# Ryedale District Council

# Habitats Regulation Assessment

December 2009

Entec UK Limited

## Report for

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# 1. Introduction

## 1.1 Background

Fundamental changes to the planning system have been introduced through the *Planning and Compulsory Purchase Act 2004* which requires Local Planning Authorities to adopt a Local Development Framework in place of their existing Local Plan. Local Development Frameworks will not be restricted solely to land use issues but go beyond traditional land use planning by integrating policies for the development of land with policies that influence the nature of places and how they function.

Ryedale District Council is currently in the process of identifying realistic development options for their Local Development Framework Core Strategy. The Core Strategy covers only those parts of the District outside the North York Moors National Park, which is under a separate jurisdiction. Prior to the Core Strategy being adopted, Ryedale District Council must comply with the requirements of the *Conservation (Natural Habitats, &c.) Regulations 1994 as amended* that implement *Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora* in England & Wales.

## 1.2 Habitats Regulation Assessment

European sites are sites which are of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species within a European context. They consist of Special Areas of Conservation (SAC) designated under *Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora* and Special Protection Areas (SPA) designated under *Council Directive 79/409/EEC on the Conservation of Wild Birds*. Ramsar Sites (designated under the 1976 Ramsar Convention) are not European sites but under UK planning policy are given the same level of protection as them.

Under Part IVA of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended Ryedale District Council must determine if the Core Strategy is likely to have a significant (adverse)<sup>1</sup> effect on a European or Ramsar site in Great Britain or a European offshore marine site either alone or in combination with other plans and projects. If significant effects are anticipated then an Appropriate Assessment of the implications for the site in views of its conservation objectives must be undertaken.

The Department for Communities and Local Government issued "Planning for the Protection of European Sites: Appropriate Assessment - Guidance for Regional Spatial Strategies and Local Development Documents" in August 2006. This draft guidance recommends a three stage approach to undertaking Habitats Regulations Assessment of land use plans:

<sup>&</sup>lt;sup>1</sup> Though beneficial effects may arise from a plan, only adverse effects are considered to be of consequence in undertaking Habitats Regulations Assessment.



**Stage 1 – Likely Significant Effects:** identifying if the plan is likely to have a significant effect on a European or Ramsar site in Great Britain or a European offshore marine site either alone or in combination with other plans and projects.

**Stage 2 – Appropriate Assessment:** if significant effects are anticipated, identifying the implications of the plan on the integrity of the relevant Europeans Sites in view of their conservation objectives. This stage is intrinsically linked to Stage 3 as the adoption of mitigation measures will influence the conclusions of the Appropriate Assessment.

Stage 3 – Mitigation Measures and Alternative Solutions: identifying mitigation measures to avoid adverse effects or developing alternative solutions in cases where it is not possible to avoid these.

If no alternative solutions exist, a plan can only be adopted if it is deemed to be for Imperative Reasons of Overriding Public Interest. In this case it is necessary to consider compensatory measures.

# 1.3 Ryedale District Council Core Strategy – Development Options

The Core Strategy wills set out broad policies for the location of housing, employment and retail development in the District.

A range of spatial development options has been developed by the Council to accommodate the current anticipated quantum of development growth within the District till 2026. These options remain at an early stage. In progressing from the current range of options to a preferred set of options, it is anticipated that the selected development option, which will be brought forward as part of the Core Strategy would be made up of elements of the development options presented here.

Table 1.1 sets out the current elements for the proposed development that are anticipated to be required over the Core Strategy period.

Table 1.1 Development Quantum used in HRA

| Development type | Volume                              | Variables/responsibility  |
|------------------|-------------------------------------|---|
| Housing          | 3000 new dwellings                  | Dependant on the outcome of the Yorkshire and Humber Plan.  |
| Employment land  | 45 ha of land provision             | Employment land review identified 45ha of suggested sites for allocation within the Market Towns. |
|                  |                                     | Dependant on the outcome of the Yorkshire and Humber Plan.  |
| Retail provision | 48,447 square metres of floor space | Retail capacity updated identified food and non-food floor space required.                        |



The options set out in Tables 1.2 to 1.4 are indicative only and have been developed to give a broad perspective of the spatial options and development quantum to be considered in the development of the preferred option. Whilst indicative areas have been delineated, they do not represent or contain specific development sites that have been identified at this stage. However, the options are sufficiently well defined to permit the identification of the sustainable advantages and disadvantages of each of the broad options to provide a meaningful basis for assessment and to inform the subsequent development of the preferred option. Although the emphasis is on housing provision employment allocations and retail provision is likely to follow a similar pattern.

Following publication of the Core Strategy, Ryedale District Council will prepare a Site Development Plan Document (DPD) which will set out in more detail where new homes, employment and retail development will be located.

**Development Location Options** Table 1.2

#### Option Description Under this option new housing would be distributed to all settlements across Option 1 the District through a combination of new Dispersed development allocated sites, the development of across all settlements in infill plots and the redevelopment

Ryedale

Concentrate new housing

at the Market Towns and

provide for local housing

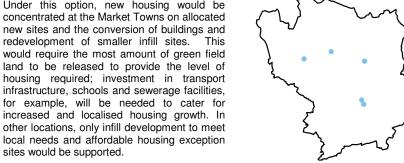
needs in the villages

Option 2

conversion of land and buildings. There would be a need for very few sites in any one location and this would reduce the need for larger green field sites.

Under this option, new housing would be concentrated at the Market Towns on allocated new sites and the conversion of buildings and redevelopment of smaller infill sites. would require the most amount of green field land to be released to provide the level of

sites would be supported.







### Option Description

Option 3 Concentrate new housing at the Market Towns and key Service Villages Under this option, new housing would be distributed and focussed at the Market Towns and a selection of villages that have a number of key facilities. In these locations new housing sites together with infill development and the redevelopment of sites would be required. In other villages, only infill development to meet local needs and affordable housing exception sites would be supported.

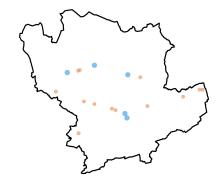


Table 1.3 Development Quantum Options

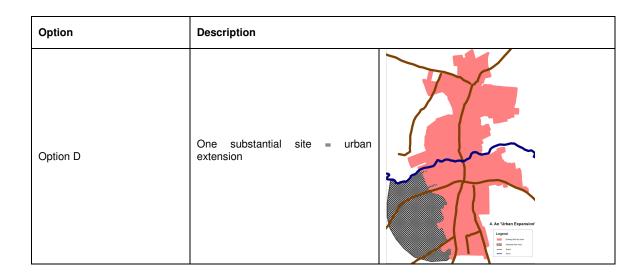
| Option               | Description  |                          |
|----------------------|--|--------------------------|
| Option I             | Malton/Norton<br>Pickering<br>Kirbymoorside & Helmsley<br>Service Villages | 50%<br>25%<br>15%<br>10% |
| Option II            | Malton/Norton<br>Pickering<br>Kirbymoorside & Helmsley<br>Service Villages | 50%<br>20%<br>15%<br>15% |
| Option III           | Malton/Norton<br>Pickering<br>Kirbymoorside & Helmsley<br>Service Villages | 50%<br>25%<br>10%<br>15% |
| Option IV            | Malton/Norton<br>Pickering<br>Kirbymoorside & Helmsley<br>Service Villages | 50%<br>20%<br>10%<br>20% |
| Malton/Norton Option | <50%<br>>50%   |                          |



Table 1.4 Settlement Distribution Options

| Option   | Description   |  |
|----------|---|--|
| Option A | Large number of small sites scattered around the town | 1. Lots of Small Sites   |
| Option B | Small number of larger sites around the town          | 2. Small Number of Larger Sites |
| Option C | Mixture of some smaller and some larger sites         | 3. Mixture of Sites  Legend  Grant printing the state of  |





## 1.4 Purpose of this Report

Entec has been commissioned by Ryedale District Council to identify any potential issues which these proposed options may have with respect to European and Ramsar sites. This is necessarily high level at this stage but the outputs will be used within the Habitats Regulation Assessment of the Ryedale Core Strategy. The purpose of this report is to:

- Identify the European and Ramsar sites that could potentially be affected by the
  development options, the reasons why the sites have been designated and the
  environmental factors (conservation objectives) required to sustain the integrity of
  the sites; and
- Determine whether the proposed development options are likely to have significant effects upon the European and Ramsar sites identified (alone or in combination), summarise potential issues and identify what further steps may need to be taken to ensure compliance with the Habitats Regulations.



# 2. HRA Methodology

## 2.1 European and Ramsar Site Identification

The Habitats Regulations Assessment started with consideration being given to:

- European and Ramsar sites situated within or adjacent to the boundaries of Ryedale District, and
- European and Ramsar sites situated within a 15km radius of Ryedale District (in line with the precautionary approach required for undertaking Habitats Regulation Assessment).

## 2.2 Baseline Data Collection

For each European or Ramsar site details of its qualifying interest features were collated. Interest features are those habitats and species listed in Annexes I and II of *Council Directive* 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora for which the sites were originally designated. Every European and Ramsar site is made up of component Sites of Scientific Interest (SSSIs), many of which support habitats and species of national value in addition to those of European interest. However for the purpose of Habitats Regulation Assessment it is only the European interest features which are considered.

Information on condition and vulnerabilities was also considered important, as small changes associated with the Core Strategy could potentially act as a tipping point in cases where site integrity is already compromised. The condition of component SSSIs is monitored and assessed by Natural England and reported on their website. The vulnerability of each European site is detailed on the Standard Natura 2000 Data Form submitted to the European Commission at the time of site selection.

Where an adverse impact on any of the sites was considered unlikely (due to the
nature of their interest features or distance from the District boundary), these sites
were not considered further within this report.

For those sites which could potentially be affected, Conservation Objectives were obtained from Natural England where possible. Conservation Objectives provide a framework for site management and a standard against which monitoring can take place to ensure a site is maintained in a favourable conservation status. However, many European and Ramsar sites do not have specific Conservation Objectives but their component SSSIs do. In such cases it is the SSSI's Conservation Objectives which relate to the European interest features which have been used for the purpose of this Habitats Regulation Assessment.

- The following resources were used to collate this information:
  - Joint Nature Conservation Committee (JNCC) website (www.jncc.gov.uk);
  - Natural England Website (www.naturalengland.org.uk);



- MAGIC Website (www.magic.gov.uk);
- Flamborough Head European Marine Site Management Scheme; and
- Sustainability Appraisal of the Yorkshire and Humber Plan 2009 Update; Scoping Report.

## 2.3 Core Strategy Development Options

The potential impacts that could arise from the development options were identified and the proposed allocations were screened with respect to their potential to have significant effects upon the European or Ramsar sites identified.

The potential for the development options to result in likely significant effects was then coded according to the "traffic light" system shown in Table 2.1. Those options that would result in no significant effects were coded green, those for which significant effects can easily be avoided by giving consideration to mitigation and alternative solutions at a later stage in the planning process were coded amber, and those that should be discounted outright in their current form unless the Imperative Reasons of Overriding Interest (IROPI) test can be passed were coded red.

The assessment was based on the key principles resulting in the worst-case scenario in line with the precautionary approach required for undertaking Habitats Regulation Assessment.

