

# 17. Ecology

## 17.1 Background information on the current situation in Leeds

17.2 The enhancement of biodiversity through the successful integration of existing and newly created wildlife habitats into development schemes is an important part of creating places where people want to live. As well as being important in its own right biodiversity also provides essential ecosystem services including the supply of food, water and timber; the regulation of flooding and climate change; and the provision of recreational and cultural benefits (see Figure 17.1).

17.3 The Leeds district has a varied landscape ranging from the uplands in the north west to the limestone ridge in the east as well as two major river valleys. This supports a rich variety of wildlife and habitats. The Leeds Biodiversity Action Plan identifies four priority habitats and six priority species with further habitats and species to be added with future reviews (Leeds City Council 2001).

17.4 The Leeds LDF includes policies which seek to maintain and enhance biodiversity and to protect designated nature conservation sites. The LDF will also identify the Leeds Habitat Network which will include areas for habitat creation, restoration and enhancement.

17.5 The Biodiversity and Waterfront Development SPD (Leeds City Council 2006a) provides detailed guidance for development adjacent to rivers, canals and watercourses.

17.6 The CSH includes five issues in this category:



Wyke Beck Valley: an important green corridor

Ecological value of the site	To encourage development on land that already has limited value to wildlife, and discourage the development of ecologically valuable sites
Ecological enhancement	To enhance the ecological value of the site
Protection of ecological features	To protect existing ecological features from substantial damage during the clearing of the site and the completion of construction works
Change in ecological value of site	To reward steps taken to minimise reductions and encourage an improvement in ecological value
Building footprint	To promote the most efficient use of a building's footprint by ensuring that land and material use is optimised across the development



