



Environmental Networks

September 2013

Guidance Note 11: Environmental Networks

1. Introduction

- 1.1 This guidance note is one in a series of documents which explain the approach and procedures to be followed in order to ensure sufficient survey, protection, mitigation and enhancement is put forward, where the natural environment may be affected by proposed development. All these details must be addressed and submitted with the planning application, or a planning decision cannot be made.
- 1.2 Environmental Networks are key to the future health of the Natural Environment and must be protected and developed to maintain the services they provide. These services underpin economic growth and are essential for thriving communities as well as supporting diverse wildlife and habitats. Sustainable development must take the Shropshire Environmental Network into account, and recognise the opportunities it provides (landscape, public access, SUDS, wildlife mitigation and enhancement etc.) from the design stage onwards, leading to more attractive, productive and healthy environments in which people can live and work.
- 1.3 This interim guidance note should be read in conjunction with other guidance notes in the series. All the currently available titles can be found at <http://shropshire.gov.uk/environment/biodiversity-and-ecology/biodiversity-and-planning/>.

2. What is an Environmental Network?

- 2.1 **Environmental Networks are multifunctional corridors of green landscape, centred around a core of existing high quality Environmental Assets (landscape, biodiversity and heritage), which support essential ecosystem services, provide potential for adaptation to climate change and give us attractive, locally distinctive places in which to live, work and enjoy life.**
- 2.2 The Shropshire Environmental Network (SEN) consists of the Shropshire Ecological Network (SEcN, areas of high biodiversity value connected by corridors and stepping stones of semi-natural habitat), together with visible and accessible historic environment assets and public access routes (national and local long distance trails and selected public sites and rights of way).
- 2.3 Green Infrastructure should be considered as part of the Environmental Network. However, some elements of green infrastructure will not provide the connectivity or habitat quality required by the ecological part of the network.

- 2.4 The SEcN has been mapped and can be found at <http://shropshire.gov.uk/environment/biodiversity-and-ecology/biodiversity-and-planning/>. The historic environment and access layers are being assessed and will be added shortly. Ecological habitats change with time and management, and we are improving our knowledge of them steadily, in partnership with statutory agencies and the many local biodiversity groups and individuals active in Shropshire. In view of this, the map will be reviewed regularly and the website should be consulted for the most recent version.
- 2.5 Boundaries on the Environmental Network are indicative only; local micro-conditions and habitat changes will need to be taken into account, which may locally change the configuration of the Network.** Detailed consideration of opportunities and positive or negative impacts on the functionality of the network for a particular development will also be informed by any specific ecological or historic environment assessments accompanying the planning application. If clarification is needed, advice should be sought from Shropshire Council's Natural Environment Team or Historic Environment Team.

Why is Shropshire's Environmental Network important?

- 3.1 The natural environment provides us all with essential services, such as clean water, food production, crop pollination, flood alleviation, raw materials, urban cooling and recreation. Shropshire's beautiful rural landscape is arguably its greatest asset. The Shropshire Visitor Survey in 2007 (commissioned by Shropshire Tourism Research Unit) showed that 'countryside and scenery' was by far the 'most liked aspect about Shropshire', with over 50% of its visitors citing countryside as the main reason for choosing Shropshire. Tourism is the second most important economic activity in the county.
- 3.2 The value people place on the natural environment is shown directly by the fact that houses with views of, or close access to, countryside sell for higher prices. The natural and historic environment has also been shown to be a key consideration in attracting businesses into an area. Green surroundings to work places provide better working environments, help to attract skilled staff and encourage people to take more exercise.

Why must we protect, enhance and reconnect our Environmental Network?

- 4.1 A recent study, the National Ecosystem Assessment shows that over 30% of the services provided by our natural environment are in decline. The Lawton

Report, *Making Space for Nature* 2010, found that nature in England is highly fragmented and unable to respond effectively to new pressures such as climate and demographic change.

