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## Appendix 1: Priority Habitat Summaries and registers

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The 19 Habitat Action Plans set out in earlier versions of the Leicester, Leicestershire and Rutland Biodiversity Action Plan have been retained in 'Space for Wildlife' as priorities for conservation and restoration. This document contains a summary for each:

- **Action Plan objectives**
- **Introduction** – a brief description and rationale for being a conservation priority
- **Current extent** – an estimate, if known, and summary of lists and inventories of the habitat
- **Species associated with the habitat**
- **Local Wildlife Site criteria** – the relationship to these, and a summary of the thresholds/indicators needed to meet the set of criteria
- **Most important factors affecting the habitat** – mainly threats
- **Opportunities** – brief notes on enhancement, conservation and creation.

The main changes in this revised plan are the additional sections on Current extent, Relationship to LWS criteria, and Opportunities.

Some habitats also have a Register of known locations for the habitat, and a distribution map.

### Sources of information

Whenever possible, the habitat action plans are accompanied by draft site lists or habitat inventories, estimates of area/number of sites, and distribution maps.

It has proved to be difficult to produce definitive inventories, and all those produced should be regarded as work in progress. Issues are:

- The age of the data used to compile the inventory – some are based on data that is now over 20 years old;
- The shortage of recent habitat survey data across the LBAP area, meaning that none of the Inventories are comprehensive;
- Lack of ground-truthing – most inventories are desk-based;
- Lack of access to some privately-owned sites (e.g. parkland sites);
- The difficulty of relating some existing datasets to local BAP standards and LWS criteria.

### Local Wildlife Sites register

Since the first local BAP was published, in 1998, criteria for designating Local Wildlife Sites (LWS) in Leicester, Leicestershire and Rutland have become established. Originally they were known as 'SINCs', or 'Sites of Importance for Nature Conservation', and the terms are interchangeable.

The *Guidelines for the selection of Local Wildlife Sites in Leicester, Leicestershire and Rutland, revised 2011 (4<sup>th</sup> edition)* has been referred to throughout. Meeting LWS criteria for designation is synonymous with being a local BAP habitat. The spatial database of LWS and candidate LWS is now the main source of information on habitats in Leicester, Leicestershire and Rutland, and it has been used as the basis for many of the appended draft habitat inventories or lists and distribution maps.

### Previous local BAP Inventories

Since the publication of the first Local BAP in 1998, several habitat inventories have been produced by members of the local BAP Steering Group.

The following have been accepted by the Group:

- **Sphagnum ponds**, Derek Lott & Dennis Ballard, 2000
- **Heath grassland**, Darwyn Sumner, 2005
- **Floodplain wetlands**, Derek Lott, 2005
- **Mature trees**, Sue Timms, 2011
- **Neutral grassland**, Karen Headley & Sue Timms, 2013

In addition, several other draft inventories were produced by LCC, but were never finalised. These, and the consultation comments of the local BAP Group at the time, have been referred to.

### National datasets

National datasets on woodlands and parklands have been used:

- Natural England: Ancient Woodlands (England) <http://www.geostore.com/environment-agency/WebStore?xml=environment-agency/xml/ogcDataDownload.xml>
- Forestry Commission, IFOS National Forest Inventory England 2014, <http://www.forestry.gov.uk/datadownload>
- Harvey *et al.* English Nature Research Report 595: A provisional Inventory of parkland and wood-pasture in the East Midlands, July 2004 <http://publications.naturalengland.org.uk/publication/63018?category=554048>
- Priority Habitat Inventory, Natural England 2014

### SSSI citations and related documentation on Natural England's web-pages

These have been used to identify habitats present on SSSIs.

### Aerial photos

These have been occasionally useful in determining extent of a resource – e.g. reedbeds. The photographs used were flown in late in summer 2011.

### Other sources

LRERC's document archive has been searched for relevant reports and surveys, and when used, these have been referenced in the text.

