

# Rutland Local Plan Review Issues & Options

# **Habitat Regulations Assessment**

# **Screening Report**



November 2015

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#### 1. Introduction

- 1.1 Rutland County Council (RCC) is undertaking a review of the adopted Rutland Local Plan. The purpose of this screening report is to determine if implementation of the emerging options, and Local Plan, will result in any likely significant effects (LSE) on a European site (either on its own or 'in combination' with other plans or projects). The outcome of the screening report will identify if further assessment is required in accordance with Article 6(3) of the EU Habitats Directive and Regulation 61 of the Conservation of Habitats and Species Regulations 2010 (as amended).
- 1.2 A Habitat Regulation Assessment (HRA) is required if it is deemed that likely negative significant effects may occur on protected European Sites (Natura 2000 sites) as a result of the implementation of a plan/project. As a general 'rule of thumb' sites with pathways of 10-15km of the plan/project boundary should be included with a HRA. The following European sites are located either within the County or within 15km the County boundary:
  - Rutland Water Special Protection Area (SPA) / Ramsar (within County),
  - Barnack Hills & Holes Special Area of Conservation (SAC) (~5.4km from county boundary), and
  - Grimsthorpe SAC (~5.9KM from county boundary).
- 1.3 The legislative background is referred to in Section 2, which outlines the regulations that require the need for this screening exercise. Section 3, provides a screening assessment for the Local Plan strategic options, assessment of likely significant effects and assessment of cumulative (in combination) effects.
- 1.4 The first part of the report will cover the screening process for the HRA. A summary of findings and conclusions can be found in Section 4 at the end of this document.

# 2. Legislative Background

### Habitat Regulation Assessment (HRA)

- 2.1 It is required by article 6 (3) of the EU Habitats Directive and by regulation 61 of the Conservation of Habitats and Species Regulations 2010 (as amended) that an appropriate assessment is carried out with regard to the Conservation Objectives of the European Sites and with reference to other plans and projects to identify if any significant effect is likely for any European Site.
- 2.2 To fulfil the legal requirements to identify if likely significant effects will occur with the implementation of the Local Plan upon the European Sites (Natura 2000 sites) a screening assessment has been undertaken in Section 3 of this report.

# 3. HRA Screening

#### HRA process

- 3.1 The initial stage of the HRA process is called the screening stage and determines if there are any likely significant effects possible as a result of the implementation of the plan with reference to other plans or projects, for any European site. It is only if a 'significant effect' is likely that the need for an Appropriate Assessment of the emerging Local Plan would be triggered.
- 3.2 The screening process should provide a description of the plan and an identification of the Natura 2000 sites which may be affected by the plan and assess the significance of any possible effects on the identified sites.

# The Rutland Local Plan Review

- 3.3 The Local Plan Review will extend the time period of the existing plan to 2036. Reasons for reviewing the plan include:
  - To extend the plan period to 2036 in order to ensure that there will be a 15 year time horizon as recommended in National Planning Policy Framework the (NPPF);
  - To provide for additional housing, employment and other development that will be required to met future needs over the extended plan period;
  - To bring the plan up to date and to reflect new issues that have arisen since adoption of the Council's current Development Plan Documents (DPDs);
  - To reflect changes to national planning policy and guidance;
  - To combine a number of existing DPDs into a single Local Plan as recommended in the NPPF; and
  - To take in to account the preparation of a number of neighbourhood plans in Rutland.

#### Relevant Natura 2000 sites

- 3.4 Rutland Water SPA/RAMSAR, Barnack Hills & Holes SAC and Grimsthorpe SAC are internationally designated sites within a 15km radius of the County boundary. Therefore the HRA screening assessment needs to identify if any likely significant effects will result from implementation of the strategic options and emerging Local Plan.
- 3.5 The locations of the sites in relation to Rutland are shown in figure 1 below.