- 4.2 *'We are choosing to lose the valuable benefits of a healthy natural environment on a massive scale. A vibrant natural environment is not a luxury for the good times – it is a necessity for economic recovery and sustainable growth for the long term.'*

Caroline Spelman, Sec. of State for Environment, Food and Rural Affairs. An invitation to shape the Nature of England Defra Discussion Document Summary 2010

Planning policy and Shropshire's Environmental Network

- 5.1 The new **National Planning Policy Framework** was published in March 2012. Several paragraphs refer to Environmental Networks (either as local ecological networks or green infrastructure), but the following is a key paragraph :

117 - To minimise impacts on biodiversity and geodiversity, planning policies should:

- plan for biodiversity at a landscape-scale across local authority boundaries;
- identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation;
- promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan;
- aim to prevent harm to geological conservation interests; and
- where Nature Improvement Areas are identified in Local Plans, consider specifying the types of development that may be appropriate in these Areas.

- 5.2 Within **Shropshire's Local Development Plan**, Policy 'CS17: Environmental Networks' in the Shropshire Core Strategy applies. Under this policy the development must:

- Protect and enhance the diversity, high quality and local character of Shropshire's natural (built and historic) environment,
- Not adversely affect the visual, ecological, heritage or recreational values and functions of environmental assets, their immediate surroundings or their connecting corridors,
- Not create barriers or sever links between dependant sites,
- Secure financial contributions, in accordance with Policy CS8, towards the creation of new, and improvements to existing, environmental sites and

corridors, the removal of barriers between sites, and provision for long term management and maintenance.

- 5.3 The presence of the Environmental Network on or adjacent to development sites provides significant opportunities and benefits to prospective residents and businesses. The network, and enhancements to it, may provide flood alleviation, room for SUDS features, improvements to the landscape and biodiversity, whilst providing an attractive backdrop to development and areas for informal recreation. These opportunities will help developments comply with a wide range of other planning policies.
- 5.4 A selection of key Environmental Network related policies in the NPPF and Shropshire Local Development Framework can be found in Appendix 1.

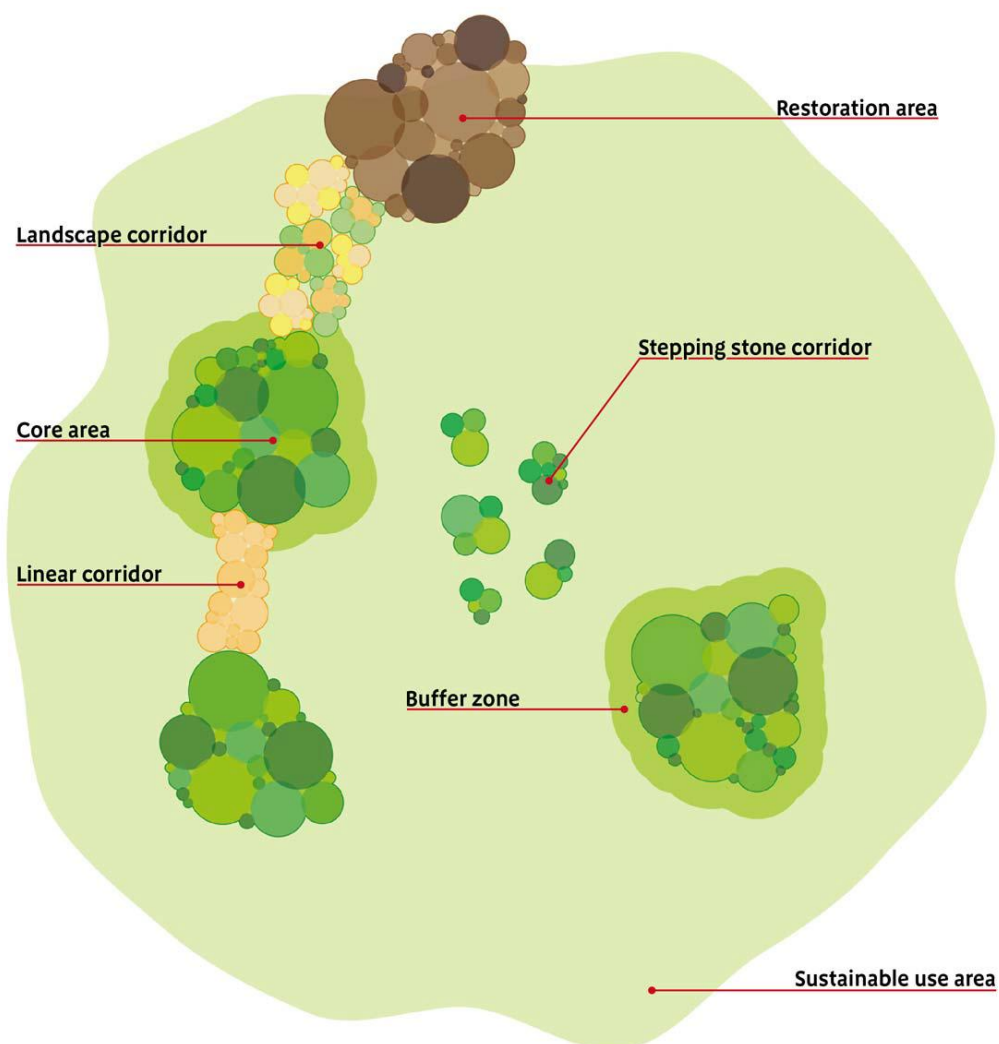
What does the Environmental Network consist of?