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## List of Habitats

		<b>Inventory</b>	<b>Map</b>
<b>01</b>	<b>Broad-leaved woodland</b>	(ASNW/PAWS only)	Y
<b>02</b>	<b>Wet woodland</b>	Draft	Y
<b>03</b>	<b>Lowland wood-pasture and parkland</b>	List of historic parklands	Y
<b>04</b>	<b>Hedgerows</b>	N	Spp.-rich only
<b>05</b>	<b>Mature trees</b>	Y (see separate doc)	Y
<b>06</b>	<b>Eutrophic standing water</b>	Draft	Y
<b>07</b>	<b>Mesotrophic lakes</b>	n/a (3 sites only)	N
<b>08</b>	<b>Floodplain wetland</b>	Y (see separate doc)	Y
<b>09</b>	<b>Reedbed</b>	Y	Y
<b>10</b>	<b>Fast-flowing streams</b>	N	N
<b>11</b>	<b><i>Sphagnum</i> ponds</b>	Y	N
<b>12</b>	<b>Springs and flushes</b>	Partial	N
<b>13</b>	<b>Neutral grassland</b>	Y (see separate doc)	Y
<b>14</b>	<b>Heath grasslands</b>	Y	Y
<b>15</b>	<b>Calcareous grassland</b>	Y	Y
<b>16</b>	<b>Roadside verges</b>	N	Y
<b>17</b>	<b>Field margins</b>	N	N
<b>18</b>	<b>Rocks and built structures</b>	N	N
<b>19</b>	<b>Urban habitats</b>	N	N
<b>20</b>	<i>Rivers (in preparation)</i>	<i>n/a</i>	<i>n/a</i>



## ***Local Biodiversity Action Plan***

### **Broad-leaved Woodland**

#### **Action plan objectives**

- **No further loss of Ancient Semi-natural Woodland (ASNW).**
- **Restore plantations on ancient woodland sites (PAWS) to native broadleaved woodlands.**
- **Plant new woodlands of locally native broad-leaved species, avoiding other habitats of conservation value and prioritising sites that are connected to existing woodland.**



#### **Introduction**

At just over 4% cover of mature woodland, Leicestershire and Rutland are particularly poorly wooded. The cover of mature broadleaved woodland is 1.8%, of which just over half is the ecologically important ancient semi-natural woodland (ASNW), which is found on sites that have been continuously wooded since before 1600AD.

Between 1930 and 1985 11% of ASNW in Leicestershire and Rutland was totally destroyed and 43% damaged by replanting. More recently, quarrying has destroyed Buddon Wood, one of the most species rich ancient woodlands in the country. Of the remaining ASNW, over 50% is less than 10ha in size, indicating how severely fragmented this resource has become.

## Current extent

The severe losses in ancient woodland that were a feature of the last century have largely ceased, and the overall resource of Ancient Semi-Natural Woodland (ASNW) is stable, at 1790 hectares. In addition, there are 900 hectares of Planted Ancient Woodland Sites (PAWS) which are likely to support species of plants and invertebrate associated with ancient woodlands. Most of these woodlands are concentrated in the Leighfield Forest, in north Rutland and in Charnwood Forest.

Mature plantation woodland is more abundant, although often scattered in small coverts and pheasant woods. However, when these woodlands are extensive and connected, as on the Belvoir Estate, they are very important woodland resources. Although they have their origins in plantation, many are no longer actively managed for forestry, and are in part secondary or naturally regenerated woodland.

Other naturally regenerated and scrub woodland occurs on post-industrial and former railway land, usually dominated by scrub species such as Sallow (*Salix* spp.) and Hawthorn (*Crataegus monogyna*), and the networks of disused railway lines are important local wooded wildlife corridors.

Part of The National Forest is within north-west Leicestershire, centred on Moira. The first trees were planted in 1990, and the National Forest Company was established in 1995. Since the publication of the first Leicester, Leicestershire and Rutland BAP in 1998, millions of trees have been and continue to be planted. Tree cover in the National Forest area is now at 19.5%, mostly of native broad-leaved species. Recent Phase 1 habitat surveys carried out by the County Council show that tree cover has also slightly increased in areas outside the National Forest.

The *National Forest Inventory England 2014* lists 15,185 hectares of woodland for Leicester, Leicestershire and Rutland; of this, 9793 hectares are categorised as 'broad-leaved', 769 hectares as 'mixed' and 1119 hectares as 'conifer'. An additional 2473 hectares are classified as 'young trees' with no distinction between conifer and broadleaved; it can be assumed that these have been planted since the first Leicester, Leicestershire and Rutland BAP in 1998.