Table 2.1 System adopted for denoting potential significant effects on European and Ramsar sites

| Colour<br>Warning | Requirement   |  |  |
|-------------------|---|--|--|
|                   | The option is considered unlikely to have a significant effect on a European or Ramsar site.  |  |  |
| Green             | OR  |  |  |
|                   | The option contains sufficient measures to ensure that it will not result in any impact on the integrity of a European or Ramsar site either alone or acting in combination.  |  |  |
|                   | The option is considered likely to have a significant effect on a European or Ramsar site.  |  |  |
|                   | AND   |  |  |
| Amber             | In its current form the option <u>might</u> result in an impact on the integrity of a European or Ramsar site either alone or acting in combination. Further consideration therefore needs to be given to mitigation measures or alternative solutions so as to ensure that it will not result in any impact on the integrity of a European or Ramsar site either alone or acting in combination. |  |  |
|                   | The option is considered likely to have a significant effect on a European or Ramsar site.  |  |  |
| Pod               | AND   |  |  |
| Red               | In its current form the option <u>will</u> result in an impact on the integrity of a European or Ramsar site either alone or acting in combination and should be deleted unless there is an argument for IROPI and no alternative solutions exist.  |  |  |



## 2.4 Development of Mitigation

The development options that were considered likely to result in significant effects during the initial screening assessment were given further consideration as to how potentially significant effects (or an adverse impact on the integrity of a European or Ramsar site) could be avoided.

## 2.5 In-Combination Effects

In line with Government advice,<sup>2</sup> only those plans and projects most relevant to the European and Ramsar sites identified during the baseline data collation exercise were considered in the evaluation of in-combination effects.

<sup>&</sup>lt;sup>2</sup> Department for Communities and Local Government (DCLG) (2006) Planning for the Protection of European Sites: Appropriate Assessment. DCLG, London.





# 3. Potentially Affected European and Ramsar sites

## 3.1 Initial Screening of European Sites

The following European and Ramsar sites fall within the boundary of Ryedale District Council and thus may be directly affected by development within the district:

- River Derwent SAC
- · Lower Derwent RAMSAR, SPA and SAC
- North York Moors SPA and SAC
- Eller's Wood & Sand Dale SAC
- Fen Bog SAC

There are other European sites more distant to the Ryedale District. Dependant on the nature and the location of these designated sites, development within the District may have an indirect effect upon them. Other European and Ramsar sites which lie within an approximate 15km radius of Ryedale District boundary are:

- Strensall Common SAC
- Flamborough Head & Bempton Cliffs SPA
- · Flamborough Head SAC
- Flamborough Head European Marine Site
- Beast Cliff Whitby (Robin Hoods Bay) SAC
- Arncliff & Park Hole Woods SAC
- Skipwith Common SAC

However, on the basis of the location of these sites in relation to the District, and their qualifying interest features, it is considered that the following sites will not be affected by development within Ryedale District. It should be noted that the Core Strategy covers only those parts of the District outside the North York Moors National Park, which is under a separate jurisdiction.

### **Arncliff & Park Hole Woods SAC**

The qualifying feature of interest on the site is the Killarney fern (*Trichomanes Speciosum*). The site was formerly extensive upland oak woodlands on acidic soils with a species-rich fern community. The woodlands have been extensively disturbed in the past for both iron workings and woodland management. However, there are abundant rocks and small cliffs and a generally



uneven topography which has allowed important ferns to survive in an undisturbed state. Extensive collecting of one of these ferns in the past has led to its near-extinction at a number of sites in Britain.

There is no public access to East Arncliff Wood or Park Hole Wood. However, there is a public footpath which runs through West Arncliff Wood and walks in the area are promoted - if recreational pressures increased due to urbanisation within Ryedale District it may be damaging to the site. However, the HRA for the Yorkshire and Humber Plan has specified that a 1500m buffer is considered great enough "to restrict the majority of casual dog walking and vandalism." Given that this site is situated approximately 15km to the north of the Ryedale planning boundary (Figure 1) and is not a major recreation attraction, recreational impacts are considered unlikely to occur.

### **Skipwith Common SAC**

The qualifying interest features for this site are Northern Atlantic wet heaths with *Erica tetralix* and European dry heaths.

The site is peripheral to any commercial farming enterprise and consequently has suffered a lack of management over the last decade, which has resulted in scrub encroachment at the expense of heathland communities. Natural England has a management agreement in place with the landowner and a large-scale heathland regeneration project for the site is being pursued.

The site is in private ownership but has open public access. Management should ensure that necessary measures are taken to control recreational and other activities that can be damaging to heathland habitats and species, such as fire-setting and vehicle scrambling.

If recreational pressures increased due to urbanisation within Ryedale District it may be damaging to the site. However, as the site is situated approximately 16.5km from the south of the Ryedale District boundary (Figure 1) development within the District is unlikely to significantly increase recreational pressure on the site, particularly given that it is not a major recreation attraction and management is in place.

There is an extant permission for deep coal mining on the site. This has previously been reviewed to assess impact on the features of interest at Skipwith Common, as a result of this review a compensation/mitigation package has been agreed with the Minerals Planning Authority and Natural England.

## 3.2 Potentially Affected European Sites

Further consideration needs to be given to the relationship between the following sites and any development within the Ryedale District:

- River Derwent SAC
- Lower Derwent RAMSAR, SPA and SAC
- North York Moors SPA and SAC
- Eller's Wood & Sand Dale SAC



- Fen Bog SAC
- Flamborough Head & Bempton Cliffs SPA
- Flamborough Head SAC
- Flamborough Head European Marine Site<sup>3</sup>
- Beast Cliff Whitby (Robin Hoods Bay) SAC
- Strensall Common SAC

Further details of the qualifying interest features, conservation objectives, condition and vulnerabilities of these sites are provided in Table 3.1.



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<sup>&</sup>lt;sup>3</sup> This comprises the marine elements of Flamborough Head & Bempton Cliffs SPA and Flamborough Head SAC and as such any effects on the Flamborough European Marine site are covered by the assessment of effects on SPA and SAC. Therefore, no specific assessment of the relationship between the Marine Site and the Core Strategy Development Options is required.

Table 3.1 Interest Features, Conservation Objectives, Condition and Vulnerability

| European<br>Site                     | Qualifying Interest<br>Features  | Conservation Objectives   | Component<br>SSSI within<br>the<br>European<br>designated<br>site | Condition Status and Reasons if Unfavourable   | Vulnerabilities  |
|--------------------------------------|--|---|---|--|--|
| River<br>Derwent<br>SAC              | Site selection:  Annex II Species:  River Lamprey (Lampetra fluviatilis)  Other qualifying features:  Annex I Habitats:  Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion | The consultation draft Conservation Objectives 2009 are, subject to natural change, to improve and maintain the following habitats features in a favourable condition:  Rivers and Streams Broadleaved, Mixed and Yew Woodland Lowland Neutral Grassland Standing Open Water Fen, Marsh and Swamp  Particular importance to improving and maintaining in favourable condition the | River Derwent<br>SSSI  Kirkham Park<br>& Riverside<br>SSSI        | 7.4% Favourable 1.74% Unfavourable recovering 90.74% Unfavourable no change 0.12% Unfavourable declining Inland flood defence works Siltation Inappropriate weirs, dams and other structures restricting passage for migratory fish Water pollution – agriculture/run off Invasive freshwater species Overgrazing 74.24% Favourable 25.76% Unfavourable no change Inappropriate weed and scrub | Water levels and flooding are an issue with the River Derwent. There is public pressure both for new flood defences and different water-level control regimes. Water quality is also a potential issue on the river. |
|                                      | vegetation  Annex II Species:  • Sea lamprey (Petromyzon marinus)  • Bullhead (Cottus gobio)   | Annex I habitats and Annex II species, subject to natural change.   | Jeffry Bog<br>SSSI  | control  100% favourable   |  |
| Lower<br>Derwent<br>Valley<br>RAMSAR | Otter (Lutra lutra)  The site represents one of the most important examples of traditionally managed speciesrich alluvial flood meadow habitat remaining in the UK.  | The consultation draft Conservation<br>Objectives 2009 for Newton Mask<br>SSSI are, subject to natural change, to<br>improve and maintain the following<br>habitat feature in a favourable<br>condition:  | Newton Mask<br>SSSI   | 45.18% Favourable 54.82% Unfavourable recovering Land ploughed prior to SSSI designation gradually improving   | Factors adversely affecting the site include:  • Water diversion for   |



| European<br>Site | Qualifying Interest<br>Features   | Conservation Objectives   | Component<br>SSSI within<br>the<br>European<br>designated<br>site | Condition Status and Reasons if Unfavourable  | Vulnerabilities  |
|------------------|---|---|---|---|--|
|                  | The river and flood meadows play a substantial role in the hydrological and ecological  | Lowland Neutral Grassland   |   |   | irrigation/domestic/industrial use • Reservoir/barrage/dam |
|                  | functioning of the Humber Basin.  The site has a rich assemblage of wetland invertebrates including 16 species of dragonfly and damselfly, 15 British Red Data Book wetland invertebrates as well as a leafhopper (Cicadula ornate) for which Lower Derwent Valley is the only known site in Great Britain. | The consultation draft Conservation Objectives 2009 for Derwent Ings SSSI, subject to natural change, are to improve and maintain the following habitat types in a favourable condition:  • Lowland Neutral Grassland • Fen, Marsh & Swamp • Standing Open Water & Canals | Derwent Ings<br>SSSI  | 77.68% Favourable 21.10% Unfavourable recovering 1.22% Unfavourable no change Inappropriate water levels: run off extended flooding has lead to slight reduction in MG4 communities | impact: flooding   |
|                  | The site qualifies as a staging post for passage birds in spring. Of particular note are the nationally important numbers of ruff ( <i>Philomachus pugnax</i> ) and whimbrel ( <i>Numenius phaeopus</i> ).  | The consultation draft Conservation Objectives 2009 for Melbourne & Thornton Ings SSSI, subject to natural change, are to improve and maintain the following habitats in a favourable condition:  | Melbourne &<br>Thornton Ings<br>SSSI                              | 53.87% Favourable<br>46.13% Unfavourable recovering<br>Waterlogged land   |  |
|                  | Assemblages of international importance: Over wintering waterfowl Species occurring at levels of  | <ul> <li>Broadleaved, mixed and yellow woodland</li> <li>Lowland neutral grassland</li> <li>Fen, Marsh &amp; Swamp</li> <li>Standing Open Water &amp; Canals</li> </ul>   |   |   |  |
|                  | <ul> <li>Eurasian widgeon (Anas Penelope)</li> <li>Eurasian teal (Anas crecca)</li> </ul>   | The consultation draft Conservation<br>Objectives 2009 for Breighton<br>Meadows SSSI, subject to natural<br>change, are to maintain the following<br>habitat in a favourable condition:   | Breighton<br>Meadows<br>SSSI                                      | 100% Favourable   |  |



| European<br>Site | Qualifying Interest<br>Features | Conservation Objectives  | Component<br>SSSI within<br>the<br>European<br>designated<br>site | Condition Status and Reasons if Unfavourable | Vulnerabilities |
|------------------|---------------------------------|--|---|--|-----------------|
|                  |                                 | Lowland Neutral Grassland  Of particular importance to the RAMSAR, SAC and SPA throughout all the conservation objectives is to create, or maintain favourable conditions of habitats of the qualifying species. |   |  |                 |
|                  |                                 |  |   |  |                 |



