



Office of the  
Deputy Prime Minister

Creating sustainable communities



# PLANNING

Planning for Biodiversity  
and Geological Conservation:  
A Guide to Good Practice

Planning shapes the places where people live and work and the country we live in. It plays a key role in supporting the Government's wider economic, social and environmental objectives and for sustainable communities.



Office of the  
Deputy Prime Minister

Creating sustainable communities



## Planning for Biodiversity and Geological Conservation – A Guide to Good Practice

March 2006

Office of the Deputy Prime Minister: London

# Acknowledgement

This guide has been produced by ODPM, Defra and English Nature. The Departments and English Nature wish to thank all those who assisted with the guide including those who kindly gave their permission for the use of case studies and other materials.

Office of the Deputy Prime Minister  
Eland House  
Bressenden Place  
London  
SW1E 5DU  
Telephone: 020 7944 4400  
Website: [www.odpm.gov.uk](http://www.odpm.gov.uk)

© Crown Copyright, 2006

*Copyright in the typographical arrangement rests with the Crown.*

*This publication, excluding logos, may be reproduced free of charge in any format or medium for research, private study or for internal circulation within an organisation. This is subject to it being reproduced accurately and not used in a misleading context. The material must be acknowledged as Crown copyright and the title of the publication specified.*

Any other use of the contents of this publication would require a copyright licence. Please apply for a Click-Use Licence for core material at [www.opsi.gov.uk/click-use/system/online/pLogin.asp](http://www.opsi.gov.uk/click-use/system/online/pLogin.asp), or by writing to the Office of Public Sector Information, Information Policy Team, St Clements House, 2-16 Colegate, Norwich, NR3 1BQ. Fax: 01603 723000 or email: [HMSOLicensing@cabinet-office.x.gsi.gov.uk](mailto:HMSOLicensing@cabinet-office.x.gsi.gov.uk)

Further copies of this publication and alternative formats are available from:

ODPM Publications  
PO Box 236  
Wetherby  
West Yorkshire  
LS23 7NB  
Tel: 08701 226 236  
Fax: 08701 226 237  
Textphone: 08701 207 405  
Email: [odpm@twoten.press.net](mailto:odpm@twoten.press.net)

or online via the ODPM website: [www.odpm.gov.uk](http://www.odpm.gov.uk)

Printed in the UK on material containing no less than 75% post-consumer waste.

March 2006

ISBN 13-978 185 112 852 8  
ISBN 10-185 112 8522

Reference No. 05 SCDD 03795

# Contents

<b>Acknowledgement</b> .....	iv
<b>1. Introduction</b> .....	1
Purpose of this guide .....	1
Who the guide is aimed at .....	1
Preparation of this guide .....	2
How to use this guidance .....	2
Status of the guide .....	2
<b>2. Information and evidence</b> .....	3
The need for an information and evidence base .....	3
The key elements of an evidence base .....	4
The information sources .....	5
Recommended ways to use and manage information effectively .....	22
<b>3. Delivering biodiversity and geological conservation through regional spatial strategies</b> .....	23
The role and function of regional spatial strategies (RSS) in relation to biodiversity and geological conservation .....	23
Identifying biodiversity and geological conservation issues and developing a project plan ..	24
Developing options and policies .....	26
The content of a draft RSS .....	27
Implementation, monitoring and review .....	29
Sub-regional spatial strategies and the sustainable communities plan .....	30
<b>4. Addressing biodiversity and geological conservation through the local development framework</b> .....	32
Delivering biodiversity and geological conservation through the local development framework (LDF) .....	32
Producing the local development framework .....	34
Content of the core strategy and other local development documents .....	35

<b>5. Development control</b>	44
Applying the principles of PPS9	44
Pre-application information gathering	45
Development control checklists	46
Ecological surveys	47
Surveys and EIA	47
Species surveys	48
Consultation	50
Conditions and obligations	51
Monitoring and enforcement	52
Avoiding, mitigating and compensating for harm	52
Building in biodiversity	55
Further design guidance for biodiversity	58
<b>6. Glossary</b>	60

# 1. Introduction

## PURPOSE OF THIS GUIDE

- 1.1 Planning Policy Statement (PPS) 9 *Biodiversity and Geological Conservation*<sup>1</sup> sets out the Government's national policies on the protection of biodiversity and geological conservation through the planning system. The Government Circular: *Biodiversity and Geological Conservation – statutory obligations and their impact within the planning system*<sup>2</sup> provides administrative guidance on the application of the law in England relating to planning and nature conservation.
- 1.2 The purpose of this guide is to complement those two publications. It provides good practice guidance, via case studies and examples, on the ways in which regional planning bodies and local planning authorities can help deliver the national policies in PPS9 and comply with legal requirements set out in the Circular. It does not make additional national policy or provide legal interpretation.
- 1.3 The key principles in PPS9 require that planning policies and decisions not only avoid, mitigate or compensate for harm but seek ways to enhance and restore biodiversity and geology. This guidance suggests ways in which these principles might be achieved.

## WHO THE GUIDE IS AIMED AT

- 1.4 The guide is aimed at those involved in the planning process. It is not intended to provide detailed technical or scientific advice in respect of biodiversity or geological conservation but, where appropriate, it provides links to other sources of such information. So, although the guide will also be of interest to specialists such as ecologists, it is intended to provide advice principally to those with a more general role in the planning process – such as planning policy makers or development control officers. The guide also provides a number of other uses, it will:
  - help developers and their agents address biodiversity and geological conservation considerations in planning applications and in the design of development;
  - inform elected members sitting on regional or local authority planning committees about ways their activities will be able to promote biodiversity and geological conservation;
  - assist individuals and community groups with an interest in how the planning system can improve their environment. It will help guide expectations about what can be delivered in terms of biodiversity and geological conservation. So it should set out what such people can expect from the planning process and how they might be involved in ways to improve their environment; and
  - provide good practice examples to help both Government agencies and non-governmental organisations gauge how successfully nature conservation is being integrated into the planning process.

---

<sup>1</sup> *Planning Policy Statement 9: Biodiversity and Geological Conservation*, ODPM, August 2005  
<http://www.odpm.gov.uk/index.asp?id=1143832>

<sup>2</sup> *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System*, (ODPM 06/2005, Defra 01/2005) <http://www.odpm.gov.uk/index.asp?id=1144318>

## PREPARATION OF THIS GUIDE

- 1.5 This guide has been prepared jointly by the Office of the Deputy Prime Minister (ODPM), the Department for Environment, Food and Rural Affairs (Defra) and English Nature<sup>3</sup>. It has been developed in close collaboration with organisations and individuals involved in planning and nature conservation.
- 1.6 Where available, case studies have been used to illustrate a good practice message on how the planning system is helping to promote nature conservation and conserve, enhance and restore biodiversity and geology. The guidance considers how these examples support the key principles and objectives of PPS9 and how they might be used in the context of the reformed planning system.

## HOW TO USE THIS GUIDANCE

- 1.7 The guidance is intended to be used in conjunction with PPS9 and the Circular to further biodiversity and geological conservation. PPS9 emphasises that development plan policies and planning decisions should be based upon good quality and up-to-date information. In accordance with this Chapter 2 to this guide provides advice on finding and using appropriate sources of information. Chapters 3 and 4 deal with integrating biodiversity and geological conservation into the plan-making process at the strategic and local levels respectively. Chapter 5 is for decision makers and others dealing with individual planning proposals.
- 1.8 This guidance is not intended to be prescriptive or comprehensive but to illustrate approaches which might be followed. More detailed advice can be obtained through following up the references and web-links provided.

## STATUS OF THE GUIDE

- 1.9 The use of examples taken from any development plan prior to its adoption is without prejudice to the Secretary of State's rights of objection or direction in respect of plan policies, or to call in plans for his own determination. The use of any example, whether from an adopted plan or otherwise, is also without prejudice to any decision the Secretary of State may wish to take in respect of any planning application coming before him as a consequence of a policy included in an example in this Guide.
- 1.10 Where other published or electronically available material<sup>4</sup> is cited, apart from Government documents, this is intended to provide pointers to good practice and does not necessarily confer full endorsement or adoption of the content by the ODPM. Similarly, the development examples used are intended to suggest good practice in ways of working rather than full endorsement of a particular decision.

---

<sup>3</sup> All references here to English Nature shall apply to its successor organisation, Natural England, which comes into being in October 2006.

<sup>4</sup> Where web links to documents are provided every effort has been made to ensure these are current at the time of writing but inevitably some may expire or change over time.



## 2. Information and evidence

### Good practice summary

The planning system requires a strong environmental evidence base and planning authorities can help establish and maintain this by adopting the following good practice:

- making full use of GIS and other web-based information sources;
- identifying key information gaps and filling these with further survey work;
- using information to identify and map areas best suited for proactive enhancement measures;
- integrating information and priorities established in biodiversity/geodiversity action plans and partnerships;
- supporting the establishment of a Local Record Centre;
- ensuring access to in-house or shared ecological/geological expertise; and
- tapping the knowledge and experience held within the wider community.

### THE NEED FOR AN INFORMATION AND EVIDENCE BASE

- 2.1 The first key principle of PPS9 reflects the requirement set out in paragraph 19 of PPS1<sup>5</sup> that plan policies and planning decisions should be based on up-to-date information about the environmental characteristics of an area. PPS9 makes clear that these characteristics should include the relevant biodiversity and geological resources.
- 2.2 Information on biodiversity and geological resources is required to:
- Provide the evidence base needed to prepare regional spatial strategies (RSS) and local development frameworks (LDFs), to carry out Sustainability Appraisals and to ensure the test of soundness is met at Examinations.
  - Deliver a spatial planning approach which applies information from all policies and programmes influencing the nature of places and how they can function, including regional and local Biodiversity and Geodiversity Action Plans.
  - Set targets and indicators to measure the implementation of RSS and LDF policies and other regional and local government objectives, such as those of Regional Sustainable Development Frameworks and sustainable community strategies.
  - To contribute to the provision of information needed for the Annual Monitoring Reports required for RSS and LDDs<sup>6</sup>.
  - Appraise environmental impacts of all development proposals, including where necessary to satisfy the requirements of the Environmental Impact Assessment Regulations (EIA Regulations) and the Habitats Regulations<sup>7</sup>.

5 *Planning Policy Statement 1: Delivering Sustainable Communities*, ODPM 2005  
<http://www.odpm.gov.uk/index.asp?id=1143804>

6 See paragraphs 4.45 and 4.46 of PPS12, (ODPM, Sept 2004 ) and paragraph 3.7 of PPS11, (ODPM, Sept 2004)

7 See Part I and IV of Government Circular: *Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System* (ODPM 06/2005, Defra 01/2005)

- Inform a strategic and spatially planned approach to the conservation, enhancement and restoration of biodiversity and geology.

## THE KEY ELEMENTS OF AN EVIDENCE BASE

- 2.3 A good information base must provide planners with an understanding of the natural environment including the landscape and its underlying geology, the range of habitats it supports and the natural processes and human activities which shape and influence this. It should enable planners to recognise those natural features distinctive to their area, their distribution and extent and the trends affecting them, particularly those likely to be most vulnerable to the effects of climate change. Below is a checklist of key elements to this information base:

### **A checklist of components of an environmental information base**

- the broad bio-geographical, geological and geomorphological character of the area, creating its main landscapes types;
- key natural systems and processes within the area, including fluvial and coastal;
- the location and extent of internationally, nationally and locally designated sites;
- the distribution of UKBAP priority habitats and species as well as areas of irreplaceable natural habitat, such as ancient woodland or limestone pavement;
- habitats where specific land management practices are required for their conservation;
- main landscape features which, due to their linear or continuous nature, are important for the migration, dispersal and genetic exchanges of plants and animals, including any potential for new habitat corridors to link any isolated sites that hold nature conservation value, and therefore improve species dispersal;
- areas with potential for habitat enhancement or restoration, including those necessary to help biodiversity adapt to climate change or which could assist with the habitats shifts and species migrations arising from climate change;
- an audit of green space within built areas and where new development is proposed;
- information on the presence of protected and priority species and areas where these are likely to occur;
- information on the biodiversity and geodiversity value of previously developed sites and the opportunities for incorporating this in developments; and
- areas of geological value which would benefit from enhancement and management.

- 2.4 The following sections set out basic information sources to use to start building this information base. These help create a valuable resource for developing a general picture of the area. Some of these sources may be too general, or insufficiently up-to-date, to be of use for individual site assessment. It would be good practice to use this information as a basis for more detailed site surveys when making development site allocations and determining specific planning applications, as species and habitat distribution can change rapidly.

## THE INFORMATION SOURCES

### Natural Areas and Joint Character Areas

- 2.5 To help Regional Planning Bodies (RPBs) and others gain a strategic understanding of biodiversity and geological resources within their region, English Nature has developed the Natural Areas<sup>8</sup> classification. This provides a useful starting point for identifying and mapping the broad biogeographical zones<sup>9</sup> within each region to provide a context upon which a strategic understanding of environmental resources and information requirements can be developed. In addition to delineating geographic areas, profiles have been developed for each Natural Area which list key habitats and species and provide a national context in terms of their significance.
- 2.6 Joint Character Areas (JCAs)<sup>10</sup> are distinct geographical areas that cover the whole terrestrial area of England. The 159 JCAs have been identified by analysing geology, soils, landform and land-use across England. They arose from the joint work on the Countryside Character Areas undertaken by the then Countryside Agency, English Nature and English Heritage and have been adopted as the main national framework that Natural England will use to package advice on priorities and targets, derived from Natural Area Profiles, for information that can be mapped such as habitats and species.

#### Case study: Using Natural Areas

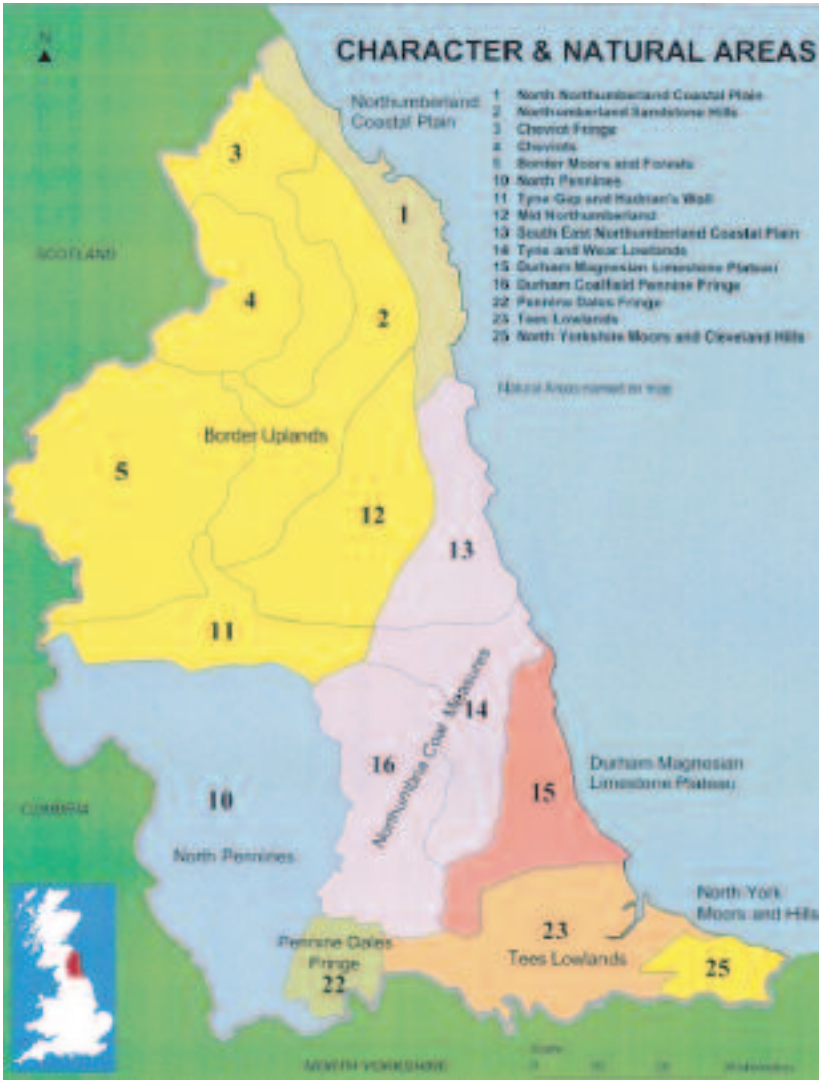
The Regional Spatial Strategy for the North East<sup>11</sup> used the English Nature Natural Areas approach as one of the building blocks for developing its environmental policies. These provided a way of interpreting ecological variations to help inform regional policy on the natural environment. It also uses indicative maps of tidal or river floodplains and landscape-scale environmental designations (National Park, Area of Outstanding Natural Beauty, Heritage Coasts, etc.) which combined with the Natural Areas help build up a strategic picture of the region's key natural resources.

8 [http://www.english-nature.org.uk/science/natural/na\\_search.asp](http://www.english-nature.org.uk/science/natural/na_search.asp)

9 Natural Areas are sub-divisions of England, each with a characteristic association of wildlife and natural features. Each Natural Area has a unique identity resulting from the interaction of wildlife, landforms, geology, land use and human impact.