### Sources of data:

Natural England *Ancient Woodlands (England)* <http://www.geostore.com/environment-agency/WebStore?xml=environment-agency/xml/ogcDataDownload.xml> Downloaded 30/12/2015

The National Forest : [http://www.nationalforest.org/about\\_us/about\\_us.php](http://www.nationalforest.org/about_us/about_us.php) 30/12/2015

Forestry Commission, IFOS *National Forest Inventory England 2014*, <http://www.forestry.gov.uk/datadownload> Downloaded 30/12/2015

## Some characteristic species

Broadleaved woodland in Leicestershire and Rutland contains great diversity of different plant communities. Bluebells (*Hyacinthoides non-scripta*) are widespread but thrive best on the lighter soils. On heavy soils Ash (*Fraxinus excelsior*) and Field Maple (*Acer campestre*) are characteristic. On more acid sites Pedunculate Oak (*Quercus robur*), Hazel (*Corylus avellana*) and brambles (*Rubus* spp) are common. Rare species include Small-leaved Lime (*Tilia cordata*), found in Buddon, Owston and Swithland and east Rutland woods, and Sessile Oak (*Quercus petraea*) confined to Charnwood Forest.

Other characteristic species include birds such as Nuthatch (*Sitta europaea*) and Greater Spotted

Woodpecker (*Dendrocopos major*); badgers (*Meles meles*); and Daubenton's, Whiskered and Noctule bats. Butterflies and moths associated with this habitat are Purple and White-letter Hairstreak, White Admiral, Square-spotted Clay and Concolorous.

## Local Wildlife Site criteria

Woodlands can be designated as Local Wildlife Sites under the following criteria:

Description	Size threshold
Included in Leicestershire Inventory of Ancient Woodland	None
With at least 4 species from Ancient Woodland Indicator list [...]	≥2ha
Naturally regenerated	≥ 5 ha
Dominated by willow and/or alder with the water table seasonally near or above the surface	≥ 0.25 ha
Contains colonies of <i>Hyacinthoides non-scripta</i> (native bluebells) ≥ 500m <sup>2</sup>	≥2ha

Woodlands and scrub can also be included in LWS for other habitats, as a complement to the main designated habitat.

Note that Wet Woodland is a separate Action Plan.

## Most important factors affecting the habitat

- Maturing conifer plantations on ancient woodland sites (PAWS) shading out native plants and altering soil conditions.
- Intensive agricultural activities on adjacent land causing impoverishment of woodland flora through eutrophication and spray drift, particularly on smaller sites.
- Habitat fragmentation.
- Lack of management causing loss of shade-intolerant species, especially from rides.
- Built development sited too close to existing woodlands.

## Opportunities

- Planting, improvement and management of existing woodlands through Countryside Stewardship (NB – this has now replaced the Forestry Commission's *Woodland Grant Schemes*) or The National Forest Woodland Creation grants.

Countryside Stewardship <https://www.gov.uk/government/publications/guide-to-countryside-stewardship-woodland-capital-grants-2015/guide-to-countryside-stewardship-woodland-capital-grants-2015#choose-options>

National Forest: Changing Landscapes Scheme <http://www.nationalforest.org/document/creatingwoodland/>

- Natural regeneration (or planting with native species of appropriate local provenance) on mineral and waste restoration sites, as long as this does not damage existing habitats or compromise regeneration or restoration of other target BAP habitats.
- Planting new woodlands as planning condition or agreement associated with development proposals, and ensuring existing woodlands are appropriately buffered and protected from the impacts of nearby development.

*Ancient Woodlands***Ancient Woodlands in Leicestershire And Rutland***Source: Inventory of Ancient Woodland, Natural England (2015)*