- 6.1 The SEN consists of the Shropshire Ecological Network (SEcN) plus historic environment sites and access routes. The Historic Environment and Access layers will be added shortly.
- 6.2 The components of the SEcN are based on those described in '*Making Space for Nature: A review of England's Wildlife Sites and Ecological Network*' (the 'Lawton Review'), September 2010 (see Fig 1):
- **Core Areas** – areas of high nature conservation value which form the heart of the network and provide places within which species can thrive and from which they can disperse to other parts of the network. Shropshire's core areas are shown **red** on the Shropshire Environmental Network Map (SEN Map), and include designated wildlife sites, priority habitats including ancient woodlands and areas known to support significant populations of protected or priority species.
 - **Corridors and stepping stones** - provide functional connectivity between core areas, enabling more mobile species to move between them to feed, disperse, migrate or reproduce. These are coloured **pale green** on the SEN Map and are existing areas of natural/semi-natural habitat, either linear such as water courses, wide road verges and disused railway lines, or 'stepping stones' such as lakes, pond clusters or farm woodlands.
 - **Restoration areas** – areas where measures are planned, or could be planned in future, to restore or create new high value areas so that ecological functions and species populations can be restored. These are usually situated to connect, compliment or enhance existing core areas. Potential restoration areas are coloured **brown**.

- **Buffer zones** – surround core areas, restoration areas, ‘stepping stones’ and ecological corridors and protect them from adverse impacts from the wider environment. Buffer zones vary in width depending on the type of site and the habitats it contains, and are coloured **dark-green** on the SEN Map. A list of buffer zone widths can be found in Appendix 2.
- **Sustainable land-use areas** – areas within the wider landscape, focussed on the sustainable use of natural resources and appropriate economic activities, together with the maintenance of ecosystem services. These help to ‘soften the matrix’ outside the network and make it more permeable and less hostile to wildlife, including self-sustaining populations of species that are dependent on, or at least tolerant of, certain forms of agriculture. These areas are coloured **yellow** and consist of Nature Improvement Areas, Priority Areas for (Biodiversity) Action and other landscape-scale areas such as the AONB.

6.3 NB It cannot be assumed that white areas on the map do not have natural or historical value. Where such value is present, or is recognised at a later date, policies MD 12 (SAMDev Plan) and CS17 (Shropshire Core Strategy) may still apply.

Fig 1 The components of ecological networks, from ‘Making Space for Nature: A review of England’s Wildlife Sites and Ecological Network’ (The ‘Lawton Review’) Chaired by Professor Sir John Lawton, 16 September 2010



How do I take the Environmental Network into account as part of a planning application?