| European<br>Site               | Qualifying Interest<br>Features   | Conservation Objectives | Component<br>SSSI within<br>the<br>European<br>designated<br>site | Condition Status and Reasons if Unfavourable | Vulnerabilities  |
|--------------------------------|---|-------------------------|---|--|--|
| Lower<br>Derwent<br>Valley SPA | Article 4.1 species  Overwintering:   |                         |   |  | The risk of eutrophication due to agricultural run-off and domestic sewage residues.                                       |
| valicy of A                    | Overwintering.  |                         |   |  | domestic sewage residues.  |
|                                | <ul> <li>Berwick's swan (<i>Cygnus columbianus bewickii</i>)</li> <li>Ruff (<i>Philomachus pugnax</i>)</li> <li>Golden plover (<i>Pluvialis apricaria</i>)</li> </ul>   |                         |   |  | Water abstraction and the associated tidal barrage are thought to adversely affect water levels and qualities on the site. |
|                                | Article 4.2 species   |                         |   |  | There is a coal mine adjacent to the site; the potential impacts   |
|                                | During breeding season:  • Northern shoveler (Anas clypeata)  |                         |   |  | are being monitored with<br>mitigation where necessary via<br>Section 106 planning<br>agreement.                           |
|                                | Over wintering:  Common teal (Anas crecca)  Eurasian widgeon (Anas Penelope)  |                         |   |  | Recreation disturbance is increasing due to increased house building adjacent to the site.                                 |
|                                | Article 4.2 population  |                         |   |  |  |
|                                | Over winter the area regularly supports 40,616 waterfowl including Berwick's swan (Cygnus columbianus bewickii ), Eurasian widgeon (Anas Penelope), common teal (Anas crecca), golden plover (Pluvialis apricaria), Ruff (Philomachus pugnax) |                         |   |  |  |



| European<br>Site                      | Qualifying Interest<br>Features  | Conservation Objectives  | Component<br>SSSI within<br>the<br>European<br>designated<br>site | Condition Status and Reasons if Unfavourable                             | Vulnerabilities   |
|---------------------------------------|--|--|---|--|---|
| Lower<br>Derwent<br>Valley SAC        | Site selection:  Annex I habitats:  Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)  Other qualifying features:  Annex I habitats:  Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)  Annex II species:  Otter (Lutra lutra) |  |   |  | There is an extant planning permission for the extraction of coal by deep mining however this has been reviewed under Regulation 50 by the Minerals Planning Authority and a compensation/mitigation package has been agreed. This is to take account of potential changes to topography, soil water relations and flooding patterns and duration as a result of subsidence.  Water levels in general are an issue in the valley and this is being addressed by a collaborative project between English Nature, Environment Agency and Yorkshire Water. |
| Eller's<br>Wood &<br>Sand Dale<br>SAC | Site selection:  Annex II species:  Geyer's whorl snail (Vertigogeyeri)  Other qualifying features:  Annex I habitats:  Petrifying springs with tufa   | The conservation objectives for the Eller's Wood and Sand Dale SSSI are, subject to natural change, to:  Improve and maintain in a favourable condition the alkaline fen Improve and maintain in a favourable condition the habitats of the population of Geyer's Whorl Snail Particular importance to improving and maintaining in favourable condition the | Eller's Wood &<br>Sand Dale<br>SSSI                               | 54.1% Favourable 45.90% Favourable no change Inappropriate scrub control | The site is very wet and vulnerable to human and livestock pressure. The present management agreement with Natural England is preventing excess livestock pressure. The site is fairly isolated and human pressure is negligible at present. The number of visitors to the site is minimal but if it increased it would be  |



| European<br>Site | Qualifying Interest<br>Features                       | Conservation Objectives   | Component<br>SSSI within<br>the<br>European<br>designated<br>site | Condition Status and Reasons if Unfavourable | Vulnerabilities  |
|------------------|---|---|---|--|--|
|                  | formation ( <i>Cratoneurion</i> )                     | Annex I habitats and Annex II species, subject to natural change.   |   |  | damaging. Scrub invasion in parts of the site is also a lesser threat but is being successfully managed through the management agreement.  |
| Fen Bog          | Site selection:                                       | The consultation draft conservation   | Newtondale  | 97.52% Favourable                            | The site has few significant   |
| SAC              | Annex I habitats:                                     | objectives 2009 of the Newtondale<br>SSSI are, subject to natural change, to<br>improve and maintain the following  | SSSI  | 2.48% Unfavourable recovering                | pressures.  The main vulnerability would be  |
|                  | <ul> <li>Transition mires and quaking bogs</li> </ul> | habitats and geological features in favourable condition:   |   |  | a lowering of the existing water<br>table resulting from drainage to<br>protect the railway running  |
|                  |   | Habitat Types represented:  |   |  | through the middle of the site.  |
|                  |   | <ul> <li>Broadleaved, mixed and Yew Woodland</li> <li>Dwarf Shrub Heath</li> <li>Fen, marsh and swamp</li> <li>Neutral Grassland</li> <li>Rivers and Streams</li> <li>Standing open water and canals</li> </ul> |   |  | Should the light grazing occurring at present be removed there is also long term potential for a lowered water table due to succession at fringes to climax community growth such as woodland. |
|                  |   | Geological Features:  |   |  | There is public access to the north part of the site and the   |
|                  |   | <ul> <li>Inland Outcrops (EO) – Callovian</li> <li>Static (fossil) geomorphological (IS)</li> <li>– Quaternary of east England</li> </ul>   |   |  | site is subject to occasional fires due to proximity to the steam engine railway.  |
|                  |   | <ul> <li>Finite buried interest (FB) 0         Quaternary of East England     </li> </ul>   |   |  | The area surrounding the site is subject to bracken spraying   |
|                  |   | Particular importance to improving and maintaining in favourable condition the Annex I habitats, subject to natural   |   |  | which has the potential to damage mire communities and species sensitive to active ingredients in the chemicals  |



| European<br>Site        | Qualifying Interest<br>Features  | Conservation Objectives   | Component<br>SSSI within<br>the<br>European<br>designated<br>site | Condition Status and Reasons if Unfavourable  | Vulnerabilities   |
|-------------------------|--|---|---|---|---|
|                         |  | change.   |   |   | used.   |
| North York<br>Moors SPA | Article 4.1 species  During the breeding season supports:  • Merlin (Falco columbarius)  • Golden plover (Pluvialis apricaria) | The conservation objectives for the SSSI are, subject to natural change, to improve and maintain in favourable condition the habitats for merlin and golden plover with particular reference to:  • Upland moorland | North York<br>Moors SSSI  | 9.99% Favourable 71.05% Unfavourable recovering 16.07% Unfavourable no change 2.89% Unfavourable declining Moor burning, overgrazing and fertiliser use Unit 1025798 Scarborough – used by illicit vehicles | The value of the North York Moors in providing suitable habitat for breeding merlin and golden plover is dependent on the moorland management that is carried out by farmers and gamekeepers to maintain the moorland plant communities and grouse populations. The most vulnerable plant communities are the heaths and mires which are susceptible to overgrazing, gripping and too frequent heather burning leading to species impoverishment and a loss of structural diversity. A lack of keepering and under gazing on some moors has resulted in large areas of under managed old heather lacking structural diversity which reduces the suitability of the habitat for merlin and golden plover. This is being addressed by looking at payments for positive heather management, such as cutting and burning.  The majority of the site is being managed in a desirable way with pressures being largely restricted to small areas. |



| European<br>Site        | Qualifying Interest<br>Features   | Conservation Objectives  | Component<br>SSSI within<br>the<br>European<br>designated<br>site | Condition Status and Reasons if Unfavourable | Vulnerabilities   |
|-------------------------|---|--|---|--|---|
| North York<br>Moors SAC | Site selection:  Annex I habitats:  Northern Atlantic wet heaths with Erica tetralix European dry heaths  Other qualifying features:  Annex I habitats: Blanket bog | The conservation objectives for the SSI are to improve and maintain in favourable condition the Annex I habitats, subject to natural change. |   |  | The majority of the moorland is managed for both sheep farming (by farmers) and for the sporting shooting of grouse (by estates and their gamekeepers). Most of the moors are grazed, as well as burnt (on a rotational basis), and this provides a diversity of heather which favours high numbers of grouse, moorland waders and merlin. Overgrazing is generally not a problem although localised winter-feeding and lack of traditional shepherding has led to some small losses of heather.  The wetter communities, particularly blanket bog, are vulnerable to drainage and over burning, leading to the loss of structural diversity as well as the loss of mosses and lichens.  The current poor economic return from sheep management is leading to a loss of sheep flocks from the moors, which is of concern. Various ongoing schemes are/have been in place to help support continued moorland management. |



| European<br>Site                                     | Qualifying Interest<br>Features   | Conservation Objectives   | Component<br>SSSI within<br>the<br>European<br>designated<br>site | Condition Status and Reasons if Unfavourable     | Vulnerabilities  |
|--|---|---|---|--|--|
| Flamborou<br>gh Head<br>and<br>Bempton<br>Cliffs SPA | Article 4.2 species  During the breeding season supports:  • Kittiwake (Rissa Tridactyla) | The consultation draft Conservation Objectives 2009 are to improve and maintain the following habitats and geological features in a favourable condition, subject to natural change: Habitat Types represented  • Maritime Cliff and Slope • Inshore Sublittoral Rock • Littoral Rock  Geological features  • EC-Coastal Cliffs and Foreshore • IA – Active process geomophological • IS – static (fossil) geomorphological  Special features  • Aggregations of breeding birds • Localities of very rare species  Of particular importance to the SAC is maintaining the favourable condition of the Vegetated Sea Cliffs of the Atlantic and Baltic coasts  Of particular importance to the SPA is maintaining the internationally important breeding population of Kittiwake, nationally important breeding populations of guillemot, razorbill and puffin and the important | Flamborough<br>Head SSSI  | 83.56% Favourable 16.44% Unfavourable recovering | The site is part of the European marine site for which a management scheme has been developed. Natural England has identified key human activities which may affect the interest features. |