10 <http://www.countryside.gov.uk/LAR/Landscape/CC/landscape/index.asp>

11 *Regional Planning Guidance for the North East* (RPG 1) ODPM/GONE, November 2002  
<http://www.go-ne.gov.uk/gone/>



## Information on natural systems

- 2.7 Information on the natural systems and processes operating within an area can be gained by contacting those agencies and partnerships involved in producing such strategies as Shoreline Management Plans, Catchment Flood Management Plans, Estuary Management Plans and River Basin Management Plans. The Environment Agency will also be a key contact for information relating to fluvial and coastal processes and data relating to flood risk and water quality.

## The hierarchy of designated sites

- 2.8 Many important sites for nature conservation have been designated under the statutes and international conventions outlined in ODPM Circular 06/2005, Defra Circular 01/2005. Along with local sites these comprise a hierarchy of designations summarised in the box below. Planning bodies will require up-to-date spatial information on the location and extent of these sites. This is available on the national web-based National Geographical Information Systems (GIS) sources set out in the following section.

<b>International</b>	Special Protection Areas (SPA) Special Areas for Conservation (SAC) Ramsar sites
<b>National</b>	Sites of Special Scientific Interest (SSSI), including National Nature Reserves (NNRs)
<b>Local</b>	Local Sites, including Sites for Importance for Nature Conservation (SINCs), Local Nature Reserves (LNRs) <sup>12</sup> , County Wildlife Sites and Regionally Important Geological and geomorphological Sites (RIGS)

## National Geographical Information Systems (GIS)

- 2.9 Local authorities are making great strides in e-enabling their planning services in line with the Government's vision to support the planning reforms with the widespread adoption of innovative technology to create a better and more efficient planning system<sup>13</sup>. Web-based GIS provide spatial information on the location of biodiversity and geological resources, including designated sites, on a national basis.

<sup>12</sup> Local Nature Reserves are designated by local authorities under Section 29 of the National Parks and Access to the Countryside Act 1949.

<sup>13</sup> An overview of the Government's e-planning programme is available on the ODPM website at:  
<http://www.odpm.gov.uk/index.asp?id=1143309>

### **Example: MAGIC and Nature on the Map**

In July 2002 a partnership of Government departments and agencies launched MAGIC<sup>14</sup>, a web-based interactive system which allows users to view and query area maps displaying key environmental designations via a standard GIS. It provides a good single source of information on designated and other sites and management boundaries, including SSSIs, Areas of Outstanding Natural Beauty and RSPB reserves. With 'Nature on the Map', English Nature's website also provides details of international sites, SSSIs, NNRs, LNRs, UKBAP priority habitats and geological sites<sup>15</sup> together with links to further websites with environmental data. Most of the site boundary data is in GIS format and can be downloaded by local authorities into their own data systems<sup>16</sup>.

- 2.10 Many local authorities are downloading this national information onto their own GIS systems and adding more local spatial data, such as local site designations. Kent County Council, for example, has developed the Kent Landscape Information System.

### **Case Study: Kent Landscape Information System<sup>17</sup>**

Kent County Council's K-LIS website enables better informed decision-making by providing detailed information on Kent's landscape and biodiversity. Primarily aimed at landowners, farm advisors and those involved in land-use planning, the website also acts as a useful information source to members of the public. This site contains details on countryside access, landscape character, identifies opportunities for habitat creation and landscape restoration, the physical environment including soils and geology, the Kent habitat survey as well as areas designated for their conservation value.

## **The National Biodiversity Network**

- 2.11 The National Biodiversity Network (NBN)<sup>18</sup> provides information from a wide range of sources via a single internet portal: the NBN Gateway. It provides access to predominantly species records, including a set of automated site reports. This data is often sourced from individual national recording schemes and societies who, in turn, gain their data from voluntary recorders and

<sup>14</sup> <http://www.magic.gov.uk/>

<sup>15</sup> <http://www.natureonthemap.org.uk/news.html>

<sup>16</sup> [http://www.english-nature.org.uk/pubs/gis/gis\\_register.asp](http://www.english-nature.org.uk/pubs/gis/gis_register.asp)

<sup>17</sup> <http://www.kent.gov.uk/klis>

<sup>18</sup> The National Biodiversity Network is a collaborative endeavour promoted by the NBN Trust, representing UK government agencies and non-government organisations, that seeks to advocate and establish agreed standards for the collection, collation and exchange of biodiversity data and improved public access to them. Within the NBN, biodiversity data is held by custodians including local record centres, national voluntary recording schemes and national government agencies. <http://www.searchnbn.net>

amateur naturalists. The Gateway also provides access to national species databases held by biodiversity organisations such as English Nature and the Natural Environment Research Council<sup>19</sup>. These can often be precise enough to inform planning decisions but should only be seen as complementing data available from local sources such as Local Record Centres.

### Information sources for climate change

- 2.12 Most biodiversity information sources show either past trends or existing distributions. However, there is an increasing body of work on how biodiversity is likely to be affected by climate change. Planners should, in the first place, familiarise themselves with the biodiversity topic chapter in *The Planning Response to Climate Change*<sup>20</sup>, which includes a number of useful information sources, such as the UK Climate Impacts Programme (UKCIP). Climate change research projects include MONARCH (see case study below) and BRANCH (Biodiversity Requires Adaptation Under a Changing Climate), which is examining the role of spatial planning in the UK, Netherlands and France in helping biodiversity adaptation.

#### Case study: changing species distribution

The MONARCH project, run by Oxford University's Environmental Change Institute, is modelling predicted movements of species and future locations of biodiversity in the UK. The work examines the current distribution of nightingales and the predicted 2050 distribution in a high greenhouse gas emissions scenario. The area of the UK with suitable climate for nightingales is predicted to reduce significantly by 2050, particularly in the south-east of England. Although the predicted distribution extends north and west, there is not necessarily suitable habitat available in these areas and so planners may need to consider how best to accommodate these habitat needs.

### Information on ancient woodland and veteran trees

- 2.13 A starting point for identifying ancient woods, not otherwise protected, is the ancient woodland inventories<sup>21</sup>. These comprise county maps of sites greater than 2 hectares that are thought to have been continuously wooded since 1600 AD. The inventory is freely available in paper format as county reports from English Nature<sup>22</sup> or downloaded from the English Nature website<sup>23</sup>, or viewed on the MAGIC website. The Woodland Trust<sup>24</sup> manages a website that shows ancient woodland currently under threat from development.

19 Although any member of the public can access the data (often summarised at 10km scale), in order to gain full access to detailed records, users need to register, log-in and request more detailed access to datasets from the original data contributors via the website.

20 *The Planning Response to Climate Change: Advice on Better Practice*, ODPM, Welsh Assembly Government, Scottish Executive, 2004. [http://www.odpm.gov.uk/pub/498/ThePlanningResponseToClimateChangeAdviceonBetterPracticePDF1234Kb\\_id1144498.pdf](http://www.odpm.gov.uk/pub/498/ThePlanningResponseToClimateChangeAdviceonBetterPracticePDF1234Kb_id1144498.pdf)

21 Local authorities should note that the ancient woodland inventories are provisional and did not, when compiled, include sites under 2 hectares in size.

22 English Nature Enquiries Service, Northminster House, Peterborough PE1 1UA, tel. 01733 455100

23 [http://www.english-nature.org.uk/pubs/gis/tech\\_aw.htm](http://www.english-nature.org.uk/pubs/gis/tech_aw.htm)

24 <http://www.woodsunderthreat.info>



- 2.14 English Nature is developing an inventory of wood pasture and parkland, the Wood-pasture and Parkland Information System (WAPIS)<sup>25</sup>. The website enables ‘single point of entry’ access to data concerning special features, management and protection of wood pasture and parkland sites.
- 2.15 PPS9 requires local planning authorities to identify areas of ancient woodland in their areas that do not have statutory protection (e.g. as a SSSI). The Wealden Ancient Woodland Project demonstrates good practice on how to address this and local authorities should consider taking a similar approach to their area.

#### **Example: Wealden Ancient Woodland Project**

The Wealden Ancient Woodland Survey is a 2 year pilot project which aims to re-examine the available information that can be used to update and enhance the existing Ancient Woodland Inventory for Wealden District. Revision of the Ancient Woodland Inventory is being carried out across the District using a combination of digital map sources, field surveys (identifying ecological, archaeological and landscape features), and historical archive research.

The Wealden Ancient Woodland Surveys is a partnership between English Nature, the Forestry Commission, Wealden District Council, the Woodland Trust, East Sussex County Council, Sussex Wildlife Trust and the Sussex Biodiversity Record Centre and the project is hosted by the High Weald Area of Outstanding Natural Beauty (AONB) Unit. The project provides a good example of a local authority recognising that its area contains a valuable biodiversity resource and setting out to improve the information it holds on this.

- 2.16 There is currently no comprehensive register of ancient trees although the Woodland Trust, in partnership with the Ancient Tree Forum and the Tree Register of the British Isles, is also developing a web-based information system identifying the location, species and condition of ancient trees through its citizen science project – the Ancient Tree Hunt<sup>26</sup>. This will help local authorities to identify aged and veteran trees in their area and enable them to ensure protection given by PPS9 is applied through the planning process. BS 5837:2005 Recommendations for Trees in Relation to Construction also provides guidance on the retention and protection of veteran trees in relation to development.
- 2.17 English Nature, as part of the Veteran Trees Initiative, produced a handbook *Veteran Trees: a Guide to Good Management* (Read, H, 2000) which provides valuable guidance on the care of ancient trees. The Woodland Trust and Ancient Tree Forum in partnership with a range of other organisations are producing a series of more detailed guides on the care of ancient trees in particular situations.<sup>27</sup>

<sup>25</sup> <http://www.wapis.org.uk>

<sup>26</sup> <http://www.ancient-tree-hunt.org.uk>

<sup>27</sup> These can be downloaded from [www.ancient-tree-forum.org.uk](http://www.ancient-tree-forum.org.uk)



## Mapping networks of natural habitats

- 2.18 PPS9 states that one of the Government's objectives for planning is to conserve, enhance and restore the diversity of England's wildlife and geology by sustaining and, where possible, improving the quality and extent of natural habitat and geological and geomorphological sites. Furthermore, PPS9 asserts that local development frameworks should identify any areas or sites for the restoration or creation of new priority habitats. One approach to this is 'opportunity mapping'. There are a number of examples of planners developing 'opportunity maps' to show where priority habitats could be restored or re-created in their area or region as a basis from which to develop policies and targets.

### Case study: Making Space for Wildlife<sup>28</sup> – the RSPB project on mapping habitat re-creation possibilities

The RSPB assessed the value and practicality of mapping habitat re-creation opportunities in a pilot project in three local authority districts in south-east Dorset. They identified land on which key habitats could most effectively be re-created by mapping a range of physical and biological features.

The RSPB also examined the extent to which Local Biodiversity Action Plan (LBAP) targets for re-creation related to opportunities identified by this project. The aim here was to assess whether the published LBAP targets were achievable given the available opportunities for re-creation – or, indeed, whether they are unduly conservative and do not reflect the full scale of opportunities. Maps were created showing opportunities using the RSPB's MapInfo-based Geographical Information System.

The total area of the three local authority districts is over 80,000 ha. In all, more than 5,000 ha was identified for potential heathland re-creation – over 1,500 ha for calcareous grassland and over 2,000 ha for wet grassland and other wetlands. All three habitats represented some 10% of the total study area.

For planning authorities to meet their legal and policy obligations to conserve and promote biodiversity, they should consider wildlife habitats and opportunities for their recreation as a land-use with intrinsic value. Identifying and mapping habitat re-creation opportunities to fulfil agreed biodiversity objectives – in effect, allocating suitable land for habitat re-creation and restoration – can be incorporated into development plans as discussed in the later chapters.

<sup>28</sup> <http://www.rspb.org.uk/policy/planningpolicy/makingspace.asp>

### Case study: East of England Regional Biodiversity Map

This initiative was driven by the need for an informed response by the Regional Biodiversity Forum to the environmental chapter of the Regional Spatial Strategy. Given the high levels of growth outlined in the East of England Plan, the need was identified for a network of biodiversity areas and corridors to both conserve existing biodiversity and restore and regenerate biodiversity in areas suffering from a current deficit, with this set against the uncertain background of climate change.

The map was initiated by the East of England Biodiversity Forum as a partnership exercise with extensive consultation. The LDU<sup>29</sup> (landscape character assessment) dataset for the region was used, plus Priority Habitat datasets supplied by English Nature, and other data was supplied by a number of other organisations including the Forestry Commission, Defra, the Wildlife Trusts, RSPB, the Broads Authority and the Environment Agency.

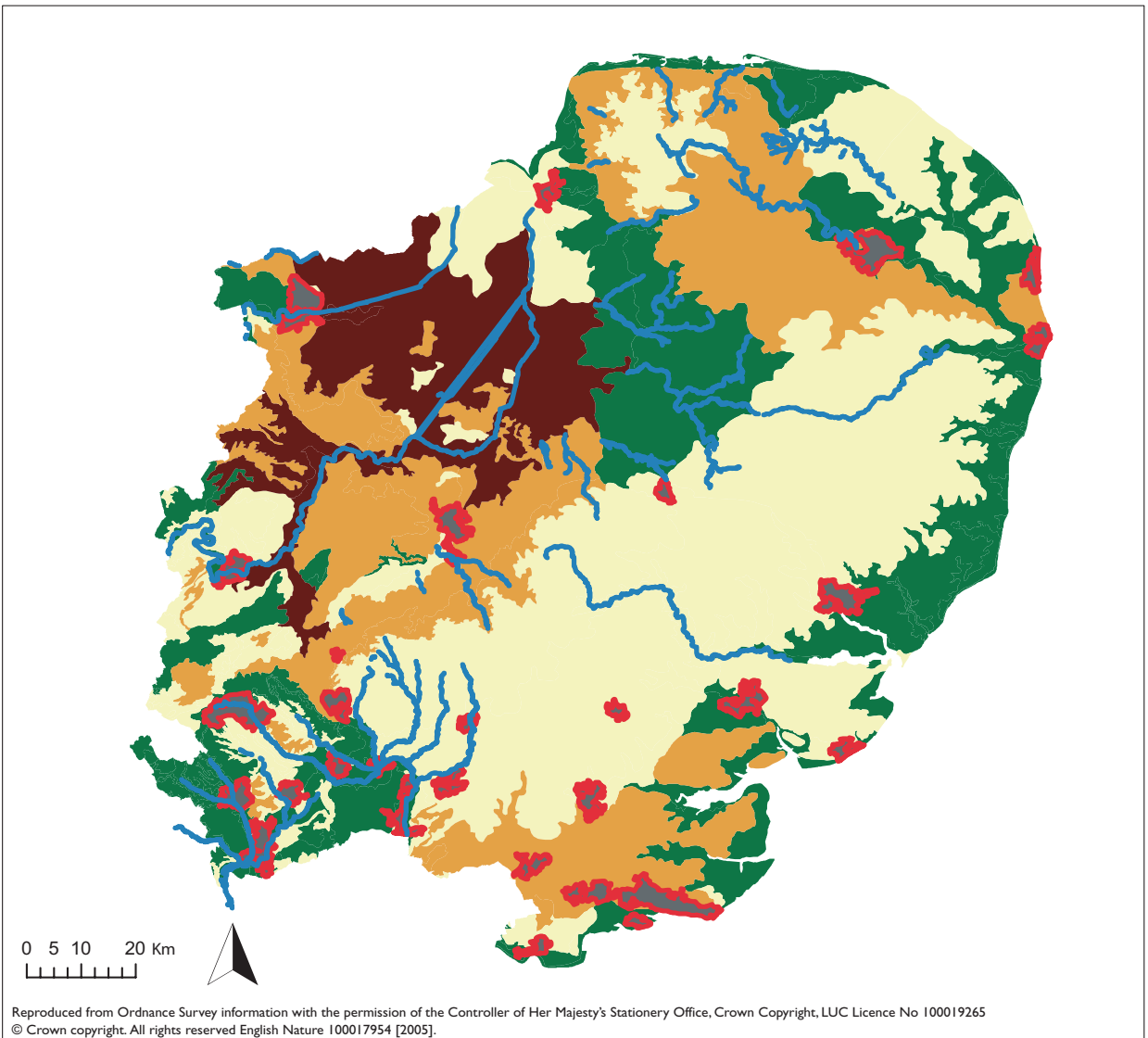
The whole project was GIS generated. LDUs qualified as Biodiversity Conservation Areas if they contained over 10% cover of priority habitat, or over 10% cover by a statutory nature conservation designation, or over 10% cover by a designated County Wildlife Site. The remaining LDUs were defined as biodiversity enhancement areas, which were subdivided into three sub-classes to represent LDUs with different potential and opportunities for habitat recreation and enhancement. Subdivision was based on examination of characteristics relating to proportion of priority habitat area, the rurality of the LDU as an indicator of wildlife potential, patch size and fragmentation, and presence of lowland calcareous grassland (given a lower weighting).