ASNW = Ancient Semi-Natural Woodland

PAWS = Planted Ancient Woodland Site

<b>Woodland name</b>	<b>District</b>	<b>Status</b>	<b>Area (ha)</b>	<b>Grid ref</b>
Aston Firs	Blaby	ASNW	25.89	SP455939
Freeholt Wood	Blaby	ASNW	4.42	SP460940
Barnby Wood	Charn	ASNW	3.08	SK494115
Benscliffe Wood	Charn	PAWS	50.97	SK518123
Black A Moors Spinney	Charn	ASNW	3.8	SK555228
Blackbrook Spinney	Charn	ASNW	2.35	SK459188
Blakeshay/Sandhills Wood	Charn	ASNW/PAWS	40.9	SK517108
Brazil Wood	Charn	ASNW	2.38	SK558136
Buddon/Rowhele Wood	Charn	ASNW	33.5	SK561152
Burleigh Wood	Charn	ASNW	8.45	SK507176
Bushy Field Wood	Charn	ASNW	5.82	SK498111
Coalbourn Wood	Charn	PAWS	9.69	SK487121
Cocklow Wood	Charn	ASNW	0.65	SK570150
Copt Oak Wood	Charn	ASNW	6.57	SK485130
Cover Cloud	Charn	ASNW	8.23	SK498103
Crow Wood	Charn	PAWS	4.24	SK561125
Hallgate Hill Spinney	Charn	PAWS	9.12	SK536115
Holywell Wood	Charn	ASNW	6.68	SK507182
Hookhill Wood	Charn	ASNW/PAWS	8.87	SK455191
Johns Lee Wood	Charn	ASNW/PAWS	11.64	SK506105
Mucklin Wood	Charn	PAWS	9.25	SK538163
Nowell Spring Wood	Charn	PAWS	3.77	SK502120
Outwood	Charn	ASNW/PAWS	67.45	SK517156
Poultney Wood	Charn	PAWS	11.99	SK493130
Sheet Hedges Wood	Charn	ASNW	21.62	SK529087
Stinking Wood/New Plantation	Charn	PAWS	8.37	SK500108
Stoneywell Wood	Charn	ASNW	14.76	SK498119
Swithland Wood	Charn	ASNW	61.03	SK539123
Ulverscroft Wood	Charn	PAWS	10.2	SK491111
White Horse Wood	Charn	ASNW	9.29	SK468184
Crow Wood	Harb	ASNW	3.12	SK757028
Laughton Hills	Harb	ASNW	3.03	SP665878
Allexton Wood	Harb	ASNW	25.83	SP821994
Bolt Wood	Harb	ASNW	26.9	SP826969
Brook Spinney	Harb	ASNW	1.84	SP726974
Browns/Hoothill Woods	Harb	ASNW/PAWS	9.76	SK760023
Glooston Wood	Harb	ASNW	9.44	SP754967
Great Merrible Wood/Holly Oaks Wood	Harb	ASNW	15.66	SP836963
Great Spinney	Harb	ASNW	2.01	SP829971
Gumley Wood	Harb	PAWS	11.4	SP681903
Hallaton Wood	Harb	ASNW	2.65	SP765977
Hardwick Wood	Harb	ASNW	3.26	SP722978
Keythorpe Wood	Harb	ASNW	5.28	SP760985
Launde Big Wood	Harb	ASNW	41.16	SK786037
Launde Park Wood	Harb	ASNW/PAWS	54.4	SK803035
Little Merrible Wood	Harb	ASNW	3.46	SP831966



Little Owston Wood	Harb	ASNW/PAWS	140.85	SK783060
Loddington Reddish	Harb	ASNW/PAWS	60.01	SK771020
Noseley Wood	Harb	ASNW/PAWS	6.15	SP733980
Park Wood	Harb	ASNW	22.04	SP826976
Priest Hill	Harb	ASNW	2.34	SK760029
Rolleston Wood	Harb	ASNW	5.78	SP736996
Shangton Holt	Harb	ASNW	11.32	SP715979
Shawell Wood	Harb	ASNW	12.03	SP554819
Skeffington/Tilton Woods	Harb	ASNW/PAWS	43.95	SK760035
Stonton Wood	Harb	ASNW	13.06	SP740962
Ambion Wood	H&B	ASNW	8.15	SP401997
Burbage Wood	H&B	ASNW	18.47	SP449941
Fox Covert	H&B	ASNW	4.39	SK438016
Gopsall Wood	H&B	ASNW	20.72	SK338064
Great Wood	H&B	ASNW	10.96	SK488073
Groby Pool Wood	H&B	ASNW	2.7	SK519083
Kirkby Spinney	H&B	ASNW	2.53	SP441998
Lady Hay Wood	H&B	ASNW	7.46	SK516084
Lawn/Old Woods	H&B	ASNW/PAWS	90.1	SK507085
Lindridge Wood	H&B	ASNW	1.5	SK472042
Mallory Park Wood	H&B	ASNW	1.04	SP447998
Martinshaw Wood (E)	H&B	PAWS	76.78	SK510072
Martinshaw Wood (W)	H&B	PAWS	25.84	SK505067
Nailstone Wiggs	H&B	ASNW	0.77	SK424085
Old Covert	H&B	PAWS	4.14	SK410020
Orton Wood	H&B	ASNW	8.84	SK328050
Ratby Burroughs	H&B	ASNW	6.79	SK494063
Sheepy Wood (Burbage Common)	H&B	ASNW	12.77	SP447947
Sheepy Wood (Twycross)	H&B	PAWS	6.03	SK330043
Spring Wood	H&B	PAWS	7.15	SK417017
Meynells Gorse	Leic	ASNW	3.62	SK542036
Cold Overton Park Wood	Melt	ASNW	16.58	SK821086
Freeby Wood	Melt	ASNW	15.11	SK801222
Lady Wood	Melt	ASNW	8.97	SK815079
Old Dalby Wood	Melt	ASNW	10.11	SK682228
Stonepit Spinney	Melt	ASNW	3.49	SK705237
Swallow Hole Covert	Melt	ASNW	4.68	SK842277
Tampions Coppice	Melt	ASNW	2.48	SK808062
Bardon Hill Wood	NWL	ASNW/PAWS	34.09	SK460131
Birch Coppice	NWL	PAWS	7.15	SK392186
Black Ditches	NWL	ASNW	3.33	SK368193
Breedon Cloud Wood	NWL	ASNW	31.84	SK416213
Burrow Wood	NWL	ASNW	10.78	SK476145
Castle Donington Racetrack Wood	NWL	ASNW	0.63	SK426260
Cat Hill Wood	NWL	ASNW	3.69	SK474153
Coppice Wood	NWL	ASNW	2.4	SK425263
Drybrook Wood	NWL	ASNW/PAWS	13.22	SK455165
Grace Dieu Wood	NWL	ASNW/PAWS	24.27	SK431173
Holly Hayes Wood	NWL	ASNW	15.2	SK443155
Lount Wood	NWL	ASNW	13.57	SK380188
Normanton Wood	NWL	ASNW	3.13	SK392137
Oakley Wood	NWL	ASNW	46.75	SK484216
Pasture/Asplin Woods	NWL	ASNW/PAWS	44.6	SK424211
Piper Wood	NWL	ASNW/PAWS	25.28	SK478213