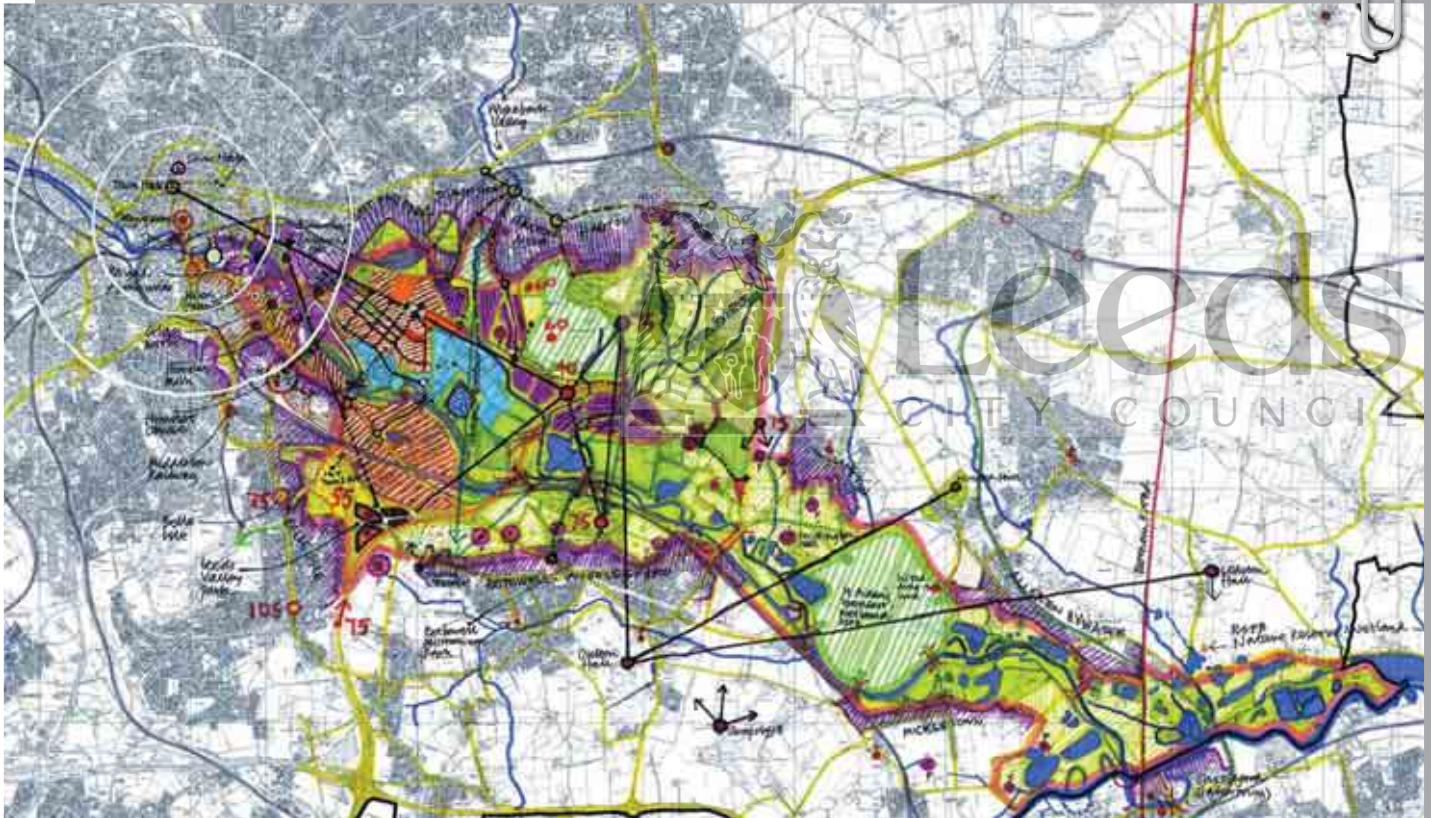


Grassland and scrub on disused railway land



Green viaduct - naturally re-vegetated viaductages

- ✓ Including trees in areas of hard landscape;
  - ✓ Habitat creation and restoration including hedgerows, meadows and wetlands;
  - ✓ The creation of habitat links and corridors, including links with off site habitats;
  - ✓ The incorporation of ponds, ditches, reedbeds and other wetland features into sustainable drainage schemes;
  - ✓ The re-opening of culverted watercourses and the restoration of canalised watercourses;
  - ✓ Incorporating vegetation, such as hedges, as part of boundary treatments where appropriate.
- 17.11 **Protection of ecological features**
- 17.12 Measures that protect ecological features include:
  - ✓ Habitats and features to be retained should be shown on site layout plans and any mitigation required for protected or important species must be agreed before work starts on site;
  - ✓ All areas of vegetation and landscape features to be retained should be protected during all site clearance and construction work by fencing to the standard specified in BS5837;
- ✓ Wetland features should be protected from run off from the site (oil, diesel spills etc) and any adverse changes in hydrology;
  - ✓ Buildings and services should avoid damaging tree roots;
  - ✓ The impact of services and site drainage should be considered;
  - ✓ All external lighting should be designed to minimise light spill and should not be directed towards any bat roost exits or any habitats or linear features used by bats or other sensitive nocturnal species.
- 17.13 **Change in ecological value**
- 17.14 All development should seek to have a net positive impact on biodiversity.
- 17.15 **A Biodiversity Management Plan** will be required which should include all protection, mitigation and enhancement measures to be implemented as part of the development. Submission and implementation of the plan will usually be required by a condition on the planning permission.
- 17.16 **Building footprint** ✓
- 17.17 Compact developments which reduce land take will be encouraged particularly where this allows space for habitat retention or creation.
- 17.18 All development should seek to minimise overall consumption, especially the consumption of non-renewable resources.
- 17.19 **Further information**
  - Green Roofs: their existing status and potential for conserving biodiversity in urban areas. English Nature: <http://livingroofs.org/>
  - ODPM / DEFRA / English Nature Planning for Biodiversity and Geological Conservation: A Guide to Good Practice. March 2006: [www.communities.gov.uk](http://www.communities.gov.uk)
  - Biodiversity by Design, TCPA: [www.tcpa.org.uk/biodiversitybydesign.htm](http://www.tcpa.org.uk/biodiversitybydesign.htm)
  - Planning for Biodiversity. Good practice guide. RTPi, 1999: [www.rtpi.org.uk/item/504/23/5/3](http://www.rtpi.org.uk/item/504/23/5/3)
  - Working with wildlife site guide, CIRIA (2005): [www.ciria.co.uk/theme\\_environmental.htm](http://www.ciria.co.uk/theme_environmental.htm)
  - Design for Biodiversity, LDA: <http://www.d4b.org.uk/policiesAndGuidance/index.asp>



### CASE STUDY: Aire Valley Leeds

The Vision for Aire Valley Leeds has been developed in partnership with a range of stakeholders and takes forward the regeneration principles that Leeds has been exploring for many years.

A new mixed use community at the edge of the city centre will re-create city living for the ecological age via the Urban Eco Settlement (UES), including the creation of a new park, green infrastructure, social infrastructure

and sustainable homes in Aire Valley and around the rim of the city. The proposals for Aire Valley Leeds Urban Eco-Settlement are about demonstrating new approaches to 'remake places', working with public and private sector partners to establish new innovative solutions, in addition to the environmental aspects of new development.

Aire Valley Futures represents the contextual and detailed consideration of how AireValley Leeds should be

implemented utilising sustainable principles, via the adaptation and supplementation of existing criteria present in such as PPS1 (Eco Towns).

This work aims to ensure that Aire Valley and its UES represents an innovative and exemplar, trailblazing approach to sustainable regeneration. It will set out a staged approach to the delivery and realisation of BREEAM excellent and code level 4, 5 and 6 of sustainable homes.

- Biodiversity and development guidance for Hampshire: recommendations for integrating biodiversity into local development Frameworks. Hampshire Biodiversity Partnership, 2005: [www.hampshirebiodiversity.org.uk](http://www.hampshirebiodiversity.org.uk)
- Biodiversity and Geological Conservation, ODPM Circular 06/2005: [www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity](http://www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity)
- ODPM Planning Policy Statement (PPS) 9 Biodiversity and Geological Conservation

- Association of Local Government Ecologists & British Standards. PAS2010 Planning to halt the loss of biodiversity. August 2006
- Guidance by Bat Conservation Trust and Institute of Lighting Engineers: Bats and Lighting in the UK (2008) available from [www.bats.org.uk](http://www.bats.org.uk)
- For information on green roofs: [www.thegreenroofcentre.co.uk](http://www.thegreenroofcentre.co.uk) or <http://livingroofs.org/>
- For information on Biodiversity Benchmark: [www.wildlifetrusts.org/biodiversitybenchmark](http://www.wildlifetrusts.org/biodiversitybenchmark)

*“Just as importantly, trees are valuable habitats for a wide range of creatures both in rural and urban settings, increasing biodiversity and bringing wildlife into built-up areas. And it is not necessary to plant only British natives for wildlife, for many exotic species are beneficial, too.”*

**Tony Kirkham,**  
Head of the Arboretum,  
Royal Botanic Gardens, Kew