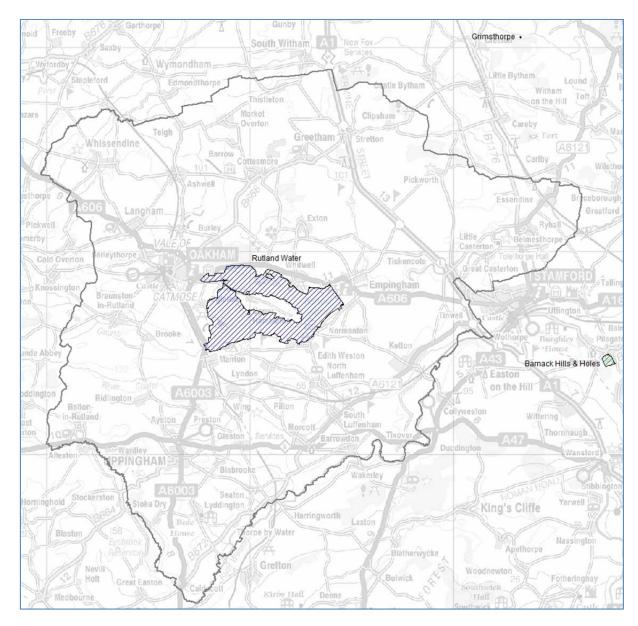


Figure 1: Locations of the relevant Natura sites, in relation to Rutland

3.6 Interest features, sensitivities and threats are included in the table below:

Table 1: Features of Rutland Water SPA/RAMSAR; Barnack Hills & Holes SAC; and Grimsthor	pe SAC
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Site	Interest Features	Sensitivities/vulnerabilities
Rutland Water SPA	Qualifies under Article 4.2 by supporting populations of European importance of the following migratory species over winter:         • Shoveler Anas cypeta         • Teal Anas crecca         • Wigeon Anas Penelope         • Gadwall Anas strepera         • Tufted Duck Aythya fuigulta         • Goldeneye Bucephala clangula         • Mute Swan Cygnus olor         • Coot Fulica atra         • Goosander         • Mergus merganser         • Great Crested Grebe Podiceps cristatus         Qualifies under Article 4.2 by regularly supporting at least 20,000 waterfowl.         Ramsar criterion 5 – Assemblages of international importance         Species with peak counts in winter:         • 19274 waterfowl (5 year peak mean 1998/99-2002/2003         • Ramsar criterion 6 – Species/populations occurring at levels of international importance.         Qualifying species         • Gadwall Anas streera,         • Northern shoveler Anas clypeata	<ul> <li>The most notable species are the populations of gadwall and shoveler (it is likely that all other species will be removed from the site citation (other than as Assemblage species) by the SPA Review, when adopted).</li> <li>Data on the use of the site by these species indicate that gadwall and shoveler numbers peak in the autumn, generally around September/October, before declining over the winter period. This suggests that Rutland is mainly used as a refuge whilst species are moulting in early autumn, before dispersing from the site to other wintering areas as winter progresses.</li> <li>During the winter, gadwall and shoveler occupy more extensive open waters of lakes, reservoirs and gravel pits. Threats include disturbance and water pollution. The principal sensitivities and vulnerabilities of Rutland Water therefore include:</li> <li>Water Quality: the level of phosphate can vary above the recommended level at certain times of the year. This increases the risk of a shift in the trophic status of the water body to an algae dominated system, which would adversely affect the site;</li> <li>Water Level: the water level is linked to abstraction and affects accessible aquatic plants for wildfowl feeling on the site. The ecological perturbation that frequent lowering and raising of water levels causes could be an important factor in whether or not a switch in trophic status occurs.</li> <li>Recreation: management of the trout fishery has caused some debate over potential effects on site ecology. In addition, water sports such as sailing have the potential to affect the site through disturbance. Casual recreation around the site margins may also affect some interest features. The</li> </ul>

Site	Interest Features	Sensitivities/vulnerabilities	
		site and the interest features are most likely to be vulnerable to disturbance during the key autumn period.	
Barnack Hills and Holes SAC	<ul> <li>Annex I habitats that are a primary reason for selection of this site:</li> <li>Semi-natural dry grasslands and scrubland facies: on calcerous substrates (Festuco-Brometalia) (important orchid sites)</li> </ul>	Barnack Hills and Holes SAC is primarily designated for its dry calcareous grasslands, which support a wide range of orchids. The site represents orchid-rich grassland in the northern part of its range, on limestone rather than on chalk. The principle vulnerability of the site is inappropriate management, and therefore there will be few (if any) effects that are likely to operate at the distances involved (at least 5km from the county boundary), particularly given the absence of pathways.	
Grimsthorpe SAC	<ul> <li>Annex I habitats present as a qualifying feature: <ul> <li>Semi-natural dry grasslands and scrubland facies; on calcerous subtrates (Festuco-Brometalia)</li> </ul> </li> <li>Annex II species that are a primary reason for selection of this site: <ul> <li>Early gentian Gentianella anglica</li> </ul> </li> </ul>	Grimsthorpe is the most northerly outpost for early gentian Gentianella anglica, with 2-3 colonies totaling several hundred plants in old oolitic limestone quarries. The site will be primarily vulnerable to direct effects, mainly inappropriate management, and therefore there will be few (if any) effects that are likely to operate at the distances involved (at least 5km from the county boundary), particularly given the absence of pathways.	

#### The Rutland Local Plan Review

- 3.7 The growth agenda for Rutland identifies that the area should accommodate an average of 173 dwellings per year over the next 21 years (2015-2036) (as set out within the Strategic Housing Market Assessment). Sites may need to be allocated for about 1,620 new homes in the Local Plan and/or Neighbourhood Plans to meet the requirement, taking into account existing allocations, windfall allowance and dwellings which are under construction or have planning permission. The need for additional employment and retail land allocations to meet future requirements to 2036 will also be considered in the light of current supply and demand for sites and changes that have occurred since the adopted Local Plan was prepared. It is intended that current allocations set out in the Site Allocations & Policies DPD will be carried forward unless they are no longer needed or appropriate to meet requirements.
- 3.8 It should be noted that all sites already allocated through the Site Allocations & Policies DPD and Neighbourhood Plans have already been subject to an HRA and were deemed to have no likely significant effect. Any changes proposed to the allocated sites through the Local Plan Review will be subject to further HRA screening at the Local Plan Review preferred options stage.