The map thus has 4 components: Biodiversity Conservation Areas, Biodiversity Enhancement Areas (3 levels), Biodiversity Corridors and Urban Improvement Areas. Between them these categories cover the entire land surface. In this respect this map is a good example of a regional map which assigns attributes to all land, by combining landscape and biodiversity datasets.

---

<sup>29</sup> LDU – Landscape Description Unit. A distinct and discrete tract of land, of varying size, defined by a particular combination of distinct natural and cultural attributes.

## East of England Regional Biodiversity Map



- Core Biodiversity Area
- Biodiversity Enhancement Area**
- Buffer fragmented habitats
- Extend and link fragmented habitats
- Large scale habitat recreation and restoration
- Urban Biodiversity Deprivation Area
- Strategic River Corridors

Land Description Units (LDU) (1:250,000 scale) developed for the Countryside Agency by Steven Warnock (in association with the Living Landscapes project). Copyright: Countryside Agency, Living Landscapes Project and Cranfield University (soil component) 2001.

T:\Gis\3400\3413-01\_East\_of\_England\_Biodiversity\Themes\ArcGIS8-2\Final\_Report\_Maps\3413-01\_Fig6\_Biodiversity\_Network.mxd



LAND USE CONSULTANTS  
43 Chalton Street  
London NW1 1JD  
Ph: 020 7383 5784  
Fax: 020 7383 4798  
www.landuse.co.uk



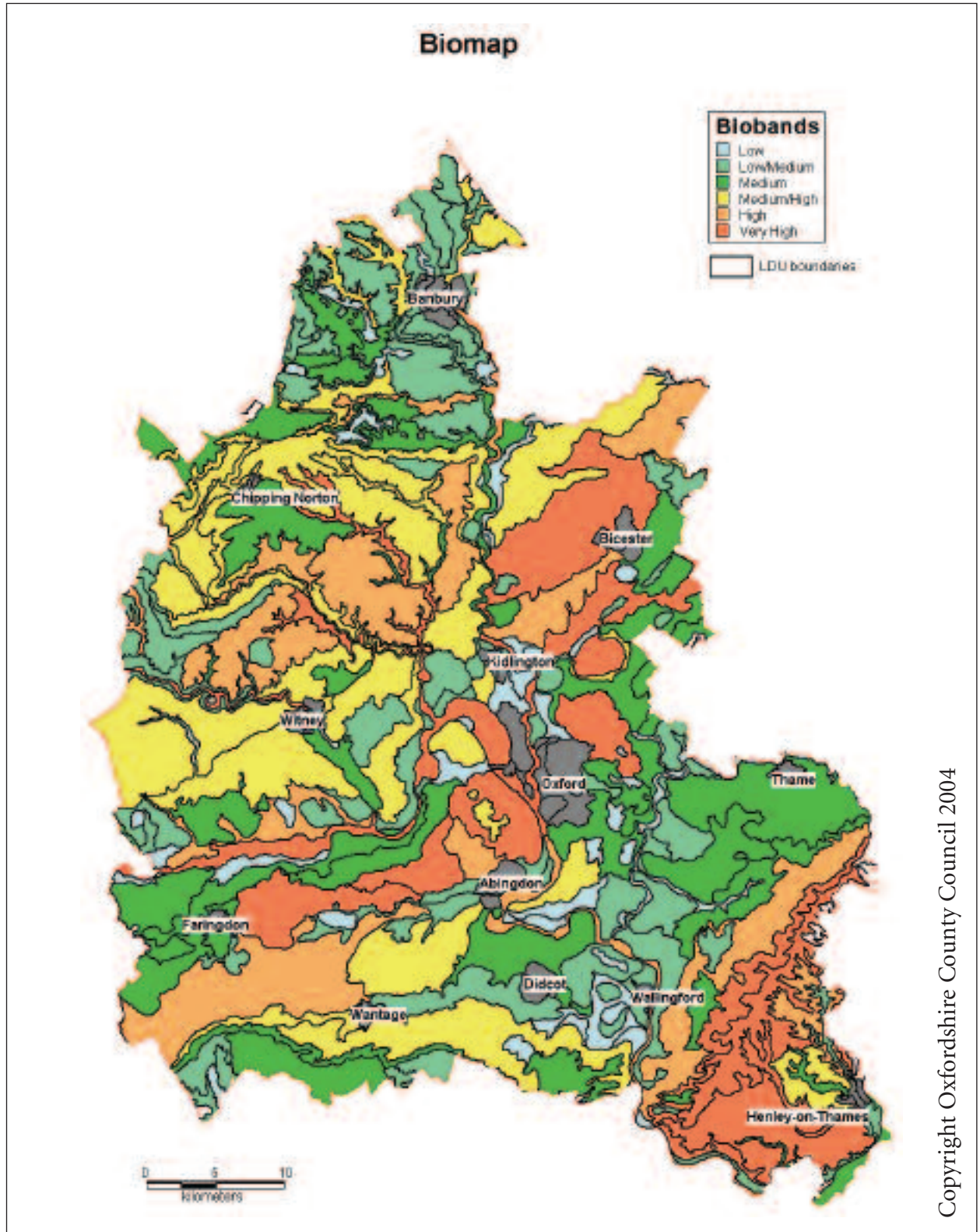
- 2.19 The East of England Regional Biodiversity Map shows good practice in developing a spatial information base to help regional planning bodies meet the PPS9 requirements for RSS to identify the current regional and sub-regional distribution of priority habitats and broad areas for their restoration and re-creation. At a county level, an example in Oxfordshire provides further good practice in mapping biodiversity opportunities to base the PPS9 requirement for local development frameworks (LDF) to identify areas for the restoration or creation of priority habitats.

**Case study: the Oxfordshire Wildlife and Landscape Study (OWLS)**

A mapping exercise was undertaken in Oxfordshire to identify key habitats and their distribution in a landscape context. OWLS<sup>30</sup> is managed by Oxfordshire County Council and sponsored by English Nature and the Countryside Agency as a demonstration project. It has produced a 'Biomap' of the county showing a hierarchy of landscape units of low to high biodiversity value. These have been used directly to inform the forward planning process and the assessment of individual planning applications, as well as setting out local strategies for biodiversity and landscape conservation.

---

<sup>30</sup> <http://owls.oxfordshire.gov.uk>



## Biodiversity Action Plans

- 2.20 Biodiversity Action Plans provide spatial information but their value lies also in setting agreed priorities for biodiversity conservation action to underpin the objectives of PPS9 and contribute to the fulfilment of the requirements placed on local authorities in terms of habitat and species conservation and enhancement.

## The UK Biodiversity Action Plan (UKBAP)

- 2.21 In the context of PPS9, biodiversity is the variety of life in all its forms as set out in the UKBAP.

### Biodiversity – The UK Action Plan 1994

The UKBAP sets out the UK Government's response to the Convention on Biological Diversity (CBD) signed in 1992. It describes the UK's biological resources and commits to a detailed plan for the protection of these transcribed into 391 Species Action Plans (covering 475 UK BAP priority species), 45 Habitat Action Plans and 162 Local Biodiversity Action Plans with targeted actions. A further 104 UK BAP priority species were given Species Statements rather than full plans with the expectation that the conservation of some of these species would be delivered through habitat conservation measures. A Lead Partner has been identified to co-ordinate the delivery of each UK BAP Species and Habitat Action Plan. These named individuals have particular knowledge and expertise for their respective species or habitat and, particularly in the case of species with small populations/limited distributions, may be a source of useful information.

- 2.22 The UKBAP provides a starting point for identifying regional and local biodiversity priorities. Its website<sup>31</sup> provides a convenient means of accessing information on the various regional, county, species, habitat or topic BAPs which all nest within the UKBAP, and of identifying key contacts, partners, summary data, reports and guidance.
- 2.23 Government has published lists of the UKBAP habitats and species of principal importance for the conservation of biodiversity<sup>32</sup>. To meet the PPS9 requirement for local planning authorities to conserve, enhance and add to these priority habitats (and the habitats of the priority species) information on their status and distribution is needed.

## Regional Biodiversity Action Plans and Partnerships

- 2.24 Regional Biodiversity Partnerships have now been established in each English Region. The formation of partnerships facilitated the first phase in agreeing regional biodiversity information and data needs. These partnerships provided synergetic opportunities for making the most of available expertise, knowledge and resources.

31 <http://www.ukbap.org.uk>

32 See Annexe C of ODPM Circular 06/2005, Defra Circular 01/2005



### Case study: The West Midlands Regional Biodiversity Partnership's Rebuilding Regional Biodiversity project

The West Midlands Biodiversity Partnership (WMBP)<sup>33</sup> is an example of an effective regional biodiversity forum. It comprises representatives from 20 organisations with an interest in biodiversity within the region and, as the basis for its future activity, identified the need for an audit of habitats and species within the West Midlands region to give an overview of priorities for action. The West Midlands Biodiversity Audit subsequently showed that the region contained 21 of the 26 priority wildlife habitats and one quarter of the 579 priority species identified in the UKBAP. The challenges this identified led WMBP to set up the 'Rebuilding Regional Biodiversity' project, with funding from Defra and the Heritage Lottery Fund. This project has, amongst other things, helped develop the Regional Biodiversity Strategy, published jointly with the West Midlands Regional Assembly. This, in turn, will influence the revision to the Regional Spatial Strategy.

- 2.25 Developing regional biodiversity partnerships to audit regional biodiversity and geological resources can provide a means of translating the UKBAP into regionally specific information that can inform Regional Spatial Strategy (RSS) priorities. A regional biodiversity audit can help establish targets and indicators to monitor the implementation of policies to address these priorities.

### Case study: North East Biodiversity Forum – regional biodiversity targets and indicators

Following publication of its regional biodiversity audit<sup>34</sup> the North East Biodiversity Forum took the process a stage further through the publication of targets for the protection and enhancement of its regional biodiversity and of a set of indicators by which to measure progress<sup>35</sup>. They were produced partly as a regional response to the national biodiversity indicators in the England Biodiversity Strategy from which they are adapted and partly to inform the policies in the Regional Spatial Strategy.

- 2.26 The role of biodiversity targets and indicators in the preparation of Regional Spatial Strategies is covered in Chapter 3.

## Local Biodiversity Plans and Partnerships

- 2.27 The Local Biodiversity Action Plan (LBAP) is a key source of data to identify and inform local biodiversity priorities. Partnerships of all organisations with a role in helping to deliver the LBAP have developed in most parts of the country. These play an essential role in achieving a coherent and credible information base upon which to plan for biodiversity. The LBAP partnership (as part

<sup>33</sup> <http://www.wmbp.org>

<sup>34</sup> *A Biodiversity Audit of the North East* – North East Biodiversity Forum 2001.

<sup>35</sup> *Biodiversity Indicators and Targets for the North East of England* – North East Biodiversity Forum 2004.

of an audit of local biodiversity) may identify all of the UK BAP priority species and habitats that occur in the area as well as other species of local biodiversity significance. For example, Wiltshire's BAP<sup>36</sup> uses national, regional and local BAPs to identify the key habitats and species for action within the county. PPS12 advises that when preparing local development documents local authorities should take account of the principles and characteristics of other relevant strategies including strategies for biodiversity<sup>37</sup>. LBAPs are likely to be a relevant biodiversity strategy for most local authorities<sup>38</sup>.

### Case study: Cornwall Community Strategy

The Cornish LBAP partnership, which includes Cornwall County Council, the County's Environmental Records Centre, Cornwall Wildlife Trust and others, has worked to protect and enhance the natural environment by engaging with Local Strategic Partnerships in the Community Strategy process. Cornwall's Community Strategy contains headline actions which seek to develop the county as a Centre of Excellence for the Natural Environment to help foster strong communities and to enhance biodiversity of Wildlife Sites in relation to a quality living environment<sup>39</sup>.

## Local sites systems

- 2.28 PPS9 states that sites of regional and local biodiversity and geological interest (which include RIGS, LNRs and Local Sites) have a fundamental role to play in meeting overall national biodiversity targets, contributing to the quality of life and well-being of the community, and in supporting research and education. Developing a local site system will depend on an understanding of the scientific and social value of the biodiversity and geological resources in an area, and once established will be a key source of information to inform local priorities and BAP targets. Good practice would be to ensure there is a strong overlap and synergy between the partnerships developed to provide the information basis for a system of local sites and the LBAP/Local Geodiversity Action Plan partnerships. Separate guidance on the development and management of Local Sites systems will be published by Defra in spring 2006<sup>40</sup>.

## Geological Information and Local Geodiversity Action Plans

- 2.29 PPS9 states that regional planning bodies should liaise with the British Geological Survey and, where appropriate, local Regionally Important Geological/geomorphological Site (RIGS) groups on geodiversity issues. Where they have been produced, it would be good practice to use Local Geodiversity Action Plans (LGAPs) as a framework upon which to audit, conserve, manage and promote characteristic geological, geomorphological and soils resources within a particular region

36 *Wiltshire Biodiversity Action Plan 2002*, Wiltshire BAP Forum <http://www.wiltshire.gov.uk/countryside-biodiversity-action-plan.htm>

37 Para 1.9 of PPS12, ODPM Sept 2004.

38 To meet Government objectives it would be good practice for local authorities to ensure that LBAPs become effectively integrated into sustainable community strategies. This is as part of the arrangements to reduce and rationalise the requirements for authorities to prepare plans to central government specifications, as proposed in the White Paper *Strong Local Leadership – Quality Public Services* and announced by the Government on 26 November 2002 <http://www.odpm.gov.uk/index.asp?id=1134086>

39 <http://www.cornwallstrategicpartnership.gov.uk/index.cfm?articleid=10538>

40 *Guidance on the Identification, Selection and Management of Local Sites*, Defra 2006.



or local authority area. LGAPs integrate conservation action between national and local conservation designations and their surrounding geological context. Production and implementation of plans involve a wide range of local groups, organisations and individuals in agreeing priorities and actions for the conservation and promotion of the geodiversity of an area<sup>41</sup>.

### Case study: Cheshire region Local Geodiversity Action Plan

Developed by a partnership involving University of Chester, Cheshire RIGS (Regionally Important Geodiversity Sites) Group<sup>42</sup> and Cheshire County Council, the Cheshire region LGAP was the first to be launched in the UK in September 2003. Fifty local organisations were consulted on the geological conservation needs of the region and the priorities for action, which then formed the basis for the eight LGAP objectives, the last of which included sustainability. Several geological conservation projects are now underway and over 52% of the original actions have now been completed. Importantly, the Cheshire region LGAP is now included within community strategies and development plans<sup>43</sup>. However, this is a process not a product so the partnership is the first to reach the stage of evaluating itself and the effectiveness of the action plan. Discussions to update the action plan are underway. The partnership is now also mentoring two other LGAP developments (Anglesey and Greater Manchester).

## Local Record Centres

- 2.30 Local Record Centre (LRC) is the generic term for a single information source, often serving a specific county or sub-region. The main function of LRCs is to collate, manage and disseminate biodiversity information, but they may also hold other types of environmental data. LRCs typically work with local species recording schemes to support the collation, validation and management of species records. They may also undertake habitat mapping or act as custodian for survey data collected by other organisations. They may be linked to the National Biodiversity Network and have a role in interpreting the information provided. Those LRCs presently up and running are supported by funding partnerships usually comprising local authorities, English Nature and other bodies such as the Environment Agency and the Wildlife Trusts.
- 2.31 With environmental information held across many disparate organisations, both public and voluntary, a LRC is the most effective and sustainable mechanism for facilitating access to this. It would be good practice for all local authorities to contribute to the establishment and running of a LRC as a cost-effective way of providing a publicly accountable 'one-stop shop' for comprehensive and reliable environmental information upon which to plan<sup>44</sup>, in line with the key principles of PPS9.

41 Further information can be found at <http://www.english-nature.org.uk/Special/geological/lgap/default.htm>

42 <http://www.ukrigs.org.uk/html/ukrigs.php>

43 [http://www.cheshire.gov.uk/Planning/NaturalHistoricEnv/Natural/NHE\\_Natural\\_Geodiversity.htm](http://www.cheshire.gov.uk/Planning/NaturalHistoricEnv/Natural/NHE_Natural_Geodiversity.htm)

44 <http://www.nbn.org.uk/information/info.asp?Level1ID=1&Level2ID=10&Level3ID=45>

- 2.32 The benefits of supporting an effective LRC include:
- better access to information on species and habitat occurrence for local planning authorities and other stakeholders;
  - avoidance of costly public inquiries due to earlier identification and resolution of potential conflicts;
  - reduced times in processing planning applications;
  - lower costs to developers; and
  - potential for the provision of data on biodiversity required for Annual Monitoring Reports.

### Case study – Nottinghamshire Ecological and Geological Data Partnership (NEGDP)<sup>45</sup>

NEGDP is a partnership including the county, city and all district authorities in Nottinghamshire and English Nature. Its aims are to facilitate the supply of environmental information to a wide range of organisations that require access to this to fulfil their statutory and stated responsibilities. The partners contribute through service level agreements with NEGDP and must sign up to a basic service to ensure the sustainability of the record centre. The basic service supports a system for designating and maintaining information on Sites of Importance for Nature Conservation within the county. The partners may procure additional services including updates on protected and BAP species and updates to Phase 1 habitat maps. Annual costs are from £4k for a district or £6k for the county for the basic service up to a maximum of around £20k per council, dependent on the level of service required.

