your colleagues) that visitor are prohibited from entering the reserve itself. I am unsure what that area means with respect to the SPA/Ramsar site. Having had a quick look online I see that visitor permits are required to enter certain areas Lyndon and Egleton (but I am unsure how these correlate to the European Protected Area)

I'd be grateful for any help or information to inform this assessment.



Jake I've copied you in as I understand Kevin is on leave and you may know the answer to some of these questions?

Best Regards

Leila Payne

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Appendix 4: Traffic data extract

The following data have been extracted from AECOM (2011) LLITM: Melton Mowbray Core Strategy.

Peak AM



Peak Pm

10	A606 Burton Rd, south of Victoria St	501	478	-23	-5%	520	514	-6	-1%
11 A606 north of Burton Lazars		527	497	-30	-6%	578	528	-50	-9%
13	A6006 east of Rudbeck Avenue	425	409	-16	-4%	705	616	-89	-13%

Interpeak

A606 Burton Rd, south of Victoria St	426	415	-11	-3%	455	443	-12	-3%
A606 north of Burton Lazars	376	360	-16	-4%	474	455	-19	-4%
	_					_		
A6006 east of Rudbeck Avenue	459	406	-53	-12%	475	425	-50	-11%
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