### The Plan objectives

- 3.9 The spatial portrait, objectives and vision help to identify the issues to be addressed in the Local Plan and set out the context in which the policies of the plan are prepared.
- 3.10 The current spatial portrait, vision and objectives were drawn up as part of the Core Strategy DPD in 2011 and were subsequently updated through the Site Allocation and Policies DPD, which was adopted in 2014. The spatial vision and strategic objectives in relation to mineral planning in Rutland was initially developed and set out as part of the Minerals Core Strategy and Development Control Policies DPD in 2010.
- 3.11 The strategic objectives will be adapted from the existing objectives set out in the Core Strategy DPD and Site Allocations and Policies DPD and the Minerals Core Strategy and Development Control Policies DPD.
- 3.12 The review of the plan is unlikely to result in the vision, spatial portrait and objectives being changed markedly from those in the adopted plan. However, some changes may be needed to the spatial portrait and vision in order to reflect any changes to the economy, environment, social and cultural matters. It is also intended that the objectives will be updated and combined to reflect any changes arising from the review of the spatial portrait and vision. Any changes made to the objectives, spatial portrait and vision will be subject to HRA screening at the the Local Plan Review preferred options stage.

#### **Emerging spatial planning options**

- 3.13 The emerging spatial options are set out below. It should be noted that given the early stages of the plan-making process, draft objectives and policy wording were not available at the time of writing this screening report. However, there is sufficient detail in order to assess potential impacts in terms of broad direction of possible growth.
- 3.14 The Settlement Hierarchy, and associated methodology, included within the adopted Local Plan have been revised to reflect the principles established in the NPPF, which seeks to direct development to the most sustainable locations.

- 3.15 The two options outlined in the Local Plan Review broadly follow the hierarchy contained within the adopted Core Strategy.
- 3.16 The main changes compared with the current settlement hierarchy are outlined within Figures 1 and 2.
- 3.17 The Restraint Villages category title is now considered too restrictive following the recent publication of Planning Practice Guidance on rural housing and the settlement category 'Small Villages' is considered more appropriate, the description of the category remains the same.
- 3.18 A new category, 'Accessible Villages with Limited Facilities' has been included within the settlement hierarchy to acknowledge the relative sustainability of a settlement based on its access to services and facilities. This category includes villages, which may only have a limited range of facilities but have an opportunity to safely access services sustainably via walking and cycling due to their location.
- 3.19 Further to the Settlement Hierarchy, the Local Plan Review also sets out a number of Potential Areas of Growth around Oakham and Uppingham. The extent of which can seen in Figures 3 and 4 below.

# Option A:

- Langham, Great Casterton, and Whissendine are now included in the Local Service Centres category;
- Market Overton is included in the Smaller Centres category;
- Barleythorpe, Preston and Toll Bar are included in a new 'Accessible Villages with Limited Facilities' category;
- The category previously named Restraint Villages has been re-named 'Small Villages' reflecting National Planning Policy Guidance on rural housing; and Belton in Rutland, Caldecott, Manyon and Morcott are now included in the 'Small Villages category.

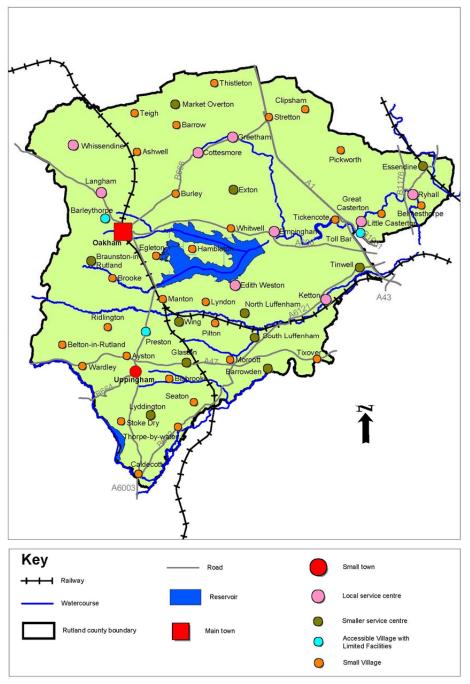


Figure 2: Settlement hierarchy – Option A

# Option B:

- Great Casterton, Langham, Nroth Luffenham, South Luffenham and Whissendine are now included in the Local Service Centres category;
- Barleythorpe, Preston and Toll Bar are included in the new 'Accessible Villages with limited Facilities category;
- The category previously named 'Restraint Villages" has been re-named "Small Villages reflecting National Planning Policy Guidance on rural housing; and
- Belston in Rutland, Caldecott, Manton and Morcot are now included in the "Small Villages" category.