## Local authority ecologists

- 2.33 Access to in-house or shared expertise in ecology and geology will improve the capacity of planning authorities to evaluate environmental information and make informed planning judgements. Employing an ecologist or biodiversity/geodiversity officer can help LPAs ensure that nature conservation becomes an integral part of all local authority decision making. In some circumstances it may be advantageous for local authorities to consider joining with adjacent authorities to employ the services of an ecologist, or possibly to contribute to a specialist officer at county level.
- 2.34 Access to an in-house ecologist, or similarly qualified professional, would help planning authorities better fulfil the objectives of PPS9 by enhancing their capacity to:
- better facilitate the integration of LBAP and local site system objectives into the planning system;
  - interpret the environmental information requirements for LDF production and select appropriate targets and indicators by which to measure progress;

<sup>45</sup> Contact: NBGRC, Natural History Museum, Wollaton Park, Nottingham NG8 2AE. Email: [nbgrc@ncmg.demon.co.uk](mailto:nbgrc@ncmg.demon.co.uk)

- provide a specialist input to community consultation exercises and workshops run as part of the LDF process;
- help ensure the Sustainability Appraisal of development plans complies with the SEA Directive<sup>46</sup>;
- satisfy the range of legal duties in respect of nature conservation;
- provide specific expertise in the strategic and spatial approach to the conservation, enhancement and restoration of biodiversity and geology throughout the LDF process;
- vet the adequacy of information submitted with planning applications and appraise the quality of environmental statements;
- find optimal ways for development control decisions to incorporate nature conservation benefits and avoid, mitigate or compensate for any harm; and
- advise on the selection of sites for allocation by supplying and interpreting ecological information, in order to identify which sites may minimise impacts on biodiversity and which are likely to have the greatest potential for enhancement.

2.35 Further information on the role of local authority ecologists, and other guidance on incorporating biodiversity in the work of local authorities, can be obtained from the Association of Local Government Ecologists<sup>47</sup>.

### **Community knowledge**

- 2.36 PPS1 expects planning authorities to build up a clear understanding of the make-up, interests and needs of the communities in their areas<sup>48</sup>. What people value in their environment and the issues that are of most concern to a community will be a significant element of the evidence necessary to plan for biodiversity and geological conservation at a local level.
- 2.37 Initiatives to engage the community, such as the Dartmoor Nature for Real<sup>49</sup> project featured, provide an example of good practice in finding out not just what people know about their natural environment but which aspects they value and wish to see supported through the planning process. It can provide a means for 'bringing on board' the community over measures necessary to manage biodiversity and geological sites. The preparation of a Statement of Community Involvement would be an appropriate way of capturing this during the process of preparing LDFs.

---

46 European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, known as the 'strategic environmental assessment' or SEA Directive.

47 <http://www.alge.org.uk/>

48 *Planning Policy Statement 1: Delivering Sustainable Development*, OPDM 2005

49 <http://www.actionforwildlife.org.uk/Contact.htm>

### Case study: Dartmoor 'Nature for Real' project.

Under the aegis of the Dartmoor Biodiversity Project 'Action for Wildlife', a pilot project called 'Nature for Real' was carried out in 2002 to work with communities to share knowledge and discover the concerns and interests relating to biodiversity and develop community initiatives which supported these. Two Dartmoor communities were selected for the pilot. Using facilitators, meetings in each community were set up to discover what was already known about the biodiversity of the area, which BAP targets related to this, which aspects of local biodiversity were important to local people and how the community might help enhance it. This led to a number of community projects to protect and enhance wildlife.

## RECOMMENDED WAYS TO USE AND MANAGE INFORMATION EFFECTIVELY

- 2.38 Having considered what sort of information is required to plan for biodiversity and geological conservation, and the various key sources, regional planning bodies and local planning authorities need to consider how best to resource and manage this. All will have some kind of system in place to help them meet their information needs but the following good practice messages emerge:
- developing stronger partnership working – for example, where there is a regional or local biodiversity forum which brings together information to share from key interest groups;
  - applying an opportunity-based focus – for example, by strategic mapping techniques which reveal where planning efforts might deliver the maximum gains;
  - encouraging greater community engagement – for example, employing participation techniques to learn what people know of, and value, in their environment;
  - making full use of available data sources (for example, web-based sources like MAGIC) to download onto local GIS systems;
  - securing access to expert advice – for example, by local authorities having in-house or shared access to ecological and geological expertise;
  - using the information supplied in EIA and ecological appraisal to add to a bank of knowledge; and
  - joint-funding the establishment and running of a Local Record Centre.

### 3. Delivering biodiversity and geological conservation through regional spatial strategies

#### Good practice summary

To ensure Regional Spatial Strategies deliver the objectives set out in PPS9, Regional Planning Bodies should adopt the following key aspects of good practice:

- Early and continuous involvement with key stakeholders, such as regional biodiversity partnerships.
- Integration of all other regional strategies with a bearing on regional biodiversity and geological conservation.
- Developing a comprehensive information base on regional biodiversity and geological resources.
- Ensuring that biodiversity and geological objectives are embraced within a broader regional vision supported by a spatial strategy and appropriate policies.
- Including biodiversity and geological conservation within a clear implementation strategy measured by appropriate targets and indicators.
- Developing sub-regional strategies which address the protection and enhancement of biodiversity and geological conservation and applying this to growth areas.

#### THE ROLE AND FUNCTION OF REGIONAL SPATIAL STRATEGIES (RSS) IN RELATION TO BIODIVERSITY AND GEOLOGICAL CONSERVATION

- 3.1 PPS11<sup>50</sup> sets out the Government's key principles underpinning the new regional planning arrangements – the statutory weight given to RSS as part of the development plan, the prominent role of partnership working and community involvement, the focus on implementation and better integration with other regional strategies and the overarching statutory purpose to contribute to the achievement of sustainable development. The role and function of RSS includes applying these principles to address biodiversity and geological conservation objectives.
- 3.2 RSS provide a means of engaging with regional partners to identify regional priorities and policies for biodiversity and geological conservation and to provide a framework for implementation. RSS have an important role in the spatial delivery of regional biodiversity strategies either through strategic policies and general principles, by influencing the content of LDFs, or by guiding other plans and strategies with a bearing on the development and use of land.

<sup>50</sup> Planning Policy Statement 11: Regional Spatial Strategies, ODPM 2004.  
<http://www.odpm.gov.uk/index.asp?id=1143839>

- 3.3 How successfully the RSS deals with biodiversity and geological conservation will be tested throughout the RSS revision by the Sustainability Appraisal, Examination and Annual Monitoring Report processes. The significance and role of these processes are outlined further in later sections of this document.
- 3.4 The following sections examine key aspects of good practice, linked to the stages of preparing a draft RSS revision, that help ensure RPBs fully reflect the Government's PPS9 policies in this work.

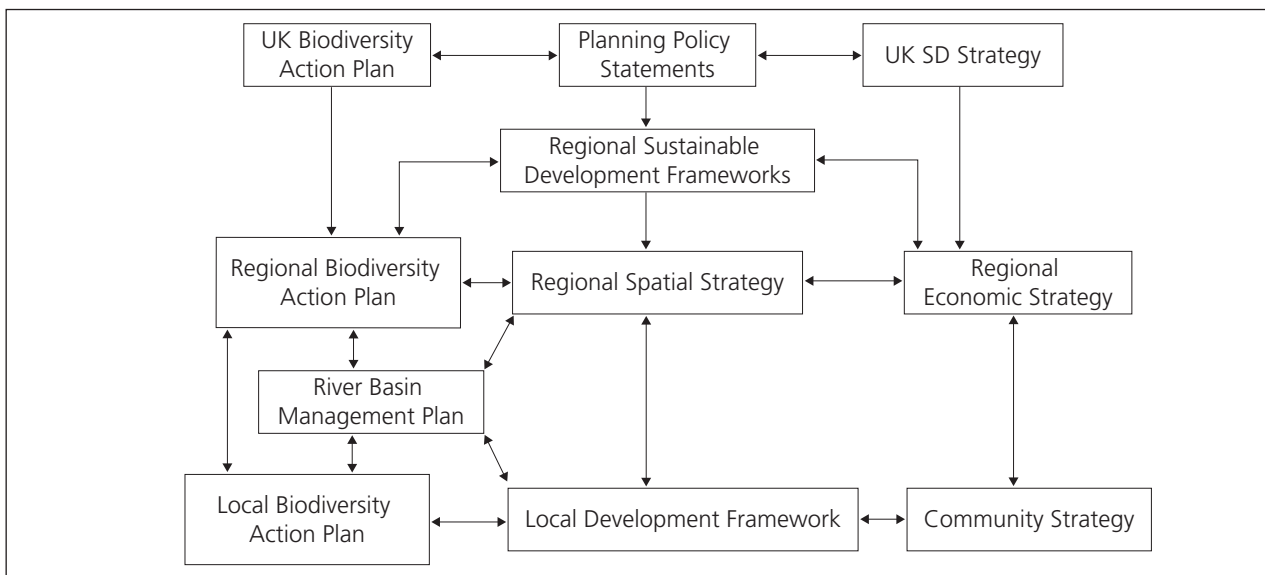
## **IDENTIFYING BIODIVERSITY AND GEOLOGICAL CONSERVATION ISSUES AND DEVELOPING A PROJECT PLAN**

- 3.5 The first stage in the revision of the RSS is the identification of key objectives and issues and the preparation of a project plan. Good practice would see RPBs engaging early with the key biodiversity and geology stakeholders referred to in paragraph 2 of PPS9. Where a regional biodiversity partnership, or a regional biodiversity strategy, exists these will not only be an important source of base-line information for the RSS review but also help scope key priorities for biodiversity and geological conservation. Chapter 2 provides more detail on sources of regional information and the work of regional biodiversity partnerships.
- 3.6 Integration of RSS with other regional strategies is a key principle of PPS11. It is essential that RSS both shapes, and is shaped by, other regional strategies, as illustrated in Figure 1. Better strategic integration can be improved by ensuring a balanced representation of stakeholder groups on RSS steering groups, including biodiversity groups such as the regional biodiversity partnership. As well as any relevant regional strategy, RPBs will also need to take Government biodiversity policies and priorities<sup>51</sup> (such as contained in the UKBAP and England Biodiversity Strategy) as key reference points in revising a RSS, as well as the outputs of previous regional monitoring reports and of any earlier community engagement and other consultation undertaken.

---

<sup>51</sup> For a full list see Annex A of PPS 11.

**Figure 1 Connecting plans and strategies – Examples of links in the web of plans and strategies<sup>52</sup>**



- 3.7 An important part of developing a project plan includes incorporating a process for stakeholder engagement. Regional Planning Bodies are required to produce a statement of public participation, outlining who will be involved and at what stage, in the revision of the RSS. This would involve those stakeholders concerned with the region's natural environment.
- 3.8 Front-loading engagement with regional biodiversity and geological stakeholders will help the RPB develop a RSS revision process that:
- captures key biodiversity and geological conservation objectives;
  - aligns both existing and emerging regional biodiversity/geodiversity strategies;
  - scopes the information and expertise available (and what further needs to be resourced); and
  - finds ways to involve the community.
- 3.9 Sustainability Appraisal (SA)<sup>53</sup> is a mandatory part of preparing a RSS revision which must incorporate the requirements of the SEA Directive<sup>54</sup>. SA is an integral part of producing a draft revision to a RSS and must start at this early stage. Ensuring comprehensive baseline information on biodiversity and geology, upon which to identify the key issues, will help ensure the RSS revision satisfies the tests of soundness on final examination. At this stage of the RSS revision, the identification of these key issues, the baseline information needed and the other plans and strategies to consider will also help develop a SA framework and select appropriate targets and indicators.

<sup>52</sup> Taken from *Environmental Quality and Spatial Planning – guidance to help in the preparation of Regional Spatial Strategies and Local Development Frameworks* – Countryside Agency and others June 2005 [http://www.english-nature.org.uk/pubs/publication/pub\\_results.asp?C=0&K=&K2=IN17.8&I=&A=&Submit1=Search](http://www.english-nature.org.uk/pubs/publication/pub_results.asp?C=0&K=&K2=IN17.8&I=&A=&Submit1=Search)

<sup>53</sup> For guidance see *Sustainability of Regional Spatial Strategies and Local Development Frameworks*, ODPM 2005. [http://www.odpm.gov.uk/stellent/groups/odpm\\_planning/documents/page/odpm\\_plan\\_030923.pdf](http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_030923.pdf)

<sup>54</sup> European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment. For guidance on its application to biodiversity see: *Strategic Environmental Assessment and Biodiversity: Guidance for Practitioners*, June 2004 – Countryside Council for Wales, English Nature, Environment Agency, Royal Society for the Protection of Birds. Prepared by South West Ecological Surveys, Levett-Therivel sustainability consultants and Oxford Brookes University [http://www.rspb.org.uk/Images/SEA\\_and\\_biodiversity\\_tcm5-56786.pdf](http://www.rspb.org.uk/Images/SEA_and_biodiversity_tcm5-56786.pdf)



## DEVELOPING OPTIONS AND POLICIES

- 3.10 Having consulted on and adopted a project plan, the RPB will have the framework for identifying strategic options and developing policies. Once again the RPB will find it helpful to engage closely with regional stakeholders to develop options and policies which address biodiversity and geological conservation.

### **Example: South East Regional Assembly**

In the South East the Regional Assembly has set up a series of advisory groups to help advise and provide expert advice in the development of the RSS. One of these is the Natural Resources and Climate Change Advisory Group whose remit includes biodiversity.

Once at the stage of developing options and policies the Assembly, via this advisory group, invited the establishment of a Biodiversity Task Group to work specifically on the development of draft policies, supporting text, targets and a spatial component for the biodiversity sub-section of the South East Plan. This task group was established and formed of members of the advisory group and the South East England Biodiversity Forum (SEEBF).

- 3.11 At this stage the options and draft policies will be developed and refined through testing against the SA framework. This will include how well they measure up against environmental criteria and satisfy the SEA Directive's requirements. English Nature will be one of the formal consultees of the Scoping Report for SA although other biodiversity contacts may be involved.
- 3.12 For example, the strategic options for development growth within the region will need to be tested against the carrying capacity of the natural environment, taking account of priorities for the protection and enhancement of key areas. This approach will help develop regional policies which ensure that LDFs identify site specific allocations which are likely to satisfy the SEA Regulations and lead to detailed planning applications that, for example, are able to meet the requirements of the EIA and Habitat Regulations.
- 3.13 When drafting policies to address biodiversity and geological conservation, RPBs should ensure they are amenable to monitoring through the application of SMART principles, i.e. ensure that targets and indicators can be applied that are specific, measurable, achievable, relevant and time bound. Such policies are more likely to secure ambitious but achievable objectives where progress can be assessed through indicators against clear and measurable targets and milestones.



- 3.14 More detailed guidance on the development of regional spatial strategy objectives, targets and indicators is contained in the ODPM publication *Regional Spatial Strategy Monitoring: A good practice guide*<sup>55</sup>.

## THE CONTENT OF A DRAFT RSS

- 3.15 The processes outlined above will culminate in a draft RSS and final version of the SA report ready for the formal consultation stage and submission to the Secretary of State.
- 3.16 RPBs should ensure that the final draft RSS deals comprehensively with biodiversity and geological issues. A useful on-line checklist<sup>56</sup> of the possible content for regional spatial strategies forms part of the supplementary files to the joint agency publication *Environmental Quality in Spatial Planning*<sup>57</sup>.
- 3.17 PPS11 requires that RSS articulate a spatial vision of what the region will look like at the end of the period of the strategy and show how this will contribute to achieving sustainable development objectives. It would be good practice to ensure that biodiversity and geological conservation comprise an integral part of this. Setting a regional vision, as proposed in the East of England, can be the context for developing a unified set of objectives to include biodiversity and geological conservation.

### Example: Draft East of England Plan<sup>58</sup>

Vision for the East of England – in its draft revision to the RSS the East of England Regional Assembly propose the following vision:

“The spatial planning vision for the East of England is to sustain and improve the quality of life for all people who live in, work in, or visit the region, by developing a more sustainable, prosperous and outward-looking region, while respecting its diversity and enhancing its assets.”

Amongst the objectives required to achieve this vision is one to protect and enhance the natural environment, including its biodiversity and landscape character.