| European<br>Site         | Qualifying Interest<br>Features  | Conservation Objectives                       | Component<br>SSSI within<br>the<br>European<br>designated<br>site | Condition Status and Reasons if Unfavourable | Vulnerabilities  |
|--------------------------|--|---|---|--|--|
|                          |  | gannetry at Bempton Cliffs.                   |   |  |  |
| Flamborou<br>gh Head     | Site selection:  |   |   |  | The interest features are vulnerable to a number of              |
| SAC                      | Annex I habitats:  |   |   |  | pressures, particularly physical damage and toxic                |
|                          | <ul> <li>Reefs</li> </ul>  |   |   |  | contamination.   |
|                          | <ul> <li>Vegetated sea cliffs of the</li> </ul>                                |   |   |  |  |
|                          | Atlantic and Baltic coasts   |   |   |  |  |
|                          | <ul> <li>Submerged or partially</li> </ul>                                     |   |   |  |  |
|                          | submerged sea caves  |   |   |  |  |
| Beast Cliff              | Site selection:  | The consultation draft Conservation           | Robin Hood's  | 98.75% Favourable                            | These cliffs are subject to                                      |
| <ul><li>Whitby</li></ul> |  | Objectives 2009 are to improve and            | Bay: Maw  | 1.25% Unfavourable no change                 | active erosion processes in                                      |
| (Robin                   | Annex I habitats:  | maintain the following habitats and           | Wyke To   | Inappropriate coastal management             | parts, particularly those areas                                  |
| Hoods Bay)               | Manakakada a a Bitta at Ha   | geological features in favourable             | Beast Cliff   |  | of soft clay where coastal                                       |
| SAC                      | <ul> <li>Vegetated sea cliffs of the<br/>Atlantic and Baltic coasts</li> </ul> | condition, subject to natural change:         | SSSI  |  | erosion maintains a cycle of erosion, landslip and               |
|                          |  | Habitat Types represented:                    |   |  | colonisation. Any management of these cliffs is difficult due to |
|                          |  | <ul> <li>Maritime Cliff and Slope</li> </ul>  |   |  | their unstable nature, but they                                  |
|                          |  | <ul> <li>Broadleaved mixed and yew</li> </ul> |   |  | are sometimes grazed in  |
|                          |  | woodland                                      |   |  | conjunction with adjacent cliff-                                 |
|                          |  | Littoral Rock                                 |   |  | top pastures. More southerly sections of cliff are relatively    |
|                          |  | Geological features                           |   |  | stable, but due to their steep and inaccessible nature are       |
|                          |  | • EO – Inland Outcrops                        |   |  | virtually unmanaged. Any   |
|                          |  | EC – Coastal cliffs and foreshore             |   |  | intensification in management                                    |
|                          |  | IA – Active process geomophological           |   |  | may influence the vegetation communities present.                |
|                          |  | Particular importance to improving and        |   |  | -  |
|                          |  | maintaining in favourable condition the       |   |  | The location of this site is rural,                              |
|                          |  | Annex I habitats, subject to natural          |   |  | but occasional settlements may give rise in the future to coast  |



| European<br>Site           | Qualifying Interest<br>Features   | Conservation Objectives  | Component<br>SSSI within<br>the<br>European<br>designated<br>site | Condition Status and Reasons if Unfavourable   | Vulnerabilities   |
|----------------------------|---|--|---|--|---|
|                            |   | change.  |   |  | protection proposals which may interfere with natural coastal erosion processes. There is a current Shoreline Management Plan for this section of the coast; the preferred coastal defence option as outlined in the plan is 'do nothing', which should contribute to maintaining active coastal processes. |
| Strensall<br>Common<br>SAC | Site selection:  Annex I habitats:  Northern Atlantic wet heaths with <i>Erica tetralix</i> European dry heaths | The consultation draft Conservation Objectives 2009 are, subject to natural change, to improve and maintain the following habitat features in favourable condition:  Habitat Types represented:  • Dwarf Shrub Heath • Purple Moor Grass and Rush Pastures | Strensall<br>Common SSSI  | 36.2% Favourable 63.8% Unfavourable recovering | Strensall Common is used for military training but this does not currently compromise the interest of the site. Scrub encroachment is a problem.  |
|                            |   | Particular importance to improving and maintaining in favourable condition the Annex I habitats, subject to natural change.  |   |  |   |



## 3.3 Potential Impacts

Given the location and nature of the European and Ramsar sites within 15km of Ryedale District, there are a number of generic potential impacts which could arise from unmitigated effects associated with housing developments in the district. For all those sites within Ryedale District, direct land take and disturbance or pollution arising through construction and operation are potential impacts of inappropriately sited developments. Further potential impacts specific to each European and Ramsar site are as follows:

### **River Derwent SAC**

The majority of rivers within Ryedale District, including the River Rye and River Dove, feed into the River Derwent.

The site supports river and sea lamprey which are generally anadromous, migrating between spawning grounds and juvenile habitat in freshwater, and adult feeding habitat in the lower reaches of the river. Spawning takes place amongst gravels in gently flowing water with preferred habitat being at the lower end of pools. Developing larvae (ammocoetes) need areas of sandy silt in slow-flowing reaches downstream of their spawning gravels where they continue developing in burrows until their metamorphosis into adults. The habitat of the larval stages is the silty margins amongst tree roots and larvae have been recorded at Barmby, East Cottingwith, Wheldrake, Stamford Bridge, Kirkham Abbey, Buttercrambe and Norton as well as further upstream. Adult lampreys migrate back upstream to spawn, it is therefore critical that the migration routes of lamprey are free from obstacles to allow free passage. Adult river lamprey have been recorded at Elvington, Stamford Bridge, Kirkham Abbey, and further upstream in the Rye and Seven.

Flooding of adjacent agricultural land and also recent flooding of urban areas has already resulted in public pressure both for new flood defences and different water-level control regimes. Current issues relating to water level control are being addressed through a collaborative project between Natural England, the Environment Agency and Yorkshire Water. However, increased urbanisation within the catchment of the River Derwent may increase surface water run-off and thus the pressure for new flood defences and different water-level control regimes to be implemented. This could impact on the natural flow regime of the river, affecting the quality of the riverbed as a lamprey spawning habitat and preventing the passage of migrating lampreys. New infrastructure (e.g. road bridges) would need to be carefully designed to avoid constriction of the river or blockage of its floodplain.

Modelling of water quality within the catchment undertaken in 2005 as part of the Environment Agency's Review of Consents process demonstrated that the guidance phosphorus standard for the river is only being met in about the upper 9km of the SAC above Malton.<sup>4</sup> Several sewage works were considered to be significant contributors to exceedence of the standard below



<sup>4</sup> The guideline Phosphorus standard for the River Derwent SAC and the Pocklington sub catchment below Blackfoss Beck is 0.1mg/l annual mean dissolved available inorganic phosphorus; 0.04 mg/l for the River Derwent tributaries draining higher ground from Rye Mouth to Elvington Beck, and 0.06mg/l on the Pocklington sub catchment upstream of Blackfoss Beck.

Malton, along with diffuse sources that the Environment Agency does not regulate. The most significant pathway for delivery of phosphorus from a diffuse source to a nearby watercourse is associated with particulate matter, transported via surface runoff and generally associated with rainfall events.

The Environment Agency Review of Consents identified that there were no adverse effects on the integrity of the site alone or in combination, from water quality discharge consents due to thermal regime, physical damage, saline water, toxic contaminants, turbidity, siltation and pH but that potential adverse effects may occur due to nutrients in relation to 10 discharge consents – including sewage works for three of the Market Towns. The effect of the largest step increase in phosphorous on the River Derwent SAC at Malton is shown by the change in GQA phosphate grade at this point from moderate to high, this grade is then maintained to the confluence of the River Ouse at Barmby.

Further review of these 10 discharge consents by the Environment Agency identified that amendments to six of the consents (see Table 3.2) to reduce the phosphourus limit to 1mg/l were required. The necessary infrastructure works to achieve this limit were included by Yorkshire Water in the relevant Asset Management Plan. <sup>5</sup> The other four discharge consents did not require modification.

Overall the Environment Agency Review of Consents process concluded:-

"The limit on phosphate to be applied at the consents in [Table 3.2] will ensure that the guideline phosphorus standards for the River Derwent riverine SAC will not be exceeded, thereby reducing the risk of an adverse effect on site integrity...

...the conclusion that there was a risk of an adverse effect on site integrity was based on an exceedance of guideline standards rather than an observed detrimental impact."



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<sup>&</sup>lt;sup>5</sup> Every five years, Yorkshire Water prepares an Asset Management Plan (AMP) that sets out its proposed spending plans for the next five years.

Table 3.2 Environment Agency Review of Consents; Amendments to Discharge Consents

| Consent Number |              | P Limit<br>(mg/L) | Delivery<br>Date | Consent<br>Modified? | Date<br>Modified<br>Limit<br>Effective | Amended<br>Consent<br>Number<br>(if<br>applicable) |
|----------------|--------------|-------------------|------------------|----------------------|--|--|
| QR27/27/0040   | Existing     | 2 <sup>a</sup>    |                  |                      |  |  |
| Q112172170040  | Modification | 1                 | 31/03/09         | Yes                  | 31/03/09                               |  |
| 3770(SS)       | Existing     | 2 <sup>b</sup>    |                  |                      |  | 27/28/0115   |
| 3770(33)       | Modification | 1                 | 31/03/10         | Yes                  | 31/03/10                               |  |
| QR27/26/0011   | Existing     | None              |                  |                      |  |  |
| QN27/20/0011   | Modification | 1                 | 31/03/10         | No                   |  |  |
| 2410           | Existing     | None <sup>c</sup> |                  |                      |  | 27/28/0195   |
| 2410           | Modification | 1                 | 31/03/10         | Yes                  | 31/03/05                               | 27/28/0195   |
| 27/25/0075     | Existing     | None              |                  |                      |  |  |
| 21/23/0013     | Modification | 1                 | 31/03/10         | No                   |  |  |
| 1907           | Existing     | None              |                  |                      |  | 27/28/0098   |
| 1907           | Modification | 1                 | 31/03/10         | No                   |  | 21/20/0090   |

a Actual Mean Concentration (2005) 1.51 mg/L

Measures to address current pressures on the water quality of the River Derwent have already been proposed by the Environment Agency and Yorkshire Water. The Humber River Basin Management Plan includes that the Environment Agency / Yorkshire Water will carry out the following actions in relation to discharges to and abstractions from the river system by 2012:

- Contribute to achievement of favourable conservation status through implementing Asset Management Plan schemes;
- Contribute to achievement of favourable conservation status by revoking or amending discharge consents;
- Modification of Yorkshire Water abstraction licence from Kirkham to Elvington Beck to ensure no adverse effect on integrity prevention of fish entrainment; and
- Contribute to achievement of favourable conservation status by revoking or amending abstraction licenses.



b Actual Mean Concentration (2005) 0.86 mg/L

c Actual Mean Concentration (2005) 0.74 mg/L

However, increased urbanisation may result in declining water quality due to increased abstraction or effluent discharge as a result of development within the District. Increased abstraction may affect the characteristic flow regime of the river, including seasonal base flows and flushing flows, whilst discharges of domestic and industrial effluent may cause deoxygenation, siltation, toxic effects or eutrophication within the river. Negative changes in water quality could affect the habitats and species supported by the river.

It should be noted that whilst potable water abstraction does take place from the River Derwent, specifically between Kirkham to Elvington Beck, it has also been classified as a resource which has "no water" available within the Environment Agency's Catchment Abstraction Management Strategy (CAMS). Therefore, the HRA for the Yorkshire and Humber Plan has assumed that any additional development in the region (including Ryedale) will be supplied with water resources from outside the catchment using the Yorkshire Water "grid supply" such that there will be no impact on the River Derwent from increased abstraction. Specifically Yorkshire Water's Water Resource Plan states that additional water for the region will be sourced from a balance of demand reduction options (additional leakage control) and the development of new or existing assets (Swale groundwater source and the River Ouse water treatment works.) The plan states that:

"Development of the River Ouse water treatment works follows the completion of extensive investigations by the Environment Agency into the sustainability of Yorkshire Water's river abstraction licences, as a part of the review of consents for the Habitats Directive. The Environment Agency has assessed the impacts of this solution and believes that utilising the full licence on the River Ouse is sustainable."



There is public access to parts of the River Derwent. If recreational pressures increased due to urbanisation within Ryedale District it may be damaging to the site, particularly due to disturbance of otter.



The HRA for the Yorkshire and Humber Plan has specified a 500m buffer be applied to the River Derwent in respect of direct disturbance. There should be a presumption against development within this buffer zone; outside this buffer avoidance measures may need to be adopted depending on the scale and location of development.