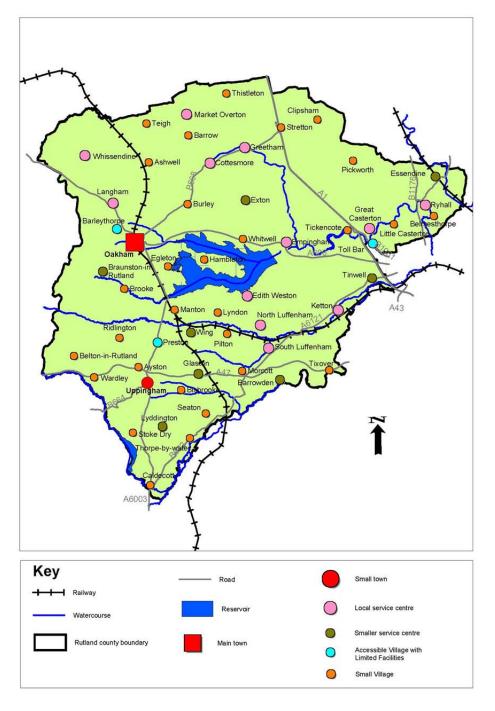
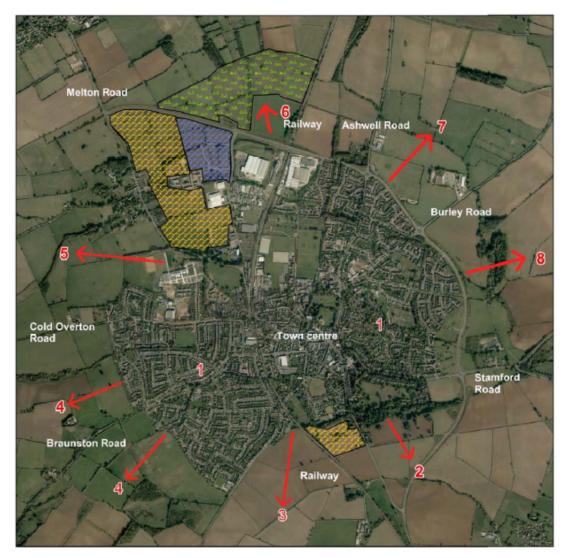


Figure 3: Settlement hierarchy – Option B



Legend

Land already allocated or with planning permission for new housing

Land already allocated or with planning permission for new employment

Land already allocated for new agricultural showground and sports fields

Potential directions of growth

Potential Areas of growth around Oakham	Description
1	Previously developed land and buildings within the built-up area of the town.
2	South-east of Oakham (between the bypass and the railway)
3	South of Oakham (between the railway and Brooke Road)
4	South of Oakham (between Brooke Road and Cold Overton Road)
5	West of Oakham (between Cold Overton Road and Barleythorpe Road)
6	North of Oakham (between Melton Road and the railway)
7	North east of Oakham (between the railway and Burley Road)
8	East of Oakham (between Burley Road and Stamford Road)

# Figure 4: Oakham – Potential directions of growth





Potential directions for growth

> Site allocatied for housing in Uppingham Neighbourhood Plan



Site allocated for future hcuisng in the Uppingham Neighbourhood Plan

Site allocate for employment in Upppingham Neighbourhood Plan.

Figure 5: Uppingham – Potential directions of growth

### Relationship between the plan and the Natural 2000 Sites

- 3.20 The relationship between the plan and the three European (Natura 2000) sites and potential impacts from implementation of the plan options are outlined below in the screening assessment. The criterion for assessment includes:
  - Identification of the individual elements of the plan (either alone or in combinations with other plans and projects) likely to give rise to impacts on the European sites, and a description of the likely impact (direct, indirect or secondary). This should set out the:
    - Plan area, implementation period, and land-take (e.g. allocated sites).
    - Physical changes that are likely to result from implementation of the plan,
    - Distance from Natura 2000 sites or key features of the site, and
    - Requirements of the plan such as resource requirements (e.g. water), and infrastructure development requirements (e.g. transport), as well as outputs such as emissions and waste (disposal to land, water, and air).
  - Potential impacts resulting from the plans, objectives and spatial options.
  - Likely changes to European sites arising as a result of:
    - Reduction of habitat area
    - Disturbance to key species
    - Habitat or species fragmentation
    - Reduction in species density
    - Changes in key indicators of conservation value (e.g. water quality, etc) and
    - Climate Change.
  - Potential likely impacts on the European sites as a whole in terms of interference with the key relationships that define the structure and function of the site.
  - Identification of indicators of significance as a result of likely effects in terms of loss, fragmentation, disruption, disturbance, and change to key elements of the site (e.g. water quality), etc.)
  - Identification of the individual plan elements, or combinations thereof, where the impacts are likely to be significant, or the scale/magnitude are not known.

#### Individual elements of the plan likely to impact on the European sites

#### Plan area and implementation period

3.21 The Local Plan Review covers the administrative authority area of Rutland. The plan period is 2015 – 2036

#### Land-take

- 3.22 The plan will allocate land either around Oakham and/or Uppingham and identify broad areas to accommodate growth for the purpose of delivering development. The Strategic Housing Market Assessment (SHMA) identifies a requirement of 173 dwellings per year over the next 21 years (2015-2036). Sites may need to be allocated for about 1,620 new homes in the Local Plan and/or Neighbourhood Plans to meet the requirement. The need for additional employment and retail land allocations to meet future requirements to 2036 will also be considered.
- 3.23 The areas identified through broad options are not accurately delineated and so an estimated land-take cannot be provided at this stage.

3.24 The Local Plan strategic options do not propose development (through the Settlement Hierarchy, nor via the site allocation options) within the designated area of Rutland Water, nor within the two other Natura 2000 sites, which are located outside of the County Boundary.