<sup>55</sup> <http://www.odpm.gov.uk/index.asp?id=1144620>

<sup>56</sup> <http://www.english-nature.org.uk/pubs/publication/PDF/SpatialPlanningSuppFiles.pdf>

<sup>57</sup> *Environmental Quality in Spatial Planning: Incorporating the natural, built and historic environment, and rural issues in plans and strategies*. The Countryside Agency, English Heritage, English Nature, Environmental Agency, 2005  
<http://www.english-nature.org.uk/pubs/publication/PDF/SpatialPlanning.pdf>

<sup>58</sup> East of England Plan – *Draft revision to the Regional Spatial Strategy (RSS) for the East of England*  
<http://www.eera.gov.uk/Documents/About%20EERA/Policy/Planning%20and%20Transport/PlanHome/RPG/RPG14/View%20the%20Plan/RSSfinal%20on%20website/Chap3.pdf>

- 3.18 RSS8<sup>59</sup> for the East Midlands provides an example of good practice in relation to dealing with biodiversity by translating an integrated vision into the form of a spatial strategy. The vision is set by the East Midlands Regional Assembly's Integrated Regional Strategy. RSS8 develops this into a focussed strategy which is set out as 10 regional core objectives to guide spatial development in the region. These objectives include bringing about 'a step change increase in the level of the region's biodiversity, by managing and developing habitats to secure gains wherever possible, and ensuring no net loss of priority habitats and species'.
- 3.19 RSS8's core objectives are then met through a spatial strategy including criteria-based policies for the design, location and sustainability of development. To implement the spatial strategy, the RSS brings forward a number of topic based policies including one addressing regional biodiversity priorities.

#### **Example:RSS8 for the East Midlands<sup>60</sup>**

RSS8 for the East Midlands, Policy 28 – Priorities for Enhancing the Region's Biodiversity reads as follows:

"Local authorities, environmental agencies, developers and businesses should work together to promote a major step change increase in the level of the Region's biodiversity. This should be done by the:

- achievement of the East Midlands regional contribution towards the UK Biodiversity Action Plan targets as set out in Appendix 5;
- establishment of large scale habitat creation projects in the priority areas of Lincolnshire, the Region's Strategic River Corridors and heathland areas;
- establishment of a regional project to promote the re-creation of key wildlife habitats in each Natural Area in the East Midlands;
- establishment of a network of semi-natural green spaces in urban areas;
- management of features of the landscape which act as corridors and "stepping stones", essential for the migration and dispersal of wildlife; and
- development and implementation of mechanisms to ensure that development results in no net loss of BAP habitats and species and that net gain is achieved."

- 3.20 The draft RSS must only cover issues relating to biodiversity and geological conservation of genuinely regional or sub-regional significance and not address the level of detail more appropriately dealt with in local development frameworks. For example, RSS policies may refer to broad locations within the region for addressing biodiversity and geological conservation but not specific sites. RSS will need to provide policies which set priorities for various parts of the region. It would be good practice to ensure that the RSS key diagram illustrates these and, for example, identifies the strategically important areas for the protection and enhancement of the natural environment, and potential areas for habitat creation and restoration, with cross reference to the relevant policies.

<sup>59</sup> *Regional Spatial Strategy for the East Midlands (RSS 8)*, Government Office for the East Midlands, March 2005  
<http://www.emra.gov.uk/publications/rpg.asp>

<sup>60</sup> *ibid.*

- 3.21 Where appropriate RSS will address sub-regional issues and where necessary identify where a Sub-regional Spatial Strategy is required. It would be good practice for RSS to identify where policies are required to address key sub-regional biodiversity and geological conservation issues. In doing so they should take account of the strategically significant natural habitats and systems which span national or regional boundaries and ensure that, through joint working with neighbouring authorities, objectives and policies are complementary and consistent. Identifying these areas will have been based on some of the information tools covered in Chapter 2, such as Natural Areas.
- 3.22 The geographical scope of RSS means that they are often the most appropriate vehicle to ensure that the objectives of wider strategies, such as Shoreline, Estuary and River Basin Management Plans, are integrated into spatial policies. RSS can help provide the strategic spatial framework for supporting measures such as Integrated Coastal Zone Management and measures to achieve the requirements of the Water Framework Directive.
- 3.23 In addressing regional, sub-regional and cross-boundary issues in relation to habitats, species and geomorphological processes, RSS should also consider the need to address issues such as climate change. Climate change may be addressed through spatial policies. Such policies could both attempt to limit the emission of greenhouse gases, for example through transport and construction policies, and also identify scope for the spatial adaptation of habitats and species to climate change, having identified what the impact on biodiversity is likely to be.

## IMPLEMENTATION, MONITORING AND REVIEW

- 3.24 In accordance with PPS11, the draft revised RSS must include a plan identifying mechanisms for implementing its objectives for biodiversity and the wider plans and agencies involved in delivery.
- 3.25 Additionally, RPBs are required to annually report on the performance of their RSS policies through an Annual Monitoring Report. In order to report on their policies, RPBs are required to develop indicators to measure their performance. Government has published Core Output Indicators<sup>61</sup> which measure achievement towards specific national objectives. These core indicators are similar at both the LDF and RSS level to achieve consistency and cost effectiveness. Of the core indicators there is one addressing biodiversity as shown below.

### **Example: OPDM Core Output Indicator for Regional Planning: Biodiversity**

Change in areas and populations of biodiversity importance, including:

- (i) priority habitats and species (by type); and
- (ii) areas designated for their intrinsic environmental value including sites of international, national, regional or sub-regional significance.

61 [http://www.odpm.gov.uk/stellent/groups/odpm\\_planning/documents/page/odpm\\_plan\\_035647.pdf](http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_035647.pdf)

- 3.26 As well as ensuring that biodiversity indicators set in RSS are reflected in LDFs it would be good practice, where appropriate, to align these with SA indicators to make the most effective use of resources.
- 3.27 Indicators should be used to measure progress against the targets required by PPS9 to be set for the restoration and re-creation of priority habitats and the recovery of priority species populations, linked to national goals.

### Case study: RSS8 for the East Midlands.

For its policies, RSS8 sets out the mechanisms for implementation, identifies the lead and supporting organisations involved, and for some policies sets specific targets and provides indicators to measure this. For example, Policy 28, which sets out priorities for enhancing the region's biodiversity (set out in example on page 28), is to be implemented through the combination of LDFs, LBAPs, Regional Environment Strategy Action Plans and the Strategic River Corridors Initiative. Lead organisations include the RPB, LPAs, English Nature and the Environment Agency supported by the Wildlife and Woodland Trusts, developers and business. Area and timescale targets for regional habitat management and restoration are applied to each priority BAP habitat in the region, (and to selected regionally identified priority habitats) and measured through application of the ODPM's core output indicators for biodiversity (see above).

RSS8 Annual Monitoring Reports admit to the difficulty experienced in collecting consistent and comprehensive data on the range of topics required and the RPB is committed to working with regional partners to improve data availability.

## SUB-REGIONAL SPATIAL STRATEGIES AND THE SUSTAINABLE COMMUNITIES PLAN

- 3.28 In addition to addressing sub-regional issues, a RSS may identify sub-regional areas where policy issues span regional boundaries. This has been the case with some of the areas promoted for development and regeneration in the Government's Sustainable Communities Plan<sup>62</sup>.
- 3.29 Although the delivery of development growth has been a key driver for the preparation of Sub-regional Spatial Strategies, good practice is emerging over how integrating and enhancing biodiversity can form an important element of this. For example, biodiversity is given an integral role to play in the approach that Government is advocating in the Thames Gateway growth area. In *Greening the Gateway*<sup>63</sup>, Government sets out a vision for integrating economic growth with environmental enhancement in the Thames Gateway. It calls for the landscape to be regarded as the functional green infrastructure which is needed to create a positive sense of place, provide environmental protection for local communities and enhance the quality of life.

<sup>62</sup> <http://www.odpm.gov.uk/index.asp?id=1139865>

<sup>63</sup> *Creating Sustainable Communities: Greening the Gateway – a greenspace strategy for the Thames Gateway*, ODPM/Defra 2003 [http://www.odpm.gov.uk/stellent/groups/odpm\\_communities/documents/downloadable/odpm\\_comm\\_026750.pdf](http://www.odpm.gov.uk/stellent/groups/odpm_communities/documents/downloadable/odpm_comm_026750.pdf)

- 3.30 In the Thames Gateway this green infrastructure ranges from the formal parks and gardens of the inner city out to the expansive coastal marshes. *Greening the Gateway* promotes a strategic approach to incorporating the natural environment and natural processes into the design of major development.
- 3.31 Similarly, the *Milton Keynes and South Midlands Sub-regional Strategy*<sup>64</sup> promotes high environmental standards in the design, masterplanning and management of this growth area. It sets out an integrated approach in which resource efficiency, use of renewables, waste reduction and emissions reduction are considered at an early stage along with measures to promote biodiversity to help create attractive, healthy and safe places to live. Central to this approach is planning for the protection and enhancement of multi-functional green space as a basis for development growth. An example of delivering green infrastructure is provided below. It illustrates how a community forest project has evolved a key role in helping to establish a green infrastructure to part of the Milton Keynes and South Midlands Growth Area.

#### Case study: Delivering green infrastructure at Marston Vale, Bedfordshire

The Forest of Marston Vale is a Community Forest and Charitable Trust covering 61 square miles of land between Milton Keynes and Bedford, a major growth area with plans for up to 19,000 dwellings over the next 20 years. The Trust is an example of an innovative delivery mechanism for green infrastructure and will play an integral part in the future development of Marston Vale. This has been achieved through partnership working with planners, developers, builders and the local community to help ensure the sustainable development of the area. The community is extensively involved throughout the consultation process, as well as contributing to practical work on the ground such as tree planting. The Trust is respected and understood by the community, which has tended to give it access to land that would not normally come on the market. The green infrastructure is being put in place ahead of the development. The success of Marston Vale stems from its ability to operate on a scale and vision that can deliver the Government's objectives for development, whilst using its status and position in the local community to ensure that a green infrastructure is the first thing to appear on the ground, ahead of development.

- 3.32 The strategies developed for delivering major growth in identified sub-regional policy areas can provide opportunities to incorporate biodiversity objectives. These should not cut across or prejudice broader regional objectives. Chapter 5 provides more examples of how this is being achieved.

<sup>64</sup> *Milton Keynes and South Midlands Sub-regional Strategy*, Government Offices for the South East, East Midlands and East of England March 2005

## 4. Addressing biodiversity and geological conservation through the Local Development Framework

### Good practice summary

It would be good practice to ensure that the principles for producing local development frameworks are applied to support the objectives of PPS9 for biodiversity and geological conservation by:

- Applying a spatial planning approach whereby the LDF seeks to deliver the objectives of broader biodiversity/geodiversity strategies and to ensure these are integrated in all land use and development sectors.
- Setting a basis for development control which seeks to promote positive benefits to biodiversity and geological conservation.
- Ensuring that the various local development documents within the LDF provide the scope necessary to achieve the above objectives.
- Securing a strong evidence base on biodiversity and geological conservation to satisfy the requirements of sustainability appraisal and the tests of soundness.
- Fully engaging all stakeholders in the process of preparing the LDF and front-loading their involvement.
- Setting ambitious but achievable targets to monitor progress in securing objectives for biodiversity and geological conservation.

### DELIVERING BIODIVERSITY AND GEOLOGICAL CONSERVATION THROUGH THE LOCAL DEVELOPMENT FRAMEWORK (LDF)

- 4.1 Government policy on local development frameworks (LDF) is set out in PPS12<sup>65</sup> and this chapter provides good practice advice on how the main principles can be applied to meet biodiversity and geological conservation objectives. The LDF must be in general conformity with the relevant regional spatial strategy (RSS) and Chapter 3 provides advice on how RSS can provide a regional strategic framework for planning for biodiversity and geological conservation.
- 4.2 PPS12 promotes a spatial planning approach which requires LDFs to integrate the objectives of a wider range of plans and programmes, including those dealing specifically with biodiversity and geological conservation. Local Biodiversity Action Plans (LBAPs) would be significant amongst these, particularly as these will become subsumed within the overarching community strategies that have a key role in determining the local priorities of LDFs. LBAPs set out local priorities for biodiversity action and LDFs should support these with appropriate policies.

<sup>65</sup> Planning Policy Statement 12: Local Development Frameworks, ODPM September 2004.

See [http://www.odpm.gov.uk/stellent/groups/odpm\\_planning/documents/page/odpm\\_plan\\_031155.hcsp](http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_031155.hcsp)



- 4.3 By integrating a wider range of strategies, the LDF can help ensure that the spatial delivery of each of these takes full account of biodiversity and geological conservation. The value of such an integrated approach is two-fold. As a matter of good practice sectoral policies should ensure that the protection and enhancement of biodiversity/geodiversity is taken into account. Areas covered by such sectoral policies can also derive tangible benefits from such an approach. Conserving biodiversity/geodiversity should be considered as a key part of good practice in meeting quality of life, well-being and sustainability objectives in issues such as housing, health, education, tourism and economic development.
- 4.4 Taking a spatial planning approach, LDFs must provide policies which shape development control decisions. A key objective of the LDF system is to streamline these and to avoid an excess of discrete, regulatory policies. It would be good practice to ensure that the protection and enhancement of biodiversity and geological conservation forms an element of a shorter suite of integrated, outcome-orientated policies which nonetheless provide a firm basis for development control.
- 4.5 As the LDF is a portfolio of plans which can be produced and revised separately, local authorities have the flexibility to react to changing circumstances more readily than under the previous local plan system. Coupled with a stronger emphasis on monitoring, the LDF system can respond to emerging issues.
- 4.6 By front-loading stakeholder involvement in LDF preparation, local planning authorities can help gain early consensus on key priorities, objectives and information requirements. This will help ensure that these issues are raised at an early stage and do not arise later to delay adoption of the LDF.
- 4.7 LDF arrangements aim to strengthen community involvement. It would be good practice to involve communities in identifying priorities for biodiversity and geological conservation. Chapter 2 highlights the Dartmoor Biodiversity Project 'Action for Wildlife' as an example of one approach to community involvement and the potential for similar initiatives could be explored when producing a Statement of Community Involvement.
- 4.8 The principle that LDFs should be sound in terms of evidence and that they are subject to Sustainability Appraisal (SA), requires local authorities to develop a comprehensive information base on the biodiversity and geological resources of an area. A further test of soundness relates to how LDFs set out a framework for implementation. This will involve monitoring the extent to which the objectives of policies for biodiversity and geological conservation are being delivered and to steer the future direction of the plan by setting appropriate targets and indicators to measure progress.
- 4.9 Further useful guidance on the preparation of spatial plans, published jointly by English Nature, the Countryside Agency, English Heritage and the Environment Agency<sup>66</sup>, concentrates on policies which LDFs might use to integrate all the objectives of sustainable development. Guidance on writing spatial policies for LDFs is provided by the Planning Officers Society<sup>67</sup>.

---

<sup>66</sup> *Environmental Quality in Spatial Planning: Incorporating the natural, built and historic environment and rural issues in plans and strategies*, The Countryside Agency, English Heritage, English Nature and the Environment Agency (2005).

<http://www.english-nature.org.uk/pubs/publication/PDF/SpatialPlanning.pdf>

<sup>67</sup> [http://www.planningofficers.org.uk/documents/Policies\\_for\\_Spatial\\_Plans\\_July\\_2005.doc](http://www.planningofficers.org.uk/documents/Policies_for_Spatial_Plans_July_2005.doc)

## PRODUCING THE LOCAL DEVELOPMENT FRAMEWORK

- 4.10 Advice on preparing LDFs is provided in PPS12 and in the companion good practice guide<sup>68</sup> and will not be repeated in detail here. However, a number of good practice messages emerge in respect of addressing biodiversity and geological conservation in the production process.
- 4.11 The programme for preparing a LDF will be set out in the local development scheme (LDS). When local authorities next review their LDS, it would be good practice to consult key stakeholders to ensure that future programmes capture emerging biodiversity priorities. For example, the LBAP may have moved on to the point where its implementation may now depend on the local planning authorities including a further SPD addressing how this might be achieved.
- 4.12 The information sources outlined in Chapter 2 must be applied to develop the strong evidence base needed for the production of local development documents (LDDs)<sup>69</sup>. This information is essential to the proper application of SA which runs through the entire production process and ensures that the adopted plan accords with the principles of sustainable development.
- 4.13 Gathering evidence on biodiversity and geological resources plays a critical role at the pre-production stage when the SA process starts. Planning authorities should exploit opportunities to use a common information base to identify the biodiversity and geological issues and options to be addressed in the plan and to develop the SA framework against which to test them. Where information is not available through the means discussed in Chapter 2, further survey work by the local authority may be necessary. It is therefore advisable to consider and allocate resources as early as possible during the LDF process.
- 4.14 At the pre-production stage planning authorities should scope all other relevant plans and programmes that inform the LDD. For the SA to satisfy the requirements of the SEA Directive, this means taking into account international and national environmental objectives including meeting EC legislation such as the Habitats Directive. It also entails taking account not just of PPS9 but of the RSS, the community strategy, the LBAP/LGAP and all sources of contextual indicators on the state of the natural environment.
- 4.15 It would also be good practice at the pre-production stage to examine the objectives of wider environmental strategies such as Shoreline, Estuary and River Basin Management Plans and to consider how they could be integrated into the LDF. Objectives for managing such natural systems may converge with those for biodiversity and geological conservation.
- 4.16 A scoping report for the SA framework will be prepared at the pre-production stage and LPAs should consider which stakeholders, in addition to English Nature as statutory consultee, to consult on the scope of biodiversity and geological conservation issues.

68 (i). *Creating Local Development Frameworks*, ODPM, November 2004.

See [http://www.odpm.gov.uk/stellent/groups/odpm\\_planning/documents/page/odpm\\_plan\\_032593.pdf](http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_032593.pdf)

(ii). *Local Development Framework Monitoring: A Good Practice Guide*, ODPM, March 2005.