## Lower Derwent RAMSAR, SPA and SAC

The HRA for the Yorkshire and Humber Plan has specified a 1500m buffer be applied to the Lower Derwent in respect of direct disturbance; this is considered sufficient to allow no disruption of the local hydrological regime. It will also "enable the extent of wet pasture to be maintained, enable sight lines for birds to be maintained and reduce casual levels of disturbance by dog walkers and groups of children." Thus, given that this site is situated approximately 5km to the south of the Ryedale District boundary (Figures 1, 2 and 3) and is not a major recreation attraction, impacts associated with changes to the local hydrological regime and recreation pressures are considered unlikely to occur.

The River Derwent flows into the Lower Derwent. As with the River Derwent SAC, increased urbanisation within the catchment may increase surface water run-off and thus the pressure for new flood defences and different water-level control regimes to be implemented along the river. This could impact on the natural flow regime of the river in turn affecting the flooding regime of wet grassland habitat and thus the suitability of this habitat for breeding and over-wintering ornithological interests. Increased urbanisation may result in declining water quality on the river due to increased effluent discharges as a result of development within the District. Discharges of domestic and industrial effluent may cause de-oxygenation, siltation, toxic effects and eutrophication within the river, in turn affecting otter due to a decrease in prey species.

Coal mining takes place adjacent to the Lower Derwent. However, minerals planning is outside the scope of the Ryedale Core Strategy (instead being dealt with by North Yorkshire County Council) and so potential impacts from such operations need not be considered further.

### North York Moors SPA and SAC

Both merlin and golden plover are vulnerable to recreational disturbance. Given that the site is within the District, house building within Ryedale could result in increased visitor numbers to the area, potentially resulting in significant disturbance. Golden plover will also use pasture outside the site boundary as feeding areas and again an increase in population may increase the risk of significant disturbance; it is noted in the HRA for the Yorkshire and Humber Plan that pasture within a minimum radius of 10km from the SPA/SAC should be maintained. Significant disturbance is that which will affect survival, for example:

- Disturbance which puts nesting birds to flight can lead to breeding failure because the eggs or chicks are predated by mammals and other birds or the eggs can chill causing the embryos to die.
- Disturbance to feeding birds can lead to them gathering insufficient food to support chicks or to prepare for long migrations and causes the birds to use up energy as they fly away from the disturbance.
- Disturbance to birds during the mating season can interrupt bonding and prevent pairing and nesting taking place.



The North York Moors also supports an intimate mosaic of dry and wet heath interspersed in parts with smaller amounts of blanket bog (mainly on the higher plateau) between river valley catchments. The most vulnerable plant communities are the heaths and mires which are susceptible to overgrazing, gripping and too frequent heather burning leading to species impoverishment and a loss of structural diversity. Given that the site is within the District, house building within Ryedale could result in increased visitor numbers to the area, potentially increasing the risk of accidental fires.

The HRA for the Yorkshire and Humber Plan has specified a 1000m buffer be applied to the North York Moors in respect of direct disturbance. There should be a presumption against development within this buffer zone; outside this buffer avoidance measures may need to be adopted depending on the scale and location of development.

#### Eller's Wood & Sand Dale SAC

The site is very wet and vulnerable to both human and livestock pressure. It is fairly isolated and human pressure at present is negligible. The number of visitors to the site is minimal but if it increased it could be damaging to its favourable condition. Natural England has confirmed that public access to the site is not currently available.

Geyer's whorl snail is mostly recorded on permanently wet calcareous flushes and is thus dependent on water chemistry and flow rate. At Eller's Wood and Sand Dale groundwater sometimes breaks out on the surface, either as gentle seepages, giving rise to flushes, or through greater flows that are evident as springs. The quantity and quality of the groundwater feeding this site must therefore be maintained, though the quantity is not likely to be naturally constant throughout the seasons or between wet and dry years. Drainage schemes associated with development in the vicinity of the site could intercept the source of groundwater to springs or flushes / reduce the area of surface they irrigate or affect water quality due to pollution incidents. In terms of surface water the site is fed by the Thornton Beck upstream of Ryedale District.

The HRA for the Yorkshire and Humber Plan has specified a 2000m buffer (or within the immediate water resource catchment area, whichever is larger) be applied to this SAC in respect of direct disturbance. There should be a presumption against development within this buffer zone.

### Fen Bog SAC

Fen often develops within valleys and the origins and movement of the water within the fen give rise to a number of different vegetation zones. Groundwater quality and quantity need to be maintained, though the quantity is not likely to be naturally constant throughout the seasons or between wet and dry years, to maintain this fen habitat.

Drainage schemes associated with development on the northern edge of the District could intercept the source of groundwater and surface water to the valley mire or affect water quality due to pollution incidents. The main vulnerability would be a lowering of the existing water table resulting from potential drainage to protect the railway running through the middle of the site - the North Yorkshire Moors Railway - which is a major tourist attraction within the District. The site is also subject to occasional fires due to its proximity to the steam engine railway line. In terms of surface water the site is fed by watercourses upstream of Ryedale District.



The site is owned by Yorkshire Wildlife Trust and there is informal public access to it. There is also a public footpath which runs along the north of the site. If recreational pressures increased due to urbanisation within Ryedale District it may be damaging to the site.

The HRA for the Yorkshire and Humber Plan has specified that the immediate water resource catchment area for this SAC should be avoided in respect of direct disturbance. There should be a presumption against development within this buffer zone; outside this buffer avoidance measures may need to be adopted to reduce the impacts associated with recreation.

#### Flamborough Head & Bempton Cliffs SPA / Flamborough Head SAC

The geology and structure of the chalk cliffs between Speeton and South Landing have weathered to produce numerous ledges, crevices and caves, which form ideal nest sites for seabirds. Flamborough Head is also the most northerly outcrop of coastal chalk in the UK and the most southerly area of bedrock on the North Sea. The site is characterised by high chalk cliffs (up to 135 m high and covering a distance of about 16 km) which are partly vegetated, over 200 caves and a chalk reef which extends up to 6 km offshore. It is vulnerable to a number of pressures, particularly physical damage and toxic contamination.

The site is part of the European marine site for which a management scheme has been developed and for which Natural England has identified key human activities which may affect the interest features. Of particular note to the Ryedale Core Strategy is that the natural and cultural heritage of the site make the area a popular site for a range of interests and hence an economically important area in terms of recreation and tourism. Both the cliff top and the marine areas are extensively used. Most activities, such as bathing, water craft and scuba diving, show a marked seasonality, although some activities attract users all year round, such as, walking and birdwatching. A number of private businesses relating to the recreation and tourism sector, such as golf clubs and caravan parks, also own or manage land in or adjacent to the European site.

Given that the site is within 15km of the District and this area is important for recreation, house building within Ryedale could result in increased visitor numbers to the area, potentially affecting the favourable condition status of the site if not managed.

#### Beast Cliff - Whitby (Robin Hoods Bay) SAC

The qualifying interest feature for this site is vegetated sea cliffs of the Atlantic and Baltic coasts. These cliffs are subject to active erosion processes in parts, particularly those areas of soft clay where coastal erosion maintains a cycle of erosion, landslip and colonisation. Any management of these cliffs is difficult due to their unstable nature, but they are sometimes grazed in conjunction with adjacent cliff-top pastures. The more southerly sections of cliff are relatively stable, but due to their steep and inaccessible nature are virtually unmanaged. Any intensification in management may influence the vegetation communities present.

The location of this site is rural, but occasional settlements may give rise in the future to coast protection proposals which may interfere with natural coastal erosion processes. There is a current Shoreline Management Plan for this section of the coast; the preferred coastal defence option as outlined in the plan is 'do nothing' which should contribute to maintaining active coastal processes. Development within the District is unlikely to influence the coastal erosion processes necessary to maintain it in favourable condition.



The site is situated just over 15km from the northeast of the Ryedale District boundary (**Figure 1**) but this area is important for recreation, therefore house building within Ryedale could result in increased visitor numbers to the area, potentially affecting the favourable condition status of the site if not sensitively managed.

#### Strensall Common SAC

Both qualifying heathland communities are vulnerable to scrub encroachment. Heathland management maintains the open nature of the heath and promotes a varied structure of unevenaged stands of native heathers and other characteristic plants. It is generally beneficial if all stages of the heather life cycle are present. Without such management, heathland becomes progressively dominated by bracken, gorse and, on wet ground, purple moor grass tussocks. Eventually scrub and trees will invade.

Low intensity grazing is a suitable means of managing areas of dry heath. Generally areas of wet heath require limited management but light grazing may also be useful for maintaining the variation in vegetation composition and structure, and for controlling invasive grasses such as purple-moor grass. The habitats within this site are highly sensitive to inorganic fertilisers and pesticides, applications of which should be avoided both within the site itself and in adjacent surrounding areas.

Water levels within areas of wet heath should be maintained to avoid adverse changes to the characteristic plant composition of the habitat. In some instances it may be appropriate to restore natural drainage where this is possible. In terms of surface water the site is part of the River Foss catchment, the Environment Agency note that the site is not currently subject to over abstraction.

Access to this site, and any recreational activities within, may need to be controlled. The site is currently used for military training which does not currently compromise the interests of the site. Natural England has a management agreement in place with Defence Estates and the tenant to ensure scrub does not expand further at the expense of the heathland communities. It is also currently pursuing the possibility of a large-scale heathland regeneration project for the site.

The site is situated immediately adjacent to the Ryedale District boundary development. However as it is used for military training no public access is available. The HRA for the Yorkshire and Humber Plan has specified that a 150m buffer should be applied to Strensall Common in respect of disturbance. Therefore, unless immediately adjacent to the site, development in the District is unlikely to influence its favourable condition.



# 4. Core Strategy Development Options

This section provides an assessment of the likelihood of each of the high level Core Strategy options currently being considered by Ryedale District Council having a significant effect on a European or Ramsar site. It draws on the conclusions of the Yorkshire and Humber Plan and the specific locations under consideration.

This assessment has been undertaken in relation to the Core Strategy. Following publication of the Core Strategy, Ryedale District Council will prepare a Site DPD (site allocations) which will set out in more detail where new homes, employment and retail development will be located. Until this stage a range of alternative locations within each of the settlements could potentially be brought forward.

# 4.1 Development Location Options

#### 4.1.1 Option 1

Option 1 will result in new housing being distributed across all settlements in the District.

Option 1 could result in an increased amount of new development taking place in close proximity to the North York Moors SPA/SAC. For example, the village of Keldhome is within 5km of the European Site. Direct impacts on the SPA/SAC as a result of development in this and other nearby villages are not anticipated. However, development in villages within 10km of the SPA may result in the loss of pasture land used for feeding golden plover. Given that a range of alternative locations will be available it is however likely that, following further investigation at Site DPD stage, the site allocations can avoid land of significant value to golden plover.

Option 1 would also increase the amount of new development in the eastern part of the District such that it is in closer proximity to European Sites on the east coast. For example, the village of Willerby is within 15km of Flamborough Head, such that residents will easily be able to take advantage of the recreational resource provided.

Development in the north of the District could increase recreational pressure on the SPA/SAC itself and result in pasture land within 10km of it increasingly being used by dog walkers resulting in the disturbance of feeding golden plover.

Given that developments are likely to be small scale there may not be significant opportunities for the provision of new public open space as an alternative recreational resource. However, given that a range of alternative locations will be available, careful consideration of the quantum of the new dwellings allocated to each town and village at Site DPD stage should ensure significant recreational pressure as a result of new development is avoided.