#### Physical changes likely to result from the implementation of the plan

3.25 Physical changes resulting from the implementation of the plan are associated with the allocation of sites around the two main towns, Oakham and Uppingham. This will result in intensification and expansion of existing urban areas to accommodate growth for example, housing, commercial and industrial businesses and supporting infrastructure.

#### Distance from European sites or key features of the site

- 3.26 The Local Plan Review will not influence development outside the boundaries of Rutland County and any effects are unlikely to extend a significant distance (>5km) beyond the boundaries, either, except possibly in combination with other plans. The distances from Rutland County are:
  - Rutland Water SPA/Ramsar (within County);
  - Barnack Hills & Holes SAC (~5.4 KM from County boundary
  - Grimsthorpe SAC (~5.9km from county boundary)

#### Resource requirements

- 3.27 The plan is intended to guide development within Rutland including residential, commercial, industrial, waste and minerals development as well as the development of public/community facilities. This will require significant natural resources to deliver growth and support.
- 3.28 As set out in Strategic Objective 14, the plan will seek to reduce the impact of people and development on the environment, encouraging the prudent use of resource.

#### Infrastructure and development requirements

3.29 All of the options will require significant infrastructure and development to support growth (e.g. transport (road & rail), electrical transmission lines & stations, renewable energy generation facilities (e.g. wind farms), gas & water mains, mineral extraction sites, and community health & education facilities (schools, etc.)) and ensure that potential environmental impacts are minimised (e.g. sewage & waste water treatment plant, waste management facilities).

#### Outputs

- 3.30 Potential emissions to air relating to development include dust, vehicle emissions from transport, greenhouse gas emissions from energy generation to supply development (residential, commercial, industrial, etc.), and emissions from (light) industrial processes.
- 3.31 Policies within the plan should seek the integration of sustainable design and technologies in order to reduce greenhouse gas emissions from growth and the ongoing use of development related to the Local Plan.

3.32 Releases to water should be restricted (for most forms of developments) to disposal or release to sewerage systems with (minimum) primary treatment prior to release to waterways. Policies within the plan to include the requirements for the use of Sustainable Drainage Systems (SuDS).

#### Potential impacts resulting from the plan's objective, spatial vision and spatial portrait

3.33 No potential impacts were identified from the adopted plans objectives on the sites. The objectives do not specifically allocate or direct development towards the Natura 2000 sites. In undertaking the review of the plan, any amendment of objectives regarding development of urban areas/settlements should avoid specifically allocating land for development that may (due to location, nature or scale) impact on the Natura 2000 sites.

#### Potential impacts resulting from the spatial options

#### The settlement hierarchy

3.34 The principal of grouping villages and larger settlements in a settlement hierarchy related to their current services will not have a Likely Significant Effect on the Natura 2000 sites. Weighting development towards the towns and most sustainable villages will reduce ancillary impacts (car travel etc.). However, it should not be assumed that because a village is included within the more sustainable Local Service Centres list, that development there will not necessarily result in Likely Significant Effects.

#### Potential directions of growth

#### Oakham

- 3.35 Although the potential directions of growth around Oakham are broad, direct impact on Rutland Water SPA/RAMSAR is not anticipated. However, the proximity of Oakham to Rutland Water and its location adjacent to some tributaries could make the SPA/RAMSAR vulnerable to ancillary impacts. Subsequent proposed allocations will require HRA screening at the preferred options stage of the Local Plan Review.
- 3.36 The scale of development, and the resulting increases in population, will require the provision of sufficient resources and infrastructure. This would include water to supply development, as well as increase in sewage & waste-water treatment capacity to ensure protection of water resources. Ensuring an adequate water supply is likely to result in increased abstraction which may impact on hydrology (water table).
- 3.37 Increased recreational and outdoor leisure opportunities may cause disturbance to the European site's habitat and wildlife.
- 3.38 Extension of transport infrastructure and intensification of road-based transport related emissions and noise may impact on the water quality and cause disturbance to the European sites.
- 3.39 The potential directions of growth are considered in turn below.

# Potential direction of growth 1 – Previously developed land and building within the built up area of the town

- 3.40 Located within the built-up area of the town, the potential direction of growth would be consistent with national planning policies that prioritise the re-use of previously developed land. It is also closely related to existing services and facilities and would therefore benefit from existing infrastructure; however, this could result in more congestion on existing town centre roads.
- 3.41 The potential direction of growth is close to Rutland Water but there are no direct linkages.

# Potential direction of growth 2 – South-East of Oakham (between the bypass and the railway)

- 3.42 The potential direction of growth is relatively flat land within the area enclosed by the bypass and adjacent to existing housing development. There is low and low-medium landscape capacity to accommodate new development with minimal downstream flood risk.
- 3.43 The potential direction of growth would extend the existing built up area in the direction of Rutland water and is in close proximity to a main tributary to Rutland Water, which could lead to possible water quality issues.

# Potential direction of growth 3 – South of Oakham (between railway and Brooke Road)

- 3.44 The potential direction of growth is relatively flat land within the area of existing housing. It has medium-high and low-medium landscape capacity to accommodate new development.
- 3.45 The potential direction of growth is in close proximity to a main tributary to Rutland Waste which could lead to possible water quality issues.