See [http://www.odpm.gov.uk/stellent/groups/odpm\\_planning/documents/page/odpm\\_plan\\_035638.pdf](http://www.odpm.gov.uk/stellent/groups/odpm_planning/documents/page/odpm_plan_035638.pdf)

(iii). *Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks*, ODPM, November 2005  
<http://www.odpm.gov.uk/index.asp?id=1161341>

69 Local development document (LDD) is the generic term for each of the development plan documents (DPDs) and any supplementary planning documents (SPD) which collectively comprise the LDF. For further details refer to PPS12.



- 4.17 Establishing the SA framework involves developing sustainability objectives expressed as targets and measured by indicators. To meet SEA Directive requirements these will need to address biodiversity<sup>70</sup>. There may well be convergence between the biodiversity objectives of SA framework and of the plan itself, in which case, shared targets and indicators can be developed. In turn these should align well with those of the other plans which inform the LDF, such as the RSS and the community strategy.
- 4.18 The production stage involves using evidence gathered at the pre-production stage to identify issues and options and testing these against the SA framework. This should be an iterative process and the main biodiversity and geological conservation bodies and partnerships involved in pre-production should be consulted on these evolving options.
- 4.19 Although full public consultation on the preferred options and submission versions of the plan will provide further opportunities to shape policies for biodiversity and geological conservation, front-loading involvement at earlier stages will reduce the amount of additional work required to address these issues at the later stages of plan production.
- 4.20 Following examination and on adoption, a Core Strategy or other LDD will include a framework for monitoring which should contain both targets and indicators to measure progress in meeting policy objectives for biodiversity and geological conservation. These monitoring arrangements should maximise alignment with SA monitoring and with that of the RSS. To help LPAs measure the implementation of their policies and produce the required Annual Monitoring Report, the Government has published Core Output Indicators for LDFs. These are closely aligned with those published for RSS, including one which addresses biodiversity (see page 29, Chapter 3).
- 4.21 LPAs will need to be pragmatic regarding setting further indicators and targets. However, where biodiversity policies are not addressed by national core indicators, local authorities should consider using local indicators based on SMART principles and linked to LBAP objectives to monitor outputs. For example, Oxfordshire local authorities working with the Thames Valley Environmental Records Centre have developed a set of local output indicators (for water voles, farmland birds, garden butterflies and condition of SSSIs). They have also secured a commitment from the record centre to supply information on these and core output indicators each year in time for the AMR deadline<sup>71</sup>.

## CONTENT OF THE CORE STRATEGY AND OTHER LOCAL DEVELOPMENT DOCUMENTS

- 4.22 This section covers some good practice pointers as to how biodiversity and geological conservation should be addressed in the LDF. LDFs comprise at least (i) a Core Strategy, (ii) a Site Specific Allocations DPD and, where necessary, (iii) Area Action Plans. Local circumstances will determine

---

<sup>70</sup> The SEA Directive does not require consideration of geological conservation.

<sup>71</sup> South Oxfordshire District Council in litt.

what additional LDDs a planning authority considers necessary. A proposals map illustrating the spatial extent of the policies in all development plan documents produced must also be kept up-to-date throughout this process.

- 4.23 The following table provides a summary of where biodiversity and geological conservation might feature in the portfolio of LDF documents. LDFs will vary between authorities and so there is no standard way of addressing this issue. Methodologies will evolve as the system develops.

<b>LDF components</b>	<b>Placing biodiversity and geological conservation</b>
Local Development Scheme (LDS)	Sets out the project plan for the LDF and which saved policies will be replaced in LDDs, where the various aspects of biodiversity and geological conservation will fit into these and the timing for their production.
Statement of Community Involvement (SCI)	Provides the programme for front-loading community and other stakeholder involvement in incorporating biodiversity and geological conservation into the LDF and includes participation and engagement techniques to be employed.
Core Strategy	Shows how the authority's corporate objectives for biodiversity and geological conservation are linked to other objectives, reflected in spatial terms and how they will be delivered.
Site Specific Allocations	Allocates specific sites for development for different uses. May set out sites designated for their biodiversity or geodiversity value to clarify their relationship to allocations for development. May set out sites where action is to be taken to enhance biodiversity/geodiversity. Must indicate any changes to nature conservation designations.
Supplementary Planning Documents (SPD)	Provides more detail for implementing DPD policies for biodiversity and geological conservation including detailed design briefs, development control checklists and design guidance.
Area Action Plans (AAPs)	Should be used where significant change or conservation needs to be delivered in a specific area.
Other Development Plan Documents	Authorities may need to prepare other DPDs which are intended to deliver specific aspects of the Core Strategy. These must comply with the Core Strategy's approach to biodiversity and geological conservation.
Adopted Proposals Map	Will show all nature conservation designations and is updated through adoption of Site Specific Allocations or Area Action Plans.
Annual Monitoring Report	Sets out annual progress in addressing biodiversity and geological conservation through the implementation of policies in the LDF with reference to objectives, targets and indicators.

## The Core Strategy

- 4.24 The core strategy will normally be the first element of the LDF to be produced as, once adopted, all further LDDs will flow from and must conform to it. Through the production process outlined above, the Core Strategy should have drawn on other local authority corporate strategies and the strategies of other organisations with land use implications, to provide a spatial vision and strategic objectives for the area.
- 4.25 On this basis, the Core Strategy should embrace an integrated approach to biodiversity and geological conservation secured in two key ways.
- 4.26 Firstly, development control policies and allocations relating to all sectors of land uses (housing, transport, etc.) should be consistent with the strategic objectives for biodiversity and geological conservation.
- 4.27 Secondly, LDFs should promote a spatial planning approach to biodiversity and geological conservation and seek to bring together and integrate policies for development and other land uses with other policies and programmes which influence the nature of places and how they function.
- 4.28 As discussed in the first section of this Chapter, this might include considering the benefits of biodiversity and geological conservation as part of strategies relating to health, education, social inclusion and environmental protection. Nature conservation can bring tangible benefits to many of these sectors and the LDF can provide a means of integrating these and guiding how this is brought about in land use terms.
- 4.29 The Core Strategy should provide a spatial strategy for the authority's area which incorporates strategic objectives for biodiversity and geological conservation. Good practice would be to develop a core policy which would deliver this and include a set of criteria (see checklist below) with which to direct corporate activity and shape development control decisions.
- 4.30 Where a Core Strategy policy includes reference to areas for the protection and enhancement of biodiversity, such as in the above example, key locations can be indicated in a key diagram.

**Checklist<sup>72</sup> of biodiversity and geological issues which might be covered in a LDF Core Strategy or other DPD policy:**

- recognition of environmental trends resulting from climate change and provision for natural systems, habitats and species to adjust to this;
- a strategic framework for the protection, restoration or creation of priority BAP habitats (and for Ancient Woodland and other habitats of recognised importance) and the protection and enhancement of the populations and habitats of priority BAP species;
- managing land use in step with naturally functioning processes and systems and aligning objectives for biodiversity and geological conservation with, for example, Shoreline Management Plans and River Basin Management Plans;
- maintaining, restoring or adding to networks of natural habitats and other landscape features essential for the migration, dispersal and genetic exchange of species (incorporating this into a more broadly functioning 'green infrastructure');
- promoting sustainable design standards for the construction and management of development which includes features beneficial to biodiversity or geological conservation;
- identifying the role of a hierarchy of internationally, nationally and locally designated sites;
- safeguarding the biodiversity value of previously developed land through planning decisions;
- promoting and supporting the enhancement and management of local geological sites through the planning process.

- 4.31 The Core Strategy should provide criteria-based policies that address biodiversity and geological conservation which are generic to the whole authority area or to broad locations shown in the key diagram. It should refer to, but not repeat, policies which derive from either PPS9 or the RSS. The Core Strategy may also identify broad locations and amounts of different types of development within the local authority area which will need to be applied to specific sites within a separate DPD.
- 4.32 Application of SA in the preparation of the Core Strategy should clarify the impacts on biodiversity and geological conservation which the various options for allocating land for development would have. These include those which result from land take, severance, fragmentation or isolation and other direct or indirect impacts.

<sup>72</sup> A check list to scope the environmental content of LDFs is contained in the web-based supplementary files to the joint-agency publication Environmental Quality in Spatial Planning at:  
<http://www.english-nature.org.uk/pubs/publication/PDF/SpatialPlanningSuppFiles.pdf>

- 4.33 The Core Strategy will provide the strategic framework for preparing more detailed plans for the LDF. Much of the information gathering and SA work carried out to produce the Core Strategy will apply to the preparation of any further plans and need not be duplicated unless it is considered out of date. Evidence gathering and analysis should concentrate on the specific impacts arising from the more detailed content of these subsequent plans, such as allocating specific sites for development.

### **Site Specific Allocations, Action Area Plans and other Development Plan Documents**

- 4.34 The Core Strategy will contain a limited suite of overarching policies, incorporating objectives in respect of biodiversity and geological conservation, which provide the strategic hooks for more detailed policies in further DPDs.
- 4.35 The local authority will need to prepare a Site Specific Allocation DPD to apply the development allocations set out in the Core Strategy and to apply these to specific areas of land which, on adoption of the plan, are picked up in the proposals map. The Site Specific Allocation DPD may need to indicate areas of land designated for their biodiversity or geodiversity value and the nature of that designation, in order to clarify relationships with development allocations. In addition to allocating land for development, a Site Specific Allocation DPD or Area Action Plan could be used to meet PPS9 requirements by identifying specific areas for the restoration and enhancement of biodiversity or geological conservation identified in the Core Strategy.
- 4.36 Policies relating to designated sites may form part of a broader, criteria-based policy within the Core Strategy but may require more detailed policy treatment in an additional DPD or SPD. The location of these sites should be kept up to date by amending the LDF proposals map whenever a Sites Specific Allocation DPD, Area Action Plan or other DPD is adopted covering the area where the site is located.

### **International sites**

- 4.37 The legal protection afforded to international sites is described in OPDM/Defra Circular 06/2005, 01/2005. Local authorities will need to ensure that, in preparing LDFs, this legal protection is not prejudiced. PPS9 requires that international sites are identified on the adopted proposals map. However the statutory protection enjoyed by these sites means that policies to protect these areas should not form part of the LDF. It would be good practice to include within DPD explanatory text which cross-references to legal protection as interpreted in OPDM/Defra Circular 06/2005, 01/2005 and which also explains the policy protection Government gives to pSPAs, cSACs and Ramsar sites.

### **Sites of Special Scientific Interest (SSSIs)**

- 4.38 PPS9 requires that SSSIs are given a high degree of protection under the planning system through appropriately worded policies in plans. Paragraph 8 of PPS9 sets out the Government's policies for developments likely to have an adverse effect on SSSIs. LDFs should not repeat this but it would be good practice for local authorities to make appropriate cross-reference to it where impacts on SSSIs form a criterion within broader LDF policy. This will ensure that development control decisions apply Government policy.
- 4.39 The legislative regime governing SSSIs is set out in Part II of the Circular. This includes the duty imposed on local authorities by Section 28G of the Wildlife and Countryside Act 1981 to take reasonable steps, consistent with the proper exercise of their functions, to further the conservation and enhancement of the special features of SSSIs. LDFs must be prepared in accordance with this duty and may contain spatial policies which encourage local authorities to meet it through routes other than development control. This might include securing enhancement of SSSIs which fall within the ownership of the planning authority or which are otherwise capable of being addressed through its broader functions.

### **Locally and regionally protected sites**

- 4.40 Local authorities should consider how local sites can be protected and enhanced. The Core Strategy will indicate how the authority and its partners intend to promote biodiversity and geological conservation. Good practice would be to include a strategy for local sites which would include positive proposals for protection and enhancement and how they will work to this end with landowners and developers of these sites. They should be identified within Site Specific Allocations DPDs so that they appear on the adopted proposals map and should include site specific policies for them.

### **Previously developed land**

- 4.41 PPS9 recognises that the re-use of previously developed land is part of a sustainable approach but that, where these sites have significant biodiversity and geological interest of recognised local importance, the aim should be to retain and incorporate it into the site. Local authorities should not repeat this as a policy within the LDF but should consider the presence of such 'brownfield biodiversity' when developing the evidence base for a LDD or when considering allocating sites for development and the content of criteria-based policies.
- 4.42 It would be advantageous if any biodiversity value of previously developed sites was identified early in the process of developing a LDF. Its protection could then be addressed through appropriate DPD policies and site allocations and by producing design guidance and development briefs as SPD. Good practice in incorporating biodiversity/geodiversity into the design of development on previously developed sites could form part of a SPD advocating wider good practice in sustainable design. This could encourage outcomes such as that described in the following case study.



### Case study: Northwick Road Site, Canvey Island

East of England Development Agency (EEDA) purchased the 27.5 hectare Northwick Road site in Canvey Island from Safeway in 2002. It was identified by regional and local partner agencies as an important strategic site that could be regenerated to provide hundreds of new jobs and much needed space for training and businesses in the area. However, the site was found to be of national importance for the wildlife it supports including a variety of rare insects – particularly bees, wasps and beetles – reflecting the national importance of the East Thames corridor for wildlife. English Nature and EEDA worked closely together to find a solution. Detailed ecological surveys helped to identify areas of the site which should be conserved because they contain the richest wildlife habitats. Extensive dialogue with local residents and businesses explored how parts of the site could be developed as community open space and a nature reserve with a visitor centre providing opportunities to view and understand wildlife on the site. The planned development includes sustainable construction principles and EEDA aims to have an exemplar development demonstrating how nature conservation can work with economic development for the benefit of the community. The outcome was good for the local community, the wildlife and the local economy. Through a constructive approach, EEDA set an example for the development community in the Thames Gateway showing how economic objectives could be met alongside environmental ones without compromising either. The wildlife that the area supported would help to enhance the development, showing that creating and enhancing areas for nature could be one of the keys to the successful regeneration of the Thames Gateway. Recently, English Nature's Council confirmed that part of the site is to be designated as a Site of Special Scientific Interest which will help safeguard its special features.



**Vegetation at Northwick Road, Canvey Island**



## Protected species policies and species of principal importance for biodiversity conservation

- 4.43 Annex A of the Circular sets out the details of the range of wildlife species which receive statutory protection under various legislative provisions. PPS9 says that these legally protected species should not be given policy protection in LDDs. However, as a matter of good practice, the status and distribution of protected species, as well as priority BAP species, should form part of the evidence gathering required for the production of the LDF. On this basis, LDFs should, where necessary, consider protection for areas where these species are most likely to occur, and should develop guidelines for protecting and enhancing populations of protected species to assist in determining the location and design of development. Such good practice would complement the policy protection afforded to priority species under PPS9 (paragraph 16) and the legal protection afforded to the species as dealt with in part IV of ODPM Circular 06/2005, Defra Circular 01/2005.

## Supplementary Planning Documents

- 4.44 Supplementary Planning Documents (SPD) provide an opportunity for the elaboration of policy in DPDs to help deliver better conservation for biodiversity and geology. There is considerable scope for supplementing DPD policies with more detailed guidance on contributing to LBAP/LGAP objectives through development.
- 4.45 There are a number of examples of Supplementary Planning Guidance (SPG) under the previous development plan arrangements. Under the new system, production of SPD must follow the procedures set out in PPS12 and associated ODPM guidance. Local authorities should review their existing SPG and consider which aspects need to form part of DPD elements of the LDF and which can form part of SPD. SPD must not be used to expand or add to LDF policy but should show how policy can be implemented.
- 4.46 SPD cannot be used to allocate land; that is for a DPD. However it can provide guidance on how a site should be developed (by means of a development brief or design guide) to help build in biodiversity benefits. The development control checklists covered in Chapter 5 could be published as part of a SPD.

### Example: Supplementary Planning Guidance:

Leicester City Council adopted *Biodiversity in Leicester – Supplementary Planning Guidance* in October 2003<sup>73</sup> to provide guidance on the implementation of biodiversity and nature conservation policies contained in Leicestershire County Council and Leicester City Council development plans. Unlike other SPG, this guidance identifies specific sites requiring particular biodiversity enhancement.

<sup>73</sup> <http://www.leicester.gov.uk/index.asp?pgid=6214>

- 4.47 Embracing nature conservation in the development process is an important element in the promotion of an urban renaissance in our towns and cities as the following Dudley example illustrates.

#### **Case study – Dudley Metropolitan Borough planning for geodiversity**

Dudley Metropolitan Borough Council in the West Midlands published Supplementary Planning Guidance to ensure that, through the development control process, its unique geological legacy is conserved as a key element of its urban regeneration. Geology is recognised as an asset to the community, not only as part of the area's history and environment, but as a resource that brings visitors from across the country and all over the world. This document is currently being produced as a SPD under the new system and was issued for public consultation in late February 2006. Adoption is proposed in July 2006.

The geology guidance is incorporated in an overall Nature Conservation SPD which also covers designated sites, protected species and the incorporation of nature conservation into the design of development. The document originated as a Good Practice Guide and has been used as informal guidance for several years pending adoption of the UDP which needed to precede SPD adoption.