Option 1 will also increase the overall amount of development taking place within the corridor of the River Derwent, as there are a number of villages (e.g. Kirkham and Howsham) in close proximity to it. Given the wider spread of development it is more likely that development within the floodplain could be avoided through careful site allocation at Site DPD stage. However, increased urbanisation adjacent to the designated stretch of river may result in an



increase in the amount of treated effluent and surface water runoff entering it. It may also increase recreational pressure on the river corridor unless sufficient alternative public open space is provided as part of development. It should be noted that the stretch of river that runs through the centre of Malton/Norton is undesignated.

In its unmitigated form, this option is therefore classified as amber.

#### 4.1.2 Option 2

Option 2 will result in new housing concentrated in the Market Towns.

The requirement to develop a large number of houses in the Market Towns to the north of the District could result in an increased amount of new development taking place in close proximity to the North York Moors SPA/SAC as all three towns are within 10km of this European site. Direct impacts on the site as a result of development are not anticipated. However, the quantum of development which would be required in these towns under this option would mean that the use of large areas of Greenfield land on the edge of the current built up area is unlikely to be avoided. This may result in the loss of large areas of pasture land which may be used by feeding golden plover.

Development in the north of the District could increase recreational pressure on the SPA/SAC itself and result in pasture land within 10km of it increasingly being used by dog walkers resulting in the disturbance of feeding golden plover. However, given that some large scale developments are likely to be required there could be opportunities for the provision of new public open space as an alternative recreational resource.

In its unmitigated form, this option is classified as amber.

#### 4.1.3 Option 3

Option 3 will result in new housing being concentrated in the Market Towns and a selection of key service villages. Table 4.1 (**Figures 1 to 3**) shows which sites will need to be considered in respect of the four main towns within Ryedale, on the basis that these are within an approximate 15km radius of the towns and taking into account the potential impacts detailed above.

Table 4.1 European or Ramsar sites potentially impacted by development in Market Towns

| European or<br>Ramsar site | Malton/Norton      | Pickering          | Helmsley           | Kirkbymoorside     |
|----------------------------|--------------------|--------------------|--------------------|--------------------|
| River Derwent SAC          | ✓                  | ✓                  | ✓                  | ✓                  |
|                            | Direct land take   | Flood management   | Flood management   | Flood management   |
|                            | Direct disturbance | Infrastructure     | Infrastructure     | Infrastructure     |
|                            | Risk of pollution  | Effluent discharge | Effluent discharge | Effluent discharge |
|                            | Flood management   |                    |                    |                    |



| European or<br>Ramsar site              | Malton/Norton      | Pickering               | Helmsley                | Kirkbymoorside          |
|---|--------------------|-------------------------|-------------------------|-------------------------|
|   | Infrastructure     |                         |                         |                         |
|   | Effluent discharge |                         |                         |                         |
|   | Recreation         |                         |                         |                         |
| Lower Derwent<br>RAMSAR, SPA and<br>SAC | ✓                  | ✓                       | ✓                       | ✓                       |
|   | Flood management   | Flood management        | Flood management        | Flood management        |
|   | Effluent discharge | Effluent discharge      | Effluent discharge      | Effluent discharge      |
| North York Moors SPA and SAC            | ×                  | ✓                       | ✓                       | ✓                       |
|   |                    | Loss of feeding grounds | Loss of feeding grounds | Loss of feeding grounds |
|   |                    | Recreation              | Recreation              | Recreation              |
| Eller's Wood and<br>Sand Dale SAC       | ×                  | ×                       | ×                       | ×                       |
| Fen Bog SAC                             | ×                  | ×                       | x                       | x                       |
| Flamborough Head & Bempton Cliffs SPA   | ×                  | ×                       | ×                       | ×                       |
| Flamborough Head<br>SAC                 | x                  | ×                       | x                       | ×                       |
| Beast Cliff SAC                         | ×                  | ×                       | x                       | x                       |
| Strensall Common<br>SAC                 | ×                  | ×                       | ×                       | ×                       |

The requirement to develop houses in the Market Towns and key service villages to the north of the District could result in an increased amount of new development taking place in close proximity to the North York Moors SPA/SAC as all three towns and key villages are within 10km of this European site. Direct impacts on it as a result of development are not anticipated. However, development in towns and villages within 10km of the SPA may result in the loss of pasture land used for feeding golden plover. Given that a small range of alternative locations will be available it is however likely that, following further investigation at Site DPD stage, site allocations can avoid land of significant value to golden plover.

Development in the north of the District could increase recreational pressure on the SPA/SAC itself and result in pasture land within 10km of it increasingly being used by dog walkers resulting in the disturbance of feeding golden plover. Option 3 would also increase the amount of new development in the eastern part of the District such that it is in closer proximity to



designated sites on the east coast, residents will easily be able to take advantage of the recreational resource provided.

Given that a small range of alternative locations will be available, careful consideration of the quantum of new dwellings allocated to Pickering / Kirkbymoorside / Helmsley and each key service village should ensure significant recreational pressure as a result of new development is avoided. Larger scale developments within the Market Towns could also present opportunities for the provision of new public open space as an alternative recreational resource.

In its unmitigated form, this option is classified as amber.

#### 4.2 Quantum of Development Options

#### 4.2.1 Option I

Option I involves the construction of 50% of new dwellings within Malton/Norton, 25% in Pickering and 15% in Kirkbymoorside/Helmsley with the remaining 10% in the key service villages.

1,500 new dwellings in Malton/Norton could potentially result in significant effects on the River Derwent. It is likely that development on Greenfield land within the floodplain could be avoided through careful site allocation. However, increased urbanisation within the catchment may result in an increase the amount of treated effluent and surface water runoff entering the It may also increase recreational pressure on the river corridor unless sufficient alternative public open space is provided as part of development.

The provision of 750 new houses in Pickering would mean that the use of a large area of Greenfield land on the edge of the current built up area is unlikely to be avoided. This may result in the loss of pasture land used for feeding golden plover, as the town is within 10km of the North York Moors SPA. Pasture land surrounding the town may also be increasingly used by dog walkers resulting to disturbance of feeding golden plover.

The provision of a proportion of 450 new houses in either Kirkbymoorside or Helmsley would mean that the use of large areas of Greenfield land on the edge of the current built up areas is unlikely to be avoided. This may result in the loss of pasture land used for feeding golden plover. Helmsley is within 10km of the North York Moors SPA whilst Kirkbymoorside is within 5km - land here is therefore more likely to be of greater value to golden plover. Pasture land surrounding the towns may also be increasingly used by dog walkers resulting in the disturbance of feeding golden plover.

In its unmitigated form, this option is therefore classified as amber.

#### 4.2.2 **Option II**

Option II involves the construction of 50% of new dwellings within Malton/Norton, 20% in Pickering and 15% in Kirkbymoorside/Helmsley with the remaining 15% in the key service villages.

The provision of 600 new houses in Pickering would mean that the use of small area of Greenfield land on the edge of the current built up area is unlikely to be avoided.

In its unmitigated form, this option is therefore classified as amber.



#### 4.2.3 Option III

Option III involves the construction of 50% of new dwellings within Malton/Norton, 25% in Pickering and 10% in Kirkbymoorside/Helmsley with the remaining 15% in the key service villages.

The provision of a proportion of 300 new houses in either Kirkbymoorside or Helmsley would mean that a small proportion of Greenfield land on the edge of the current built up areas is unlikely to be avoided.

In its unmitigated form, this option is therefore classified as amber.

#### 4.2.4 Option IV

Option IV involves the construction of 50% of new dwellings within Malton / Norton, 20% in Pickering and 10% in Kirkbymoorside/Helmsley with the remaining 20% in the key service villages. Given that a small range of alternative locations will be available careful consideration of the quantum of new dwellings allocated to each key village should ensure significant recreational pressure as a result of new development is avoided.

In its unmitigated form, this option is therefore classified as amber.

#### 4.2.5 Malton/Norton Option

This option involves decreasing or increasing the quantum of development that should take place in Malton/Norton.

Less than 1,500 new dwellings would reduce the magnitude of impacts associated with the need to develop Greenfield land, treated effluent and surface water runoff entering the river, and recreational pressure on the river corridor. By significantly reducing the number of new dwellings to the low hundreds in order to meet local needs the likelihood of significant effects arising will be minimised.

In its unmitigated form, this option is therefore classified as green-amber.

Greater than 1,500 new dwellings would increase the magnitude of impacts associated with the need to develop Greenfield land, treated effluent and surface water runoff entering the river, and recreational pressure on the river corridor. In a worst-case scenario 3,000 new dwellings would be allocated to Malton/Norton. Large areas of Greenfield land within the floodplain will need to be developed, whilst opportunities for providing alternative public open space are likely to be limited.

In its unmitigated form, this option is therefore classified as amber-red.

# 4.3 Malton/Norton Location Options

#### 4.3.1 Option A

Option A would result in a number of small sites scattered around the towns; potentially this could include small areas adjacent to the River Derwent.



Given the flexibility it is likely that development within the floodplain could be avoided through careful site allocation at Site DPD stage, although consideration would still need to be given to the impact of surface water run-off entering the Derwent system.

By diverting housing away from the River Derwent at Site DPD stage it may reduce future recreational pressure on the river corridor by virtue of increased travelling time reducing the attractiveness of the river as a location of informal recreation. Even so, existing access to sensitive stretches of the river bank may need to be considered through adoption of a management plan

There is no public access to the River Derwent within Malton as development occurs up to the river bank, the Malton and Norton Canoe Club (~50 members) is situated adjacent to Castlegate and has direct access to the river.

There is a Riverside Walk which follows the route of the Centenary Way (~30 miles from Filey to York) along the left bank of the River Derwent. This is accessed from the Norton side of the river near Castlegate and Railway Street, the stretch of river between the two bridges is anticipated to be well used. Public access from elsewhere in Norton is limited by the presence of the railway line.

Coarse fishing is available on the stretch of river by Old Malton and between Barmby Barrage and Malton Sewage Treatment Works.

In its unmitigated form, this option is therefore classified as amber.

#### 4.3.2 Option B

Option B would result in a number of larger sites around the towns being developed; potentially this could include areas adjacent to the River Derwent. Given that there are only a small number of large sites suitable it is highly likely that development within the floodplain would need to take place with surface water run-off likely to be discharged directly to the River Derwent. It may also increase future recreational pressure on the river corridor unless sufficient alternative public open space is provided as part of any development, no additional access to the river is promoted and existing access to sensitive stretches is considered through adoption of a management plan.

In its unmitigated form, this option is therefore classified as amber.

#### 4.3.3 Option C

Option C would result in a mix of smaller and larger sites around the towns being developed; potentially this could include areas adjacent to the River Derwent. Given the flexibility it is likely that development within the floodplain could be avoided through careful site allocation at Site DPD stage, although consideration would still need to be given to the impact of surface water run-off entering the Derwent system. By diverting housing away from the River Derwent at Site DPD stage it may reduce recreational pressure on the river corridor by virtue of increased travelling time to access it, even so existing access to sensitive stretches of the river bank by need to be considered through adoption of a management plan.

In its unmitigated form, this option is therefore classified as amber.