# Potential direction of growth 4 – South of Oakham (between Brooke Road and Cold Overton Road

- 3.46 The potential direction of growth is sloping, exposed land. The direction has low landscape capacity to accommodate new development. Part of the area proposed is owned by the Woodland Trust as Community Woodland.
- 3.47 The potential direction of growth is in close proximity to a main tributary to Rutland Waste, which could lead to possible water quality issues.

# Potential direction of growth 5 – West of Oakham (between Cold Overton Road and Barleythorpe Road)

3.48 The potential direction of growth is relatively flat land but development could result in loss of separation between Oakham and Barleythorpe. The direction has low landscape capacity to accommodate new development. A large part of area occupied by school playing fields.

3.49 The potential direction of growth is in close proximity to a main tributary to Rutland Waste, which could lead to possible water quality issues.

# Potential direction of growth 6 - North of Oakham (between Melton Road and the railway)

- 3.50 The potential direction of growth extends the developed area of the town beyond the Oakham bypass into the open countryside. The direction has low-medium landscape capacity to accommodate new development and is constrained by land allocated for agricultural showground; and sports fields to north and west. Close to recent housing development and employment land but it is not well related to the rest of the town.
- 3.51 The potential direction of growth is in close proximity to a main tributary to Rutland Waste, which could lead to possible water quality issues.

# Potential direction of growth 7 – North east of Oakham (between the railway and Burley Road)

- 3.52 The potential direction of growth extends the developed area of the town beyond the Oakham bypass into open countryside. The direction has partly low or medium-high landscape capacity to accommodate new development. The direction is close to existing supermarket development but is not well related to the rest of the town.
- 3.53 The potential direction of growth is in close proximity to a main tributary to Rutland Waste, which could lead to possible water quality issues.

# Potential direction of growth 8 – East of Oakham (between Burley Road & Stamford Road)

- 3.54 The potential direction of growth extends the developed area of the town beyond the Oakham bypass into open countryside and close to woodland. The direction has medium landscape capacity to accommodate new development. The direction is close to existing supermarket development but is not well related to the rest of the town.
- 3.55 The potential direction of growth would extend the existing built up area in the direction of Rutland water and is in close proximity to a main tributary to Rutland Waste, which could lead to possible water quality issues.

#### <u>Uppingham</u>

3.56 The draft Uppingham Neighbourhood Plan (UNP) allocates development sites and has already been subject to HRA, which concluded that whilst the Uppingham Neighbourhood Plan may produce minimal effect on Rutland Water (the only Natura 2000 site within 15km of the boundary of Uppingham), the implementation of the UNP will not result in any likely significant effects upon Rutland Water.

#### Likely changes (potential effects) to the European sites resulting from the plan

#### Reduction of habitat area

3.57 There will be no physical reduction in the area of habitat resulting from implementation of the plan objectives.

- 3.58 Although the spatial options are quite broad at this stage, they do not propose development within the designated areas and as such will not result in a reduction in habitat area.
- 3.59 No potential effects on the habitat area are likely to result from implementation of the plan objectives or spatial options.

#### Disturbance to key species

- 3.60 Most noise sources are likely to be associated with construction and associated movements of new traffic. An increase in noise levels may disturb birds, which may disturb roosting and feeding and ultimately result in a loss of available habitat and possible relocation to an alternative site.
- 3.61 Light from development has the potential to illuminate habitat areas and affect feeding habitats of waders. Strong lights can cause unusual behaviour in flying birds causing them to disorientate, lose control of their flight and collide with the light source or its associated structures causing high levels of mortality.
- 3.62 Increased density of development and close proximity has the potential to obstruct flight paths and line of sight species, reducing the appeal of the habitat and increasing risk of fatalities through collision.
- 3.63 Visual contact with people can cause disturbance to birds such as increased anxiety and flight response. The distance for provoking flight response varies between species.
- 3.64 No direct disturbance to key species nor with regard to habitat/species fragmentation/reduction in density is likely to result from implementation of the plans objectives. Intensification of land-use surrounding or connecting to the European site may result in indirect disturbance.
- 3.65 No potential effects are likely to result from implementation of the plans objectives or spatial options.

Changes in key indicators of conservation value

- 3.66 The Water Framework Directive aims for a 'good' status for all ground and surface waters in the European Union.
- 3.67 The ecological and chemical status of surface waters are assessed according to the following criteria:
  - Biological quality.
  - Hydromorphological quality such as river bank structure, river continuity or substrate of the river bed.
  - Physical-chemical quality that refers to environmental quality standards for river basin specific pollutants. These standards specify maximum concentrations for specific water pollutants. If even one such concentration is exceeded, the water body will not be classed as having a 'good ecological status.'
  - Chemical quality that refers to environmental quality standards for river basin specific pollutants. These standards specify maximum concentrations for specific pollutants.