- 7.1 Applicants should first check if their proposed development will fall within or adjacent to the Environmental Network as shown on the current Network Map. In a small number of cases, developments at some distance from the Network may still have the potential to impact upon it (e.g. through pollution).
- 7.2 The following should be considered in a planning application affecting the Environmental Network:

- a) If the Network crosses or lies adjacent to the development site, or the development will have a negative impact on the Network despite being at a greater distance, the network must be protected and enhancement measures proposed, appropriate to the local character of the Network and surrounding area.
 - b) Enhancement of the ecology of the network would normally aim to restore or create 'Priority Habitats' with a diverse or characteristic flora of native species. A list of Priority Habitat types can be found in Appendix 3.
 - c) How can enhancements to the Network add value to the development, such as providing more accessible green space for residents or visitors, Sustainable Urban Drainage Schemes, improved visual environment, cooling of public places etc.?
 - d) Without impacting on the ecological functionality of the Network, how could people move along it (walking/cycling/riding) and what other facilities can they access from it? (Not all elements of the SEN will be suitable for public access and some may provide visual access only.)
 - e) How will the development protect and enhance the local character of Shropshire's built and historic environment?
 - f) How will the development contribute to local distinctiveness with regard to landscape and biodiversity?
 - g) If the development is likely to sever or constrict the Environmental Network, and appropriate mitigation or compensation to prevent this is impossible, what alternative site can be found for the development?
- 7.3 Advice on restoring or creating valuable wildlife habitats and improving the quality of existing habitats can be found in **Guidance Note 5: Ecological Avoidance, Mitigation, Compensation and Enhancements** (in preparation).
- 7.4 Applicants are encouraged to seek pre-application advice from the Natural Environment Team, Shropshire Council, at the pre- or early design stage to maximise efficiency through the planning process.
(<http://new.shropshire.gov.uk/planning/applications/get-help-with-an-application/>)

Appendix 1 Planning policy relating to Environmental Networks

- **National Planning Policy Framework 2012 – key paragraphs concerning Ecological Networks:** Paragraphs 9, 109, 114 and 117
- **Shropshire Core Strategy – policy CS17 – Environmental Networks**
- **Site Allocation and Management of Development (SAMDev) Document -** Draft policy areas for biodiversity and geodiversity: MD14 - Protecting and Enhancing Shropshire’s Natural Environment.
- **Natural Environment Supplementary Planning Document (Natural Environment SPD, part of the Shropshire Local Development Framework)**

Appendix 2 - Buffer zones

Biodiversity/Geodiversity Feature	Habitat	Buffer (metres from boundary)
SAC/Ramsar site	All habitats	1000
SAC/Ramsar site	wetland	Water catchment area
SSSI/NNR	wetland	Water catchment area or 500m (whichever is greater)
SSSI/NNR	Other habitats	250m
SSSI/NNR	geological	50m
Ancient woodland		500m
Local Wildlife Site	wetland	500m
Local Wildlife Site	Other habitats	250m
Local Geological Site (RIGS)		50m
LNR		100m
Priority habitats or habitat important for priority species	wetland	500m
Priority habitats or habitat important for priority	Other habitats	250m

species		
---------	--	--

Appendix 3 – Priority Habitat Types (Section 40 list, NERC Act 2006), found in Shropshire.

Broad habitat type	Priority Habitat	Most likely in urban/urban fringe
Arable and horticulture	Arable field margins	Y
Arable and horticulture	Traditional orchards	Y
Boundary	Hedgerows	Y
Freshwater	Eutrophic standing waters	Y
Freshwater	Mesotrophic lakes	N
Freshwater	Ponds	Y
Freshwater	Rivers	Y
Grassland	Lowland calcareous grassland	N
Grassland	Lowland dry acid grassland	Y
Grassland	Lowland meadows	Y
Grassland	Purple moor-grass and rush pastures	N
Heathland	Lowland heathland	N
Heathland	Upland heathland	N
Inland rock	Inland rock outcrop and scree habitats	Y
Inland rock	Open mosaic habitats on previously developed land	Y
Wetland	Blanket bog	N
Wetland	Coastal and floodplain grazing marsh	Y
Wetland	Lowland fens	Y
Wetland	Lowland raised bog	
Wetland	Reedbeds	Y

Wetland	Upland flushes, fens and swamps.	N
Woodland	Lowland mixed deciduous woodland	Y
Woodland	Upland oakwood	N
Woodland	Wet woodland	Y
Woodland	Wood-pasture and parkland	Y

Appendix 4 – Further information

- 1 *Making Space for Nature: A review of England's Wildlife Sites and Ecological Network* (The 'Lawton Review') Chaired by Professor Sir John Lawton, 16 September 2010

- 2 *An invitation to shape the Nature of England*
Defra Discussion Document Summary 2010