- 4.48 Another urban example is in Brighton where a SINC forms a core element of a major brownfield urban regeneration scheme.

#### **Case study: Brighton Station goods yard redevelopment.**

A £150m urban regeneration scheme is currently underway at Brighton Station goods yard site. The development brief for this 15 acre site incorporates state-of-the-art thinking in sustainable urban regeneration to create a mix of uses – commercial, residential and recreational – which integrates biodiversity as a key element. By means of a Section 106 agreement, the developers will incorporate and enhance the old railway line, which is currently a Site of Nature Conservation Interest (SINC), to create a wildlife and recreational area within the development which will also be a greenway for pedestrians and cyclists.

- 4.49 Through a clear development brief, the Brighton Station regeneration scheme provides an example of how a local biodiversity site can form the hub of a development, contribute to the quality of life and well-being of future residents and users, and secure and enhance biodiversity. As SPD such development briefs can form part of the LDF.

## 5. Development control

### Good practice summary

The development control process is a critical stage in delivering the protection and enhancement of biodiversity and geological conservation required by PPS9. The following key examples of good practice can help better achieve these objectives:

- Adopting the five point approach to decision-making – information, avoidance, mitigation, compensation and new benefits.
- Ensuring that planning applications are submitted with adequate information using early negotiation, published checklists, requiring ecological surveys and appropriate consultation.
- Securing necessary measures to protect, enhance, mitigate and compensate through planning conditions and obligations.
- Carrying out effective planning enforcement.
- Identifying ways to build biodiversity and geological conservation into the design of new development.

### APPLYING THE PRINCIPLES OF PPS9

- 5.1 Paragraph 1 of PPS9 sets out the Government's key principles to ensure that the potential impacts of planning decisions on biodiversity and geological conservation are fully considered. These set out a series of steps which planning authorities should adhere to in order to achieve the aim of preventing harm to biodiversity and geological interests. A useful *aide-memoire* to ensure that this principle is applied during the development control process is the five-point approach to planning decisions recommended in the Royal Town Planning Institute's good practice guide *Planning for Biodiversity*<sup>74</sup>.

---

<sup>74</sup> *Planning for Biodiversity – Good Practice Guide* – Royal Town Planning Institute, 1999

### **Example: the RTPI five-point approach to planning decisions for biodiversity**

1. **Information** – is more information about the site's biological resource needed? Is more information about the development and its potential effects needed? Is the significance of the effects clear? Is relevant internal or external expertise available?
2. **Avoidance** – have all adverse effects on wildlife species and habitats been avoided wherever possible?
3. **Mitigation** – where adverse effects are unavoidable, have they been or can they be minimised by the use of mitigation measures that can be guaranteed by, for example, conditions or planning obligations?
4. **Compensation** – where, despite mitigation, there will be residual adverse effects that cannot be reduced further, have they been or can they be compensated for by measures aimed at offsetting harm? Can the compensatory measures be guaranteed by conditions or planning obligations?
5. **New benefits** – where there would be no significant harm to wildlife species or habitats, are there opportunities to provide new benefits for wildlife, for example, by habitat creation or enhancement? Can these new benefits be guaranteed by planning obligations?

- 5.2 This five-point approach can be applied to all planning decisions. However, planners should refer to the Circular<sup>75</sup> for the statutory steps (including, for example, the provisions of the EIA Regulations and the Habitats Regulations) required in the development control process where internationally and nationally protected sites or species are involved. A licensing regime applies to all European protected species listed in schedule 2 of the Habitats Regulations and also to badgers through the Protection of Badgers Act 1992.

## **PRE-APPLICATION INFORMATION GATHERING**

- 5.3 Chapter 2 dealt with the ways that planning authorities can develop and maintain an evidence base upon which to plan for biodiversity and geological conservation. This will supplement the further information required to determine a planning application. In the development control process the onus falls on the applicant to provide enough information to enable the planning authority to assess the impacts on biodiversity and geological conservation. Planning applications must be supported by adequate information. Planning authorities have powers to require further information or, in some cases, to refuse planning permission due to a lack of it. Insufficient information can significantly delay decision making.

<sup>75</sup> See ODPM Circular 06/2005, Defra Circular 01/2005 Part I B and Part IV B

- 5.4 Pre-application negotiation can prevent such delays and help ensure that planning applications are submitted with adequate information on biodiversity and geological impacts. In some cases it would be appropriate to include third parties, such as English Nature, in these discussions.

## DEVELOPMENT CONTROL CHECKLISTS

- 5.5 One helpful means of improving the efficiency of the development control process is for local authorities to publish generic advice to help applicants understand the type of information that might need to be supplied with a planning application. Some local authorities publish biodiversity checklists for development control.

### Case study: Checklists

South Oxfordshire District Council requires all planning applications to take wildlife into account and has produced a biodiversity advice note in the form of a single A4 sheet which is included with each planning application form. It contains a simple tick box checklist<sup>76</sup> to alert applicants to potential impacts on bats, badgers, birds, ponds, amphibians, trees and hedgerows with details of contacts from whom they can obtain further advice. The leaflet stresses that the presence of wildlife will not necessarily prevent an application being approved but does encourage every proposal to be wildlife-friendly.

The Biodiversity Partnership for Cambridgeshire and Peterborough has produced a Biodiversity Checklist<sup>77</sup> which gives detailed guidance on the type of information needed from developers. This guidance, the first of its kind in England, has been developed with the help of constituent local authorities and endorsed by the Government Office for the East of England. The biodiversity checklist was funded and produced by Cambridgeshire County Council for the Biodiversity Partnership for Cambridgeshire and Peterborough with contributions from a number of other organisations. It includes advice on minor household applications (referring to issues such as the presence of bats and great-crested newts) and larger proposals and includes a summary sheet setting out the issues that need to be addressed for major developments.

- 5.6 Such checklists can help local authority planners assess the comprehensiveness of information relating to biodiversity and geology submitted with a planning application. Such checklists might form part of a Supplementary Planning Document within a local development framework as discussed in Chapter 4.

<sup>76</sup> [http://www.southoxon.gov.uk/ccm/cms-service/download/asset/?asset\\_id=456054](http://www.southoxon.gov.uk/ccm/cms-service/download/asset/?asset_id=456054)

<sup>77</sup> <http://www.cambridgeshire.gov.uk/NR/rdonlyres/BA8E3741-34F4-4421-80F7-3069B275FF61/0/biodguide.pdf>

## ECOLOGICAL SURVEYS

- 5.7 Where the nature and location of a development is such that nature conservation impacts may be significant and existing information regarding this is lacking or inadequate, further ecological surveys may be necessary in advance of a planning application. In certain cases these surveys might include information on possible alternative sites. Pre-application negotiation can help scope the nature of survey work required. South Gloucestershire's biodiversity design guide provides useful generic advice for planning applicants regarding the need to carry out an ecological survey where development will affect sites with known or potential value for wildlife. Such guidance could also form part of a Supplementary Planning Document.

### Case study: extract from South Gloucestershire Council Design Guide – Biodiversity and the Planning Process<sup>78</sup>

#### Surveys

- must be carried out by suitably qualified and experienced persons;
- must be carried out at an appropriate time and month of the year, in suitable weather conditions and use recognised surveying techniques;
- must be to an appropriate and recognised level of scope and detail (e.g. Phase II NVC for grassland) and must record and map the range of habitats and species of flora and fauna found on site;
- must include the results of a search of ecological data from the Bristol and Regional Environmental Records Centre (contact details on back of leaflet);
- must include an assessment of the likely effects of development on the nationally and locally important species and habitats recorded on site or in the locality;
- identify measures to be taken to avoid impacting on the biodiversity of the site and in the locality, either directly or indirectly, both during construction and afterwards;
- the Council will require additional surveys if the detail provided is deemed inadequate;
- all applications to redevelop (particularly brick or stone) agricultural buildings such as barns or stables must be accompanied by a wildlife survey.

<sup>78</sup> <http://www.southglos.gov.uk/southglos/planningandbuilding/localplanning/non-statutory+planning+guidance>

## SURVEYS AND EIA

- 5.8 Where planning applications are subject to the EIA Regulations this is likely to require a range of ecological surveys. EIA procedures can be complex and if local authorities provide advice and guidance to developers at an early stage this is likely to improve the efficiency of the development control process. To help developers comply with the EIA Regulations, Surrey County Council has set up a one-stop shop on its website<sup>79</sup> which takes developers through the entire process from screening and scoping to review.
- 5.9 The Institute of Ecology and Environmental Management (IEEM)<sup>80</sup> is developing draft guidance on the ecological input to EIA. This guidance, when finalised, will provide a recommended procedure for the ecological component to EIA in an effort to raise standards and improve the effectiveness of EIA in addressing impacts upon biodiversity. A final version of this guidance will be available in 2006.

## SPECIES SURVEYS

- 5.10 Many individual wildlife species receive statutory protection under a range of legislative provisions<sup>81</sup> and licences may be needed when they are affected by development. The development control process plays a critical part in ensuring that the statutory protection of species is applied and the Circular sets this out in detail. PPS9 also requires that other species identified as requiring conservation action as species of principal importance for the conservation of biodiversity in England<sup>82</sup> are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations.
- 5.11 Prior surveys are particularly critical where there is a reasonable likelihood of legally protected or priority BAP species being present, and at risk of impact, and where their presence has not been adequately quantified.
- 5.12 Advance survey information on the presence of protected species, linked to any required mitigation or compensatory measures, will help avoid infringements of national and international law, help satisfy the legal requirements of both the EIA and Habitats Regulations and form the basis of a subsequent licence application, if required.

---

79 <http://www.surreycc.gov.uk>

80 <http://www.ieem.net>

81 Certain plant and animal species, including all wild birds, are protected under the Wildlife and Countryside Act 1981. European plant and animal species are protected under the Conservation (Natural Habitats, &c.) Regulations 1994. Some other animals are protected under their own legislation, for example, the Protection of Badgers Act 1992.

82 Lists of habitats and species of principal importance for the conservation of biological diversity in England published by the Secretary of State for Environment, Food and Rural Affairs, in response to Section 74 (2) of the Countryside and Rights of Way Act 2000 are set out in Part III of OPDM/Defra Circular 06/2005, 01/2005.



### Case study: R v Cornwall County Council ex parte Jill Hardy<sup>83</sup>

This case involved a planning application where an EIA was required and an Environmental Statement (ES) was provided. Although it was stated that conditions at the site were those favoured by a protected species (in this case bats) the ES did not include a survey for their presence. Granting planning permission, the planning authority imposed a condition requiring the applicant to carry out a survey to establish whether bats were present prior to commencing the development. The Court held that this information should have been included in the ES, otherwise the authority could not comply with the EIA Regulations (Regulation 3(2)). The planning permission was quashed.

- 5.13 Although the above case is specific to the application of the EIA Directive, it does illustrate a key good practice point. Where a development poses a likely risk of harm to a protected or priority BAP species, local planning authorities should ensure that an adequate survey is carried out in advance of a planning application. The results of this survey should be submitted with the planning application and show how the proposal has taken this evidence into account through its design and any mitigation or compensation proposed.
- 5.14 In consultation with English Nature, local authorities might work out the types and locations of development where there is a high risk of an impact on protected and priority species. Equally, discussion with English Nature or local geologists (e.g. RIGS group) will help establish areas of known geological interest. Many local authorities are already adopting this approach and, for example, targeting proposals such as barn conversions and requiring a professional bat survey prior to a planning application being considered.

### Case study: Peak District National Park Authority's bat protection and mitigation process

Bats are a protected species under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and schedule 2 of the Conservation (Natural Habitats, &c.) Regulations 1994. It is illegal to kill, injure or capture a bat, or to recklessly disturb their roosts. The Peak District National Park Authority has put in place a system to address protected species in the development control process. Using fixed criteria, it requires a prior bat survey for planning applications where there is a high risk of bats being affected. If the required survey is not provided, the application is not registered and the eight-week clock for determining applications does not start ticking until a survey is received. Where a survey reveals the presence of bats, the development can only go ahead when suitable mitigation has been put in place.<sup>84</sup>

<sup>83</sup> 2001 Journal of Planning Law 786

<sup>84</sup> <http://www.peakdistrict.org>

- 5.15 Approaches, such as that applied in the Peak District, ensure that the legal protection afforded to protected species is correctly applied. Providing developers incorporate all necessary survey and mitigation work in advance of submission in accordance with the authority's requirement, there need be no delay in determining planning applications.
- 5.16 Other guidance is available on how to address the issue of protected species in planning and construction. The Construction Industry Research and Information Association (CIRIA)<sup>85</sup> has published *Working with Wildlife* which provides useful good practice advice for the development industry in dealing with protected species. English Nature has produced guidance for the following protected animal species commonly encountered by developers: reptiles<sup>86</sup>, great crested newts<sup>87</sup>, badgers<sup>88</sup>, barn owls<sup>89</sup>, bats<sup>90</sup>, dormouse<sup>91</sup> and water voles<sup>92</sup>.

## CONSULTATION

- 5.17 Measures such as pre-application negotiation and checklists can help make planning applications as complete as possible in terms of adequacy of information. Consultation is then an important means of testing this information and adding value. Where European species or badgers are involved, a licence will ultimately be required if the species or its breeding or resting places will be affected. English Nature can advise on whether the proposed avoidance, mitigation or compensation measures are satisfactory and this advice could form the basis for an agreed method statement to meet both planning and licensing requirements.
- 5.18 Consultation is an important means of obtaining advice and information on specific planning applications. In PPS1 the Government sets out its policy for encouraging closer engagement by the community in the planning process. Public participation in the development control process can yield valuable information regarding impacts on and potential benefits for biodiversity and geological conservation. It provides an opportunity for the community to have an input into the design of the built environment.
- 5.19 English Nature is a statutory consultee on planning applications affecting biodiversity and geological conservation in the circumstances set out in the Circular. However, other bodies such as the County Wildlife Trust, the RSPB, local biodiversity partnerships and RIGS groups, academic experts, nature conservation enthusiasts or recognised local experts may also be consulted where appropriate and may be able to provide helpful advice for specific localities. For example, Local

---

85 <http://www.ciria.org.uk>

86 *Reptiles: Guidelines for Developers*, English Nature 2004, ISBN 1 85716 807 0  
<http://www.english-nature.org.uk/pubs/publication/PDF/ReptilesIft.pdf>

87 <http://www.english-nature.org.uk/pubs/publication/PDF/gcn0801w.pdf>

88 *Badgers and Development*, English Nature 2002, ISBN 1 85716 614 0  
<http://www.english-nature.org.uk/pubs/publication/PDF/badgerdev.pdf>

89 <http://www.barnowltrust.org.uk/Forms/BarnOwlsOnSite.pdf>

90 *Bat Mitigation Guidelines*, English Nature 2004, ISBN 1 85716 781 3  
<http://www.english-nature.org.uk/pubs/publication/PDF/Batmitigationguide2.pdf>

91 *The Dormouse Conservation Handbook*, Bright, P., Morris, P. and Mitchell-Jones, T. (2006) (2nd edition). English Nature, Peterborough

92 *Water Voles: guidance for planners and developers*, English Nature (2001), ISBN 1 85716 458 X

Wildlife Trusts or biodiversity partnerships might be key consultees when a local site is involved. Where a planning application affects a Regionally Important Geological or geomorphological Site (RIGS), as opposed to a geological SSSI, planning authorities should involve and seek advice from the local RIGS group<sup>93</sup>.

- 5.20 Chapter 2 deals with the role of local authority ecologists who, where employed, can provide valuable input to the development control process and should be a 'first port of call' for applications where biodiversity is likely to be a factor.
- 5.21 Local Records Centres, in addition to being a vital repository for information (as covered in Chapter 2), can play a proactive consultee role in the development control process as the following example from Somerset shows.

#### **Case study: The Somerset Environmental Records Centre (SERC)<sup>94</sup>**

Planners and ecologists in Somerset have developed an efficient mechanism for taking biodiversity information into account in the development control process. The Somerset Environmental Records Centre (SERC) has developed an electronically-based consultation system with South Somerset District Council over a four month period to March 2004. This entails the planning authority emailing to SERC weekly batches of all applications received, complete with GIS digitised application boundaries and application type codes. SERC runs this GIS table against all relevant biodiversity information held in GIS (over 2,000 evaluated sites, habitat parcels and 250,000 records of important species) using its bespoke application 'BioPlan'. For developments identified by the software as potentially having an impact on biodiversity, customised data search output is generated. This shows the relevant biodiversity information in the vicinity of the proposed development site. The data searches are then emailed back to the planning authority ecologist and, where relevant, to third parties such as English Nature.

## **CONDITIONS AND OBLIGATIONS**

- 5.22 It would be good practice to address biodiversity and geological conservation as completely as possible in the design of the development approved. However, it will often be necessary to secure further matters through the imposition of conditions and/or obligations.
- 5.23 Local planning authorities, when granting planning permission, will need to consider if conditions need to be applied which address biodiversity or geological conservation concerns. An example might be the imposition of a condition which prevents an approved activity from taking place

<sup>93</sup> see the UKRIGS website: <http://www.ukrigs.org.uk/html/ukrigs.php>

<sup>94</sup> <http://www.somerc.com>

during a specific period of the year, for example where breeding birds might be disturbed. Technical details relating to the agreed approach are best included in a separate method statement with a planning condition requiring this to be implemented. The method statement can subsequently form the basis of a licence application, if required. In some cases ‘Grampian-type’ conditions may be imposed which limit progress on a development until certain measures to protect or secure biodiversity or geological interests are in place. Grampian or negative conditions should not be used when there are no prospects at all of the action in question being performed within the time-limit imposed by the permission.