- 3.68 The Water Framework Directive stipulates that the groundwater must achieve 'good quantitative status' and 'good chemical status' (i.e. not polluted) by 2015. Groundwater bodies are classified as either 'good' or 'poor'.
- 3.69 Diffuse pollution, including discharges into the river from sewage treatments works, industrial sources, agricultural and urban run-off all contribute towards the introduction of chemicals into the water bodies.
- 3.70 The South Holland, South Kesteven and Rutland Water Cycle Study states that Oakham is within the East Midlands WRZ, supplied by Severn Trent Water. Any increases in flow from Oakham Wastewater Treatment Works (WwTW) have the potential to impact upon the Rutland Water/SAC. It is assumed that the WwTW will be required to discharge to their consented water quality standards as well as their consented water discharge volumes. Therefore it is considered that there will not be a decrease in water quality compared with current water quality. Discharge consents are regulated by the Environment Agency to protect the water quality of receiving watercourses. Water discharge from wastewater treatment will be required to meet the water quality requirements of the Water Framework Directive 2015.
- 3.71 Many wetlands have close associations with groundwater and the relationship can be disrupted by wither changes to the aquifer or to the wetland. Alterations to hydrology have the potential to affect important networks for local wildlife. Abstraction of groundwater or surface water is undertaken for use in agriculture, industry domestic water supplies, or tourism. In catchments of key wetland sites, abstraction could either lead to drying of the wetland or cause indirect damage through difficulties in water level control, drying of springs, and reduced river flows. Wetland habitat wildlife are influenced by the physical and chemical characteristics of the water environment.
- 3.72 Development within flood zones and implementation of flood alleviation/attenuation measures may cause an alteration to the water balance. It is recognised that although such development and measures may not have an impact at the source; there may be an impact on flooding regimes downstream. The suitability for SuDS is variable and will need to be assessed on a site-by-site basis once the extent of the growth sites are known. With regard to connection of the closest surface watercourse, confirmation should be sought from the Environmental Agency as to the available capacity and preferred run-off rates.
- 3.73 No potential effects are expected to impact on the key indicators of conservation value as a result of the plans objectives.
- 3.74 Potential effects regarding key indicators of conservation value of the European sites may occur, including changes in hydrology (abstraction & maintenance of water tables and flooding regimes), changes in water quality (run-off and increased throughput at sewage treatment facilities), and indirect disturbance & environmental nuisance impacts (noise, fugitive dust & diffuse emissions from transport/industrial activities).

#### Climate change

3.75 Climate change may potentially affect wetland habitats due to reduced water availability, which may also reduce food availability.

- 3.76 No potential effects are likely in relation to climate change as a result of implementation of the plans objectives.
- 3.77 Potential effects relating to climate change as a result of development of SUEs include vehicle emissions, and energy consumption associated with residential, commercial, industrial development as well as development of supporting infrastructure and facilities.

Potential likely impacts on the European sites as a whole in terms of interference with the key relationships that define the structure and function of the site

3.78 No potential effects on the European site have been identified resulting from the plan's objectives. Amendments of the objectives (and related policies) may require further assessment to ensure that none result.

#### Strategic spatial options

Rutland Water SPA/RAMSAR

- 3.79 Potential effects identified resulting from the strategic spatial options include:
  - Fragmentation of surrounding habitat areas outside of the designation.
  - Indirect disturbance and environmental nuisance (air quality, noise, lighting, visitor pressure) leading to a decrease in key species populations over time.
  - Changes in water quality related to increased levels of sewerage outfall and diffuse pollution sources.
  - Changes in the water table (resulting from increased abstraction).
  - Alteration of the flooding regime.
  - Emissions from increased vehicle emissions that contribute to the release of greenhouse gases and may reduce air quality leading to affects on habitat/ecosystem structure and function.

Barnack Hills & Holes SAC

3.80 The principle vulnerability of the site is inappropriate management, and therefore there will be few (if any) effects that are likely to occur at distances involved (at least 5km) from the county boundary), particularly given the absence of pathways.

Grimsthorpe SAC

3.81 The principle vulnerability of the site is inappropriate management, and therefore there will be few (if any) effects that are likely to occur at distances involved (at least 5km) from the county boundary), particularly given the absence of pathways.

Identification of indicators of significance as a result of likely effects in terms of loss, fragmentation, disruption, disturbance, and changes to key elements of the site

3.82 Table 2 below identifies indicators of significance, in light of the specific sensitivities/vulnerabilities and conservation objectives for the sites.