#### 4.3.4 Option D

Option D would result in one large urban extension being developed. Given that there are only a small number of large sites suitable for such an extension it is highly likely that development within the floodplain of the River Derwent would take place with surface water run-off likely to be discharged directly to the River Derwent. It may also increase recreational pressure on the river corridor unless sufficient alternative public open space is provided as part of any development, no additional access to the river is promoted and existing access to sensitive stretches is considered through adoption of a management plan.

In order to ensure sufficient access to the development site a new bridge across the River Derwent may be required. This would need to be carefully designed to avoid constriction of the river or blockage of its floodplain. Passage for migratory fish and otter will need to be maintained. Careful consideration would need to be given to construction methods and pollution prevention guidance adopted.

In its unmitigated form, this option is therefore classified as amber.

# 4.4 Pickering / Kirkbymoorside / Helmsley Location Options

For these towns Option A is considered to be the only viable option. It would result in a number of small sites scattered around the towns; potentially this could include small areas of pasture on the edge of the built up area which are used as feeding grounds by birds associated with the North York Moors SPA. However, given that a range of alternative locations will be available it is likely that, following further investigation at Site DPD stage, site allocations can avoid land of value to SPA birds.

In its unmitigated form, this option is therefore classified as amber.





# 5. In-Combination Effects

## 5.1 Background

Government advice specifies that only those plans and projects most relevant to European and Ramsar sites within the area subject to Habitats Regulation assessment be considered in the evaluation of in-combination effects. The following plans have therefore been considered with potential in-combination effects noted.

### 5.2 Yorkshire and Humber Plan

The Yorkshire and Humber Plan will set out the need for future development in the Yorkshire and Humber Region and how this could be met through a number of policies. The quantum of development allocated to Ryedale and adjacent districts up to 2026 will need to be subject to HRA in due course.

Currently this plan is only at HRA screening stage; however the HRA should ensure that impacts associated with the quantum of development proposed within Ryedale (e.g. drinking water abstraction) do not result in significant effects; such that consideration only needs to be given to how that quantum is distributed across the District to ensure no significant effects arise at the local level.

# 5.3 Scarborough Local Development Framework

This LDF provides a framework for development in Scarborough, adjacent to the eastern boundary of Ryedale District. The overarching document in the LDF – the Core Strategy - has not yet been subject to HRA, only screening has been undertaken. However, there is potential for in-combination effects on designated sites on the east coast due to recreational pressure as a result of development in key villages to the east of the District.

# 5.4 Hambleton Local Development Framework

This LDF provides a framework for development in Hambleton, adjacent to the western boundary of Ryedale District. There is potential for in-combination effects on the North York Moors due to recreational pressure as a result of development in Market Towns and villages to the north of the district. However, the adopted Core Strategy DPD and Development Policies DPD have both been subject to HRA, concluding that significant effects as a result of these plans being implemented will not occur. Specifically Policy DP31 of the Development Policies DPD recognizes that recreational pressure has the potential to lead to adverse effects but provides a safeguard in this respect.



## 5.5 York Local Development Framework

This LDF provides a framework for development in York, adjacent to the southwestern boundary of Ryedale District. The Core Strategy has been subject to HRA. No significant incombination effects are anticipated.

Specifically no adverse effects on the integrity of Strensall Common SAC are anticipated. However, it is noted in the HRA conclusions that this issue will need to be picked up in more depth during allocation of specific sites through the Allocations DPD and therefore the potential remains for in-combination effects on Strensall Common SAC.

# 5.6 East Riding Local Development Framework

This LDF provides a framework for development in East Riding which is adjacent to the southern boundary of Ryedale District. The Core Strategy has not yet been adopted and the HRA is only at screening stage. However, no significant in-combination effects are anticipated.

# 5.7 North York Moors Local Development Framework

This LDF provides a framework for development in the National Park, including those parts of Ryedale district outside the jurisdiction of the LPA. There is potential for in-combination effects on the North York Moors due to recreational pressure as a result of development in Market Towns and villages to the north of the district. However, the adopted Core Strategy DPD has been subject to HRA, concluding that significant effects as a result of this plan being implemented will not occur. Specifically Core Policy C requires:

"The quality and diversity of the natural environment of the North York Moors National Park will be conserved and enhanced. Conditions for biodiversity will be maintained and improved and important geodiversity assets will be protected. Protected sites and species will be afforded the highest level of protection."

# 5.8 Derwent Catchment Abstraction Management Plan

It should be noted that whilst abstraction does take place from the River Derwent, it has also been classified as a resource which has "no water" available within the Environment Agency's Catchment Abstraction Management Strategy (CAMS). Therefore, the HRA for the Yorkshire and Humber Plan has assumed that additional development in the region (including Ryedale) will be supplied with water resources from outside the catchment using the Yorkshire Water "grid supply" such that there will be no impact on the River Derwent from increased abstraction.

## 5.9 Yorkshire Water - Water Resources Plan

Yorkshire Water's Water Resource Plan states that additional water for the region will be sourced from a balance of demand reduction options (additional leakage control) and the development of new or existing assets (Swale groundwater source and the River Ouse water treatment works.) The plan states that:



"Development of the River Ouse water treatment works follows the completion of extensive investigations by the Environment Agency into the sustainability of Yorkshire Water's river abstraction licences, as a part of the review of consents for the Habitats Directive. The Environment Agency has assessed the impacts of this solution and believes that utilising the full licence on the River Ouse is sustainable."

# 5.10 NYMNP Management Plan / Recreation & Access

The NYMNP Management Plan includes a number of objectives relating to "recreational management" within the NYMNP including "in relation to all recreational activity, to undertake a range of management measures with the aim of minimising the effects of these activities both on each other and on the wider environment of the Park, and to monitor their impact."

Their Recreation & Access Strategy expands on the impact recreation has on the special qualities of the park. It notes that levels of user activity vary considerably with certain locations (e.g. Goathland, Robin Hood's Bay and Helmsley and their immediate surroundings) accommodating a relatively high proportion of all activity. The area around Newtondale (accessed mainly by the North Yorkshire Moors Railway) in particular experiences high levels of use due to the provision of a wide range of recreational and access opportunities; much of this area supports internationally important vegetation and bird communities.

The Recreation & Access Strategy includes the objective to "manage and promote positive recreational experiences in a way that reconciles conflict between the environment, users and local communities." Specific measures include engendering respect for the special qualities of the moorland and encouraging users to act responsibly through education (e.g. impacts of dogs and people leaving paths on nesting birds). In addition to information provided at visitor centres, car parks and other information points, consideration should be given to the Moorland code for visitors being distributed even more widely via Tourist Information Centres, tourist accommodation providers, partners, through outreach programmes etc.

The implementation of both these plans should ensure that the special qualities of the moors are promoted and recreational activities appropriate to that special character encouraged thereby reducing potentially adverse effects associated with recreational pressure as a result of development in Ryedale District.

# 5.11 Flamborough Head Management Plan

The overarching objective of the Management Plan is to "ensure that human activities are managed in ways that are compatible with the wildlife features of the European Marine Site and to seek opportunities to improve these assets and the human activities that depend upon them." It includes actions to minimise the impact on the marine environment from recreation and/or tourism which should thereby reduce potentially adverse effects associated with recreational pressure as a result of development in Ryedale District.





# 6. HRA Conclusions

### 6.1 Introduction

Five European or Ramsar sites are located within the District's boundary, and a further seven sites are located within approximately 15km. Particular issues which have been highlighted and recommended further investigations and mitigation measures are summarized in the following sections.

The measures highlighted in the grey boxes should be considered in determination of the preferred option and if incorporated into the Core Strategy then it should not result in significant adverse effects.

Several of these measures will need to be implemented during preparation of the Site DPD (site allocations) which will set out in more detail where new homes, employment and retail development will be located.

# 6.2 Summary of Development Location Options

The implementation of Option 1 will increase pressures associated within increased urbanisation on the River Derwent. Such pressures are reduced under Options 2 and 3 as (excepting development in Malton/Norton which occurs under all options) urbanisation adjacent to the designated stretch of river is avoided.

The HRA for the Yorkshire and Humber Plan has specified a 500m buffer be applied to the River Derwent in respect of direct disturbance. There should be a presumption in the Core Strategy against all development within this buffer zone; outside this buffer but within the floodplain of the River Derwent and its tributaries avoidance measures may need to be adopted depending on the scale and location of development.

Except within Malton/Norton, development will not be permitted within the floodplain of the River Derwent and its tributaries unless it can be demonstrated through an Appropriate Assessment that there will be no adverse effect on the integrity of the SAC, alone, or in combination, with other plans or projects.

The sewage works serving the four main towns in the District – Malton/Norton, Helmsley, Kirkbymoorside and Pickering – and many of the villages all discharge into the River Derwent catchment. It will be necessary to ensure that, following any new development, treated effluent discharged can still comply with the current or amended (following the Environment Agency's ongoing Habitats Review of Consent process – see Table 3.2) discharge consent. Providing compliance can be achieved by Yorkshire Water then the risk of an adverse effect on site integrity will be minimised.

For any development in the District, it will be necessary to ensure that any measures required to ensure compliance are included in the next AMP and implemented prior to development taking place.



Yorkshire Water has confirmed there is very limited capacity within the sewage treatment works serving some of the villages in the District. The availability of capacity within the sewage treatment works serving the Market Towns is still subject to confirmation from Yorkshire Water.

Development in the District will only be permitted where sufficient sewage treatment capacity exists such that there will be no adverse effect on the integrity of the River Derwent SAC, alone, or in combination, with other plans or projects as determined by the Environment Agency Review of Consents process. Prior to planning permission being granted Yorkshire Water will be consulted to confirm that sufficient treatment capacity exists. If capacity does not exist then development will not be permitted until such time that measures to ensure compliance have been implemented by Yorkshire Water.

Increased urbanisation within the catchment of the River Derwent may increase surface water run-off and thus the pressure for new flood defences and different water-level control regimes to be implemented therefore it will be necessary for the Core Strategy to ensure that all developments do not increase flood risk, also taking into account the likely affect of climate change on flow regimes.

Developments within the catchment of the River Derwent and its tributaries must incorporate sustainable drainage measures to:

- a) ensure there is no increase in surface water run-off (accounting for climate change) and thus demand for flood defences; <sup>6</sup> and
- b) ensure there is no increase in diffuse pollution from the built up area entering the river system. <sup>7</sup>

Development within the catchment may increase the demand for flood defences due to loss of floodplain or an increase in surface water run-off. The need for flood defence works should be avoided by not permitting development within the floodplain and incorporating sustainable drainage measures to avoid an increase in surface water run-off.

Flood defence works associated with developments will only be permitted if it can be demonstrated through an Appropriate Assessment that there will be no adverse effect on the integrity of the SAC, alone, or in combination, with other plans or projects.

Under all options there is the potential for indirect impacts on the North York Moors SPA as a result of the loss of pasture land used for feeding golden plover. However by spreading the distribution of development more widely Options 1 and 3 provide the most flexibility to ensure that significant effects can be avoided at Site DPD stage. It should be noted that if any large

<sup>&</sup>lt;sup>7</sup> SuDs adopted must be effective at treating diffuse pollution not just reducing run-off rates. Passive treatment systems use natural processes to remove and breakdown pollutants from surface water run-off. On small sites filter strips can be used effectively to remove excess solids and pollutants before discharge to an infiltration system. Retention ponds and wetlands are suitable for larger sites (over 5ha) and would usually have at least 20 days retention time to permit biological degradation, in the case of wetlands planted areas provide a greater degree of filtration and nutrient removal. For further details see environment-agency.gov.uk/static/documents/GEHO0308BNSS-e-e.pdf



<sup>&</sup>lt;sup>6</sup> Run-off rates should be in accordance with those set out in the North East Yorkshire Strategic Flood Risk Assessment

Greenfield sites within 10km of the SPA are to be brought forward surveys may be required during preparation of the Site DPD to confirm they are not of significant value to golden plover prior to allocation.