- 5.24 Sometimes the actions necessary to address biodiversity or geological conservation issues may only be secured through a s106 planning obligation, particularly where enhancement or mitigation measures are to be undertaken outside of the application site. Planning obligations<sup>95</sup> are usually used where financial payments or on-going management are required to address biodiversity or geological conservation concerns. Pre-application negotiation regarding the terms of planning obligations can help reduce subsequent delays in determining the planning application.

## MONITORING AND ENFORCEMENT

- 5.25 Under the Town and Country Planning Act 1990, local planning authorities have a range of enforcement powers to ensure that the terms of planning conditions and obligations are met and also that appropriate action is taken against unauthorised development. It would be good practice for authorities to work closely with English Nature and other nature conservation organisations to ensure statutory planning enforcement where the most expedient course of action is taken to remedy any unauthorised development which is prejudicial or harmful to nature conservation objectives.

## AVOIDING, MITIGATING AND COMPENSATING FOR HARM

- 5.26 In line with PPS9 principles, planning authorities should seek to avoid direct harm to biodiversity and geology recognising that certain natural habitats, such as ancient woodland, cannot be replaced. The following example demonstrates how pre-application negotiation between planners and developers in the development control process helped achieve a development location which avoided harm to biodiversity and conserved irreplaceable natural habitats *in situ* as part of the masterplan design of a housing development.

---

<sup>95</sup> Further information on Planning Obligations, ODPM Circular 05/2005, July 2005.

### Case study: Haydon Meadow, Priory Vale, Swindon

Haydon Meadow is a lowland neutral hay meadow which supports wild flowers, insects and other animals. It was already designated a County Wildlife Site whilst recognising that it formed part of a wider area long earmarked for residential development in the local plan. As part of the Environmental Statement for this section of Swindon's northern expansion, the developers conducted a detailed ecological survey of the meadow. This revealed its deeper importance (meriting later designation as a SSSI) and identified means of safeguarding this through the design of the development.

The SSSI was notified during consultation on a proposal for approximately 5,500 houses to be built in the Haydon area. English Nature worked with the development consortium and Swindon Borough Council to ensure a sustainable future for the SSSI through the development control process by addressing this as part of the design. Local open space was located immediately adjacent to the SSSI to absorb recreational pressures from the surrounding residential development. The developers are promoting Haydon Meadow, and other biodiversity features safeguarded in this development, as valuable assets to this growing community. As part of a section 106 obligation, Wiltshire Wildlife Trust has been funded to provide interpretative leaflets and information boards, collect litter and undertake orchid counts and guided walks for local residents.



Patrick Cashman, English Nature

**Orchid at Haydon Meadow at the Priory Vale development, Swindon**

- 5.27 The key message here is that early negotiations between local authority planners and developers through the development control process can avoid unnecessary harm to biodiversity and bring positive benefits to new housing schemes.
- 5.28 Where harm cannot be avoided then appropriate mitigation may be a means of reducing any adverse impacts. Mitigation could comprise measures carried out on or outside the development site in order to reduce adverse effects on nature conservation interests on the site itself or on adjacent or other land potentially affected.
- 5.29 Compensation relates to all measures designed to help to offset the adverse effects that cannot be further reduced by mitigation. Compensation measures, a final option wherever all mitigation possibilities have been exhausted, will normally involve off-site measures to offset losses within the development site or to offset residual effects on affected wildlife sites. Developments may provide a combination of both mitigation and compensation because the aim is to maximise the effects of mitigation in order to reduce the need for and scale of compensation measures. It is good practice to work on the principle of 'no net loss' of biological and geological diversity, and to aim for a 'net gain' in biological and geological resources as a result of the development proposal. In terms of the application of Regulations 48, 49 and 53 of the Habitats Regulations, compensatory measures have a specific meaning and legal status (see Part I of the Circular).
- 5.30 The following Swindon South Sector example presents a case where some loss of biodiversity was inevitable. Through close co-operation between the developers and the local authority, it was possible to design a development in ways which mitigated and compensated for this loss.

#### Case study: Swindon Southern Development Area

The Swindon Southern Sector involved the allocation of 722 acres of farmland within which to provide 4,000-5,000 homes. A number of protected species were present including great crested newts, water voles, badgers and bats. The habitat management necessary to both mitigate and compensate for the potential harm that this development could cause to these protected species was negotiated and formed part of the overall design. Where necessary, it was guaranteed through a planning obligation and planning conditions. The planning permission provides for:

- the protection of key areas of existing habitat to retain existing protected species on the site, notably great crested newts and water voles;
- the provision of an extensive area of off-site compensation with areas of new habitat and landscaping dedicated to nature conservation;
- the incorporation of new native planting to improve and enhance the diversity of the habitat, especially for protected species;
- the enhancement of several farm holdings under agricultural management plans incorporating 60 ha of new tree planting, 4km of new hedgerow, 50 ha of restored grassland and 35 ponds; and
- the signing of a management plan to secure the ongoing protection and enhancement of both new and existing environmental features and benefits within the site.



- 5.31 These cases demonstrate the value of carrying out ecological surveys and building any mitigation or compensation necessary into the design of the scheme well in advance of the development actually taking place. Where biodiversity interest is discovered during construction, it is usually much more difficult to ‘retrofit’ ecological mitigation or compensation into a design.

## BUILDING IN BIODIVERSITY

- 5.32 PPS9 states that plan policies should promote opportunities for the incorporation of beneficial biodiversity and geological conservation features within the design of development. The design, layout and landscaping of new developments offer enormous opportunities to add to, or enhance, biodiversity or geological conservation. These can range from minor additions to the fabric of buildings, for example to provide nesting spaces for species such as swifts (see below), through to providing major new areas of biodiversity habitat alongside development. One example<sup>96</sup> provides suggestions for accommodating reptiles and amphibians in designed landscapes. The type of measures introduced may be guided by priorities established in local and regional BAPs.
- 5.33 The England Biodiversity Strategy makes specific reference to the need to incorporate more biodiversity elements into buildings and uses the ‘green roofs for black redstarts’ work in London as a case study<sup>97</sup>. Green roof initiatives provide a prominent example of incorporating biodiversity in the design of new buildings. London, for example, has a number of green roofs which have attracted particular attention. The Laban Dance Centre, winner of the Stirling Prize for Architecture 2003, has an aggregate-based roof created for black redstarts from building rubble on site.
- 5.34 Other species, such as bats and swifts, are highly dependent on built structures for survival. Maintenance of existing, and the design of new, buildings can take account of this. Biodiversity can be incorporated into small-scale developments through wildlife-friendly landscaping, installation of sustainable drainage schemes, and features such as green walls, balconies, roofs and nesting and roosting spaces.
- 5.35 At a simple level, nest and roosting boxes can be easily incorporated in or onto existing and new buildings. A wide range of boxes to benefit birds, bats and some invertebrates are available. There are also opportunities for incorporating artificial nesting burrows in the walls and embankments of civil engineering structures to benefit species such as the sand martin and kingfisher.
- 5.36 Development control decisions which embrace biodiversity and geological conservation can be of broad benefit to communities by creating employment through new projects, creating cost effective naturally functioning utilities (such as for flood relief and drainage), enhancing the local economy through tourism and improving local surroundings which enhance quality of life.

---

<sup>96</sup> *Opportunities for Amphibians and Reptiles in the Designed Landscape*, Bray, R & Gent, T (eds.) 1997. English Nature science series No. 30. English Nature, Peterborough.

<sup>97</sup> <http://www.blackredstarts.org.uk/>



- 5.37 Major development, due to its scale and demand on resources, can have both the greatest impact on and provide the greatest benefits to biodiversity and geological conservation. A number of good practice examples, such as Cambourne, are emerging where biodiversity forms an important element of how development is planned and executed.

### Case study: Cambourne

The creation of a new settlement between Cambridge and Bedford which will eventually contain 3,000 new homes shows how biodiversity conservation formed an integral part of the development masterplan. Natural features are being used to enhance the quality of life for existing and future residents. Biodiversity was considered at an early stage of this development, with the developers employing ecologists as part of the design team. The design process involved identifying, protecting and managing all existing valuable habitats (including species-rich woods) as part of a green infrastructure, creating new areas of habitat (including grassland, waterways and lakes) and incorporating ecological corridors which provide pedestrian and cycle ways through the site. This good practice example shows how the existing biodiversity (which was relatively limited) was protected and how areas of new wildlife interest can be created. The design is intended to bring nature in Cambourne right up to residents' doorsteps.



Reproduced by kind permission of Cambourne Consortium

- 5.38 The development control process can provide opportunities to contribute to meeting UK and local Biodiversity Action Plan targets, for example, creating new heathland, woodland, grassland or wetland habitats.



Peter Wakely, English Nature

**The London Wetland Centre, at Barnes, provides a successful example of how, through a planning permission for housing, an opportunity was taken to provide a major wetland nature reserve in the heart of London**

- 5.39 The Needingworth Wetland Project in Cambridgeshire referred to below is one such example. Large scale projects have the greatest conservation value in the longer term owing to the scale of ecological units. However, a series of smaller projects can also make a cumulatively significant contribution.

### Mineral and Waste Local Development Documents

- 5.40 Much of the good practice discussed here applies equally to mineral and waste applications. These allow opportunities to contribute substantially to the achievement of targets in LBAPs by way of habitat creation and geological conservation in restoration schemes. Restoration requirements can be linked to the creation of priority habitat to meet UKBAP targets. Mineral planning permissions typically have a long life-span and the active extraction phase can continue for many years. These active phases can be very beneficial for biodiversity and geological conservation. Specific habitats that benefit specialist species can be created in an active quarry and previously unknown or unrecorded geological features can be uncovered. Mineral and Waste Documents should therefore include policies which ensure that biodiversity and geology is conserved and enhanced during any active phases in addition to those relating to restoration schemes.



Andy Hay, rspb-images.com

**The Hanson – RSPB wetland project at Needingworth in Cambridgeshire will, through restoration following sand and gravel extraction, eventually form one of the largest new wetlands in Europe meeting 40% of the UKBAP target for reed bed creation**

## FURTHER DESIGN GUIDANCE FOR BIODIVERSITY

- 5.41 Planners can now refer to a range of design guidance on the integration of biodiversity into the design of development. The Town and Country Planning Association, in the first of a series of publications aimed at the Sustainable Communities Plan, has produced guidance on how to design development so as to incorporate biodiversity at a range of scales from 'doorstep spaces' to regional parks and Community Forests. It includes many UK and foreign case studies<sup>98</sup>.

---

<sup>98</sup> *Biodiversity by Design: a guide for sustainable communities*, TCPA 2004.



### Case study: the Town and Country Planning Association's *Biodiversity by Design*:

In 2004 the Town and Country Planning Association (TCPA) published the first in a series of design guides for the sustainable communities plan explaining how biodiversity can be incorporated within, and be an integral part of, the design process. By reference to examples both here and abroad, the TCPA design guide deals with core design principles for integrating greenspace and biodiversity into development through design at a range of scales. It also considers techniques for analysing the existing green infrastructure upon which to base the design, how to incorporate this into a development master plan, and the design and long-term management of detailed design features.

- 5.42 The London Biodiversity Partnership<sup>99</sup> (through English Nature and the Greater London Authority) has worked with the London Development Agency to produce the *Design for Biodiversity* brochure, launched by the Mayor in February 2004.
- 5.43 CIRIA are also developing a project around buildings for biodiversity to help deliver the technical specification and guidance necessary to install vegetation on buildings for biodiversity, sustainable urban drainage and energy efficiency benefits. The Chartered Institute for Water and Environmental Management (CIWEM) published a *Habitats Guide* in 2004<sup>100</sup> which features a specific chapter on buildings.
- 5.44 The Building Research Establishment Ltd. (BRE)<sup>101</sup> has developed standards which have become widely adopted by the construction industry as a means of reviewing and improving the environmental performance of buildings. Among the criteria used to assess the potential environmental impact of a building are those which consider site ecology. Credits can be achieved for minimising ecological damage, designing positive enhancement of site ecology and protecting existing features. BRE's 'Eco-homes' standards applies the BREEAM standards to dwellings.
- 5.45 Another initiative is CIRIA's *Working with Wildlife* publication<sup>102</sup> which comprises a mixed-media ring-bound resource package giving useful information and good practice guidance to help those involved in the construction industry stay within the law relating to wildlife and understand and implement good practice in protecting wildlife on development and construction projects.

99 <http://www.lbp.org.uk/>

100 *CIWEM Habitats Guide*, Volume 1 ISBN 1 870752 78 3

101 <http://www.bre.co.uk>

102 *Working with Wildlife*. A resource and training pack for the construction industry (C587TP)  
Authors: J Newton, C Williams, B Nicholson, R Venables and others, 2004. ISBN: 0 86017 587 1

## 6. Glossary

**Ancient Woodland** – in England defined as an area which has been wooded continuously since at least 1600 AD. Divided into ancient semi-natural woodland and plantations on ancient woodland sites. Both types of stand are classed as ancient woods.

**Avoidance** – Measures taken to avoid adverse impacts of change, such as locating a development away from areas of ecological interest.

**Baseline information (environmental)** – information about the state of the environment in the absence of any potential effects that may arise from a proposed project or other change.

**Biodiversity (or Biological Diversity)** – the variety of life on earth or in a specified region or area.

**Compensation** – measures to offset or make up for losses caused as a result of development or other change, including residual adverse effects which cannot or may not be entirely mitigated.

**Designated Sites** – collective term for specific sites, capable of being identified on a map, recognised for their nature conservation value which is usually described in a written citation.

**Ecosystem** – a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.

**Enhancement** – measures to increase the quality, quantity, net value or importance of biodiversity or geological interest.

**Environmental carrying capacity** – the amount of development that can be supported in an area without causing long-term environmental damage or the depletion of environmental assets.

**Environmental limit** – the point where environmental carrying capacity is reached and further development or other change may cause long-term environmental harm.

**Fragmentation** – breaking up a habitat, ecosystem or land-use type into smaller parcels resulting in habitat or species isolation and reduced connectivity.

**Geodiversity** – the variety of rocks, fossils, minerals, landforms and soils along with the natural processes that shape the landscape.

**Geological conservation** – the element of nature conservation relating to the policy and practice of conserving both geological and geomorphological features.

**Geology** – the physical features of the Earth which enable us to understand its origin, history, structure and composition, and through the fossil record, the evolution of life.

**Geomorphology** – the physical features and natural processes operating on the surface of the Earth which enable us to understand landforms and their origin.

**Green infrastructure** – the sub-regional network of protected sites, nature reserves, greenspaces and greenway linkages. The linkages include river corridors and flood plains, migration routes and features of the landscape which are important as wildlife corridors. Green infrastructure should provide for multi-functional uses i.e. wildlife, recreational and cultural experience, as well as delivering ecological services such as flood protection and microclimate control. It should also operate at all spatial scales from urban centres through to open countryside.

**Green roof** – the term to describe both intensive ornamental roof gardens and extensive roofs with more naturalistic plantings or self-established vegetation which can provide a habitat for biodiversity.

**Greenspace** – generally used to refer to public open space which is normally vegetated rather than hard surfaced. Greenspace occurs in a number of forms including urban parks and gardens and country parks, and has value and potential for biodiversity and geological conservation.

**Habitat** – the place in which a particular plant or animal lives. Often used in the wider sense referring to major assemblages of plants and animals found together. The place or type of site where an organism or population naturally occurs.

***In situ* conservation** – the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species within their existing natural surroundings.

**Integrity (of ecosystem)** – the degree to which all ecosystem elements (species, habitats and natural processes) are intact and functioning in ways that ensure sustainability and long-term adaptation to changing environmental conditions and human uses.

**Irreplaceable natural habitat** – a habitat such as ancient woodland, that once destroyed, cannot be replaced.

**Mitigation** – measures undertaken to limit or reduce adverse effects resulting from development or other change taking place including modifications, deletions or additions to the design of the development, adaptation of methods or timing or adjustments in the nature, scale or location of the project.

**Nature conservation** – the protection, preservation, management or enhancement and the improvement of understanding and appreciation of flora, fauna and geological and geomorphological features.

**Restoration** – the re-establishment of a damaged or degraded system or habitat to a close approximation of its pre-degraded condition.

**Translocation** – the movement of a species, individuals of a species, or the whole or part of a habitat from one area to another. In the planning context this would usually be in connection with moving species or habitats to a new location to make way for development. It may also include the introduction of a species or habitat from elsewhere as part of a development.

**Veteran trees** – trees of interest biologically, aesthetically or culturally by virtue of their age, trees in an ancient state or those that are old relative to others of the same species.



ISBN 13-978 185 112 852 8

ISBN 10-185 112 8522

**Price: £18.00**

ISBN 1-851128-52-2