European site	Key environmental features	Site specific vulnerabilities &	Indicators of
SILE	ICALUICS	potential effects	significance of likely effects.
Rutland Water SPA	Supports populations of European importance of the following migratory species over winter: • Shoveler Anas cypeta • Teal Anas crecca • Wigeon Anas Penelope • Gadwall Anas strepera • Tufted Duck Aythya fuigulta • Goldeneye Bucephala clangula • Mute Swan Cygnus olor • Coot Fulica atra • Goosander • Mergus merganser • Great Crested Grebe Podiceps cristatus Regularly supports at least 20,000 waterfowl.	<ul> <li>Water quality – contamination of water resources from increased levels of sewage outfall (phosphate loading) and diffuse pollution sources</li> <li>Water level – abstraction. Could result in alteration of trophic status.</li> <li>Disturbance to species (noise, lighting, public access, recreation)</li> </ul>	<ul> <li>Decrease in/disturbance of key species</li> <li>Water quality indicators (phosphate levels)</li> <li>Water level &amp; alteration of trophic status</li> </ul>
Rutland water Ramsar	<ul> <li>Species with peak counts in winter:</li> <li>19274 waterfowl (5 year peak mean 1998/99- 2002/2003</li> <li>Ramsar criterion 6 – Species/populations occurring at levels of international importance.</li> <li>Qualifying species</li> <li>Gadwall Anas streera</li> <li>Northern shoveler Anas clypeata</li> </ul>	<ul> <li>Water quality – contamination of water resources from increased levels of sewage outfall (phosphate loading) and diffuse pollution sources</li> <li>Water level – abstraction. Could result in alteration of trophic status.</li> <li>Disturbance to species (noise, lighting, public access, recreation)</li> </ul>	<ul> <li>Decrease in/disturbance of key species</li> <li>Water quality indicators (phosphate levels)</li> <li>Water level &amp; alteration of trophic status</li> </ul>
Barnack Hills & Holes SAC	<ul> <li>Semi-natural dry grasslands and scrubland facies: on calcerous substrates (Festuco-Brometalia) (important orchid sites)</li> </ul>	<ul> <li>Absence of pathways, no likely potential effects</li> </ul>	<ul> <li>Absence of pathways, no likely potential effects</li> </ul>
Grimsthorpe SAC	<ul> <li>Semi-natural dry</li> </ul>	Absence of	Absence of

# Table 2: Identification of indicators of significance

European site	Key environmental features	Site specific vulnerabilities & potential effects	Indicators of significance of likely effects.
	grasslands and scrubland facies; on calcerous subtrates (Festuco-Brometalia)	pathways, no likely potential effects	pathways, no likely potential effects
	<ul> <li>Early gentian Gentianella anglica</li> </ul>		

### Cumulative (in combination) effects assessment

3.83 Land use plans that may act in-combination with the plan include:

- Harborough District Core Strategy DPD
- Harborough District Council emerging Local Plan
- Melton Borough Council Core Strategy
- Melton Borough Council emerging Local Plan
- South Kesteven Core Strategy
- South Kesteven Site Allocations and Planning Policies DPD
- South Kesteven Emerging Local plan
- City of Peterborough Core Strategy
- City of Peterborough Site Allocations DPD
- City of Peterborough emerging Local Plan
- North Northants Joint Planning Unit Core Strategy
- Rural North Oundle and Thrapston Plan
- 3.84 A number of Neighbourhood Plans are in preparation. Edith Weston was made in June 2014 but did not propose any growth. Uppingham is awaiting the outcome of a legal challenge and plans are in preparation for Cottesmore, Greetham Langham, and Barrowden and Wakerley. When adopted, Neighbourhood Plans form part of the statutory development plan for the area together with the Local Plan. The Neighbourhood Plans must be in general conformity with the strategic policies of the development plan in force and a separate HRA screening report must be undertaken. Both HRA screening reports for Edith Weston Plan; and the draft Uppingham Neighbourhood Plan do not identify any significant in combination likely effects will occur due to the implementation of those plans.

Assessment of cumulative (in-combination) effects

- 3.85 Heavy vehicles, machinery and plans required for existing and further potential development in the vicinity of the European site will increase levels of noise affecting the site.
- 3.86 Surface run off from new transport infrastructure and other developments may be a source of contamination to water in the river. Indirect activities occurring within the river catchment contribute towards diffuse pollution, which may have a cumulative effect on the integrity of the sites. Other development in the area may increase levels of sedimentation of waterways and contribute to nutrient loading, particularly intensification of agriculture and development related to urban extensions.

3.87 A number of species for which the European site has been designated are highly susceptible to disturbance. As such pressure from increased numbers of people using the site for recreation particularly residents from new housing development could have significant effects on the European sites.

#### 4 Future Assessment Requirements

- 4.1 The principal sensitivities and vulnerabilities of Rutland Water, and the likely significant effects include: Water quality changes in water quality related to increased levels of sewerage outfall (increased phosphate loading) and diffuse pollution sources; Abstraction could result in alteration of trophic status; and Disturbance direct and indirect disturbance including air quality, noise, lighting, visitor pressure, recreation, water sports.
- 4.2 The principle vulnerability of the Barnack Hills & Holes SAC; and Grimsthorpe SAC is inappropriate management, and therefore there will be few (if any) effects that are likely to operate at the distances involved (at least 5km from the county boundary), particularly given the absence of pathways. No further assessment is required in relation to these sites.
- 5.1 The overall conclusions of the HRA Screening Report are:
  - The Plans objectives will not have alone (or in combination) likely significant effects on Rutland Water Ramsar, Rutland Water SPA, Barnack Hills & Holes SAC, Grimsthorpe SAC. However, amendment of the objectives will require further assessment to ensure that no likely significant effects result.
  - The assessment of the broad spatial options shows some possible or likely impacts on the Rutland Water SPA and Rutland Water Ramsar, both alone and incombination. However, based on the Issues and Options consultation document, it cannot be concluded whether there would be no likely significant effects or adverse effects since these judgements can only be made in the Local Plan Review preferred options document when more information will be available on the scale and location of the development. Therefore, further HRA screening will be undertaken at the next preferred options stage in the Local Plan review to ensure that no likely significant effects would occur.