Under all options there is also the potential for indirect impacts on the North York Moors SPA/SAC as a result of recreational pressures; either on the European Site itself or as a result of increased use of pasture land used by feeding golden plover. By spreading the distribution of development more widely Options 1 and 3 provide the most flexibility at Site DPD stage to ensure that significant effects can be avoided, though they may also result in increased pressures on designated sites along the East Coast.

The East Coast is more distant from Ryedale than the North York Moors and so careful consideration of the quantum of development in all these areas should ensure significant effects as a result of new development are lessened, by virtue of increased travelling time reducing the attractiveness of Flamborough Head as a location for informal recreation.

Except within the Market Towns, <u>no development</u> will be permitted within 500m of the River Derwent SAC, Ikm of the North York Moors SPA/SAC, 150m of Strensall Common SAC or 2km of Eller's Wood and Sand Dale SAC, unless it can be demonstrated through an Appropriate Assessment that there will be no adverse effect on the integrity of the SAC, alone, or in combination, with other plans or projects.

Except within the Market Towns, development will only be permitted on Greenfield sites within 10km of the North York Moors SPA where it has been demonstrated through an Appropriate Assessment that the development site is not of significant value to golden plover.

Furthermore, it is anticipated that the existence of the North York Moors Management Plan and Flamborough Head Management Plan will have a positive in-combination effect.

Except within the Market Towns, residential development within the District will only be permitted within 10km of the North York Moors SPA/SAC and east coast designated sites where Natural England considers an appropriate management plan is in place to deal with any recreational pressures as a result of new development.

To help manage recreational pressure on the North York Moors SPA/SAC and east coast designated sites all new residential developments within 10km should provide a financial contribution (appropriate to the scale of development in question and distance from the designated sites) towards on-going access management in accordance with this management plan.

# 6.3 Summary of Development Quantum Options

Under all options 1,500 of new dwellings will be within Malton/Norton potentially resulting in significant effects on the River Derwent. However, if the number of dwellings allocated could be reduced this would reduce the magnitude of impacts on the River Derwent. A significant increase in the number of dwellings allocated to these two towns should be avoided to protect the SAC.



It should be noted that the stretch of river that runs through the centre of Malton/Norton is undesignated.

Table 6.1 Areas of Existing Green Space in the Market Towns (ha)

| Туре              | Malton/Norton | Kirkbymoorside | Helmsley | Pickering |
|-------------------|---------------|----------------|----------|-----------|
| Allotments        | 3.05          | 0.14           |          | 2.05      |
| Amenity Space     | 14.31         | 1.40           | 0.55     | 9.20      |
| Cemeteries        | 7.57          | 1.10           | 1.25     | 0.82      |
| Green Space       |               |                | 75.34    |           |
| Parks and Gardens |               |                | 62.67    | 0.07      |
| Play Areas        | 0.95          | 0.86           | 0.63     | 0.89      |
| Sports Facilities | 67.96         | 50.29          | 0.22     | 6.27      |
| TOTAL             | 93.84         | 53.79          | 140.66   | 19.3      |

Natural England's accessible natural greenspace standards<sup>8</sup> state that no person should live more than 300m from their nearest area of accessible natural green space of at least 2ha in size. Natural accessible greenspace includes green corridors such as the River Derwent, hence to avoid increasing recreational pressure on this resource, potentially resulting in increased disturbance of otter, it should be ensured that alternative resources are available in respect of new residential development. This may be through providing access to existing green space (e.g. links to the Public Right of Way network) or by creating new green space. The creation of alternative accessible natural green spaces could be incorporated into development schemes or funding could be secured through financial contributions from developers of sites within Malton/Norton.

To avoid increasing recreational pressure on the River Derwent, in line with Natural England guidance, an area of accessible natural greenspace of at least 2ha in size within  $300m^9$  of each home must be provided in respect of residential developments in Malton/Norton. Given the linear nature of the River Derwent this alternative greenspace must include green corridors along which it should be possible to complete a circuit of approximately 2.5km.

If access to sufficient alternative greenspace does not exist, then, unless an Appropriate Assessment at Site Allocations DPD stage can demonstrate there will be no adverse effect on the integrity of the SAC, alone, or in combination, with other plans or projects, development will not be permitted until such time that measures to ensure its provision have been secured.



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<sup>&</sup>lt;sup>8</sup> naturalengland.org.uk/ourwork/enjoying/places/greenspace/default.aspx

<sup>&</sup>lt;sup>9</sup> Excluding greenspace with direct access to the river within at least 100m of the River Derwent

**Table 6.1** gives an approximate indication of the level of existing green space within and surrounding Malton/Norton based on a PPS17 assessment undertaken for the Local Development Framework.

Under all options there is the potential for indirect impacts on the North York Moors. However by reducing the quantum of development in Kirkbymoorside (in closest proximity to the European Site) under Options III and IV significant effects are most likely to be avoided. Reducing the quantum of development in both Pickering under Options II and IV and Helmsley under Options III and IV will also ensure significant effects are most likely to be avoided.

Natural England's accessible natural greenspace standards<sup>10</sup> state that no person should live more than 5km from their nearest area of accessible natural green space of at least 100ha in size. They also state that no person should live more than 10km from their nearest area of accessible natural green space of at least 500ha in size. Given that within 5km of Kirkbymoorside and within 10km of Helmsley and Pickering the available green space resource includes part of the North York Moors SPA/SAC to avoid increasing recreational pressure it should be ensured that access to alternative resources are available.

This could be achieved through providing improved access to existing green space (e.g. links to the Public Right of Way network) within Ryedale or by contributing to on-going access management within the North York Moors National Park in accordance with the agreed management plan.

The availability of alternative accessible natural green spaces could be incorporated into development schemes or funding could be secured through financial contributions from developers of sites within Kirkbymoorside, Pickering and Helmsley.

To avoid increasing recreational pressure on the North York Moors SPA/SAC, in line with Natural England guidance, an area of accessible natural greenspace of at least 100ha in size must be provided within 5km<sup>11</sup> of each home forming part of new residential developments in Kirkbymoorside.

To avoid increasing recreational pressure on the North York Moors SPA/SAC, in line with Natural England guidance, an area of accessible natural greenspace of at least 500ha in size must be provided within  $10 \text{km}^{12}$  of each home forming part of new residential developments in Kirkbymoorside, Helmsley and Pickering.

If access to sufficient alternative greenspace does not exist, then, unless an Appropriate Assessment at Site Allocations DPD stage can demonstrate there will be no adverse effect on the integrity of the SPA/SAC, alone, or in combination, with other plans or projects, development will not be permitted until such time that measures to ensure its provision have been secured.



<sup>&</sup>lt;sup>10</sup> naturalengland.org.uk/ourwork/enjoying/places/greenspace/default.aspx

<sup>&</sup>lt;sup>11</sup> Excluding greenspace within the North York Moors SPA/SAC

<sup>&</sup>lt;sup>12</sup> Excluding greenspace within the North York Moors SPA/SAC

**Table 6.1** gives an approximate indication of the level of existing green space within and surrounding Kirkbymoorside, Helmsley and Pickering based on a PPS17 assessment undertaken for the Local Development Framework.

In terms of distributing the remaining housing amongst key service villages under all options there is considered to be sufficient flexibility in site allocations to ensure that significant recreational pressure as a result of new development is avoided.

# 6.4 Summary of Malton/Norton Location Options

Under all options developed adjacent to the River Derwent could take place, however Options A and C provide present the greatest flexibility to avoid development in the floodplain. It should be noted that the stretch of river that runs through the centre of Malton/Norton is undesignated. However, given that the species associated with the SAC (e.g. otters) are mobile they will still pass through the town and so this section of river needs to be given a similar level of protection to that within the designated site.

In Malton/Norton, a sequential approach will be taken to site allocation such that development will only be permitted within the floodplain of the River Derwent if no other sites are reasonably available. No built development will be permitted within 100m of the River Derwent SAC unless it can be demonstrated through an Appropriate Assessment that there will be no adverse effect on the integrity of the SAC, alone, or in combination, with other plans or projects.

The construction of development related infrastructure within the undesignated section of the River Derwent floodplain will only be permitted if it can be demonstrated through an Appropriate Assessment that the natural flow regime of the river will be maintained and the passage of migratory fish and otter will not be restricted.

Developments that are in close proximity to the River Derwent (including the undesignated stretch)<sup>13</sup> will not be granted planning permission unless an otter survey (encompassing at least 250m upstream and downstream of the site) has been completed by an appropriately qualified ecologist. Habitat considered suitable for otter must be retained and enhanced as part of the development proposals.

Development sites in close proximity to the River Derwent (including the undesignated stretch) must, unless Natural England agree an exemption, incorporate (i) a buffer zone of at least 100m from the river bank in which no built development takes place, and (ii) a buffer zone of at least 30m from the river bank to be retained and enhanced as part of the development proposals and to which direct public access must be prohibited.



<sup>&</sup>lt;sup>13</sup> Up to 500m from the river

Developments that are permitted within 500m of the River Derwent (including non-designated stretches) will, unless Natural England agree an exemption, be required to produce an Ecological Management Plan approved by Natural England detailing how impacts upon the SAC will be mitigated for during both construction and operation. Specific consideration will need to be given to pollution prevention, avoiding disturbance of otters during construction, avoiding disturbance of otters during operation as a result of lighting and public access, and monitoring requirements during and post-construction.

# 6.5 Summary of Pickering / Kirkbymoorside / Helmsley Location Options

For these towns Option A is considered to be the only viable option.

"In Pickering / Kirkbymoorside / Helmsley, a sequential approach will be taken to site allocation such that development will only be permitted on Greenfield sites if no other sites are reasonably available."

Greenfield development sites within 10km of the North York Moors SPA will only be granted planning approval once a breeding bird survey has been completed by an appropriately qualified ecologist. If golden plover are recorded, development will only be permitted where it has been demonstrated through an Appropriate Assessment that the development site is not of significant value to golden plover.

To avoid increasing recreational pressure on pasture land of value to golden plover, in line with Natural England guidance, at least 2ha of accessible natural greenspace within 300m of each home must be provided as part of the development proposals in respect of residential developments on Greenfield sites in Pickering / Helmsley / Kirkbymoorside, unless an Appropriate Assessment at Site Allocations DPD stage can demonstrate there will be no adverse effect on the integrity of the SPA/SAC, alone, or in combination, with other plans or projects.

#### 6.6 Conclusion

If the above measures are considered in determination of the preferred option and incorporated into the Core Strategy then it should not result in significant adverse effects. However, it will be necessary to revisit the HRA once the Core Strategy is drafted to confirm this is the case. It is also recommended that the following wording should be incorporated into the text of the final Core Strategy:-

"Any project that could have an adverse effect on the integrity of a European or Ramsar site, alone, or in combination with other plans or projects, would not be in accordance with the aims and objectives of this Core Strategy."