Piper Wood remnant	NWL	ASNW	2.41	SK478221
Rough Park	NWL	PAWS	33.39	SK392181
Smooth Coppice	NWL	PAWS	4.09	SK427237
Spring Wood	NWL	ASNW	46.23	SK381225
The Coppice (Heath End)	NWL	ASNW	4.16	SK368207
Willesley Wood	NWL	ASNW	2.67	SK332154
Armley Wood	Rutl	ASNW	6.78	SK913077
Ash Plantation	Rutl	PAWS	1.32	SK922129
Ayston Spinney	Rutl	ASNW	2.93	SK851015
Barnsdale Wood	Rutl	ASNW/PAWS	23.54	SK906087
Bloody Oaks	Rutl	ASNW	11.52	SK970113
Boundary Wood	Rutl	PAWS	1.5	SK845005
Burley Bushes	Rutl	PAWS	17.03	SK902101
Burley/Rushpit Woods	Rutl	ASNW/PAWS	156.21	SK893092
Castledike Wood	Rutl	ASNW	49.88	SK005144
Clipsham Park Wood	Rutl	ASNW/PAWS	58.03	SK976166
Cottesmore Wood	Rutl	ASNW/PAWS	30.62	SK914128
East Wood	Rutl	ASNW	6.65	SK004116
Empingham Old Wood	Rutl	PAWS	2.8	SK965105
Greetham Wood Far	Rutl	ASNW	34.05	SK953144
Greetham Wood Near	Rutl	ASNW	53.26	SK945146
Hambleton Wood	Rutl	ASNW	13.09	SK909068
Hardwick Wood	Rutl	ASNW	4.54	SK968127
Lane Wood	Rutl	ASNW	4.67	SK962108
Little Haw Wood	Rutl	ASNW	21.09	SK963175
Lodge Wood	Rutl	ASNW/PAWS	6.43	SK959104
Old Wood	Rutl	ASNW	12.15	SK962101
Osbonall Wood	Rutl	PAWS	16.94	SK961149
Pickworth Great Wood	Rutl	ASNW	94.11	SK982147
Priors Coppice	Rutl	ASNW	27.4	SK831051
Stoke Great Wood	Rutl	PAWS	32.2	SP844976
Stretton Wood	Rutl	ASNW/PAWS	30.9	SK956169
The Coppice	Rutl	ASNW	4.75	SK970132
Tickencote Laund	Rutl	PAWS	10.54	SK980102
Tolethorpe Oaks	Rutl	ASNW/PAWS	9.27	SK019121
Tunneley Wood	Rutl	ASNW/PAWS	35.2	SK933120
Turnpole Wood	Rutl	ASNW/PAWS	23.35	SK005128
Wardley Wood	Rutl	ASNW/PAWS	67.11	SP836993
Westland Wood	Rutl	ASNW/PAWS	21.57	SK921123
Woodhead	Rutl	ASNW/PAWS	24.4	SK996118
Woolfox Wood	Rutl	ASNW	16.48	SK958139

Compiled by LRERC, December 2016

# Leicestershire & Rutland Environmental Records Centre

Leicestershire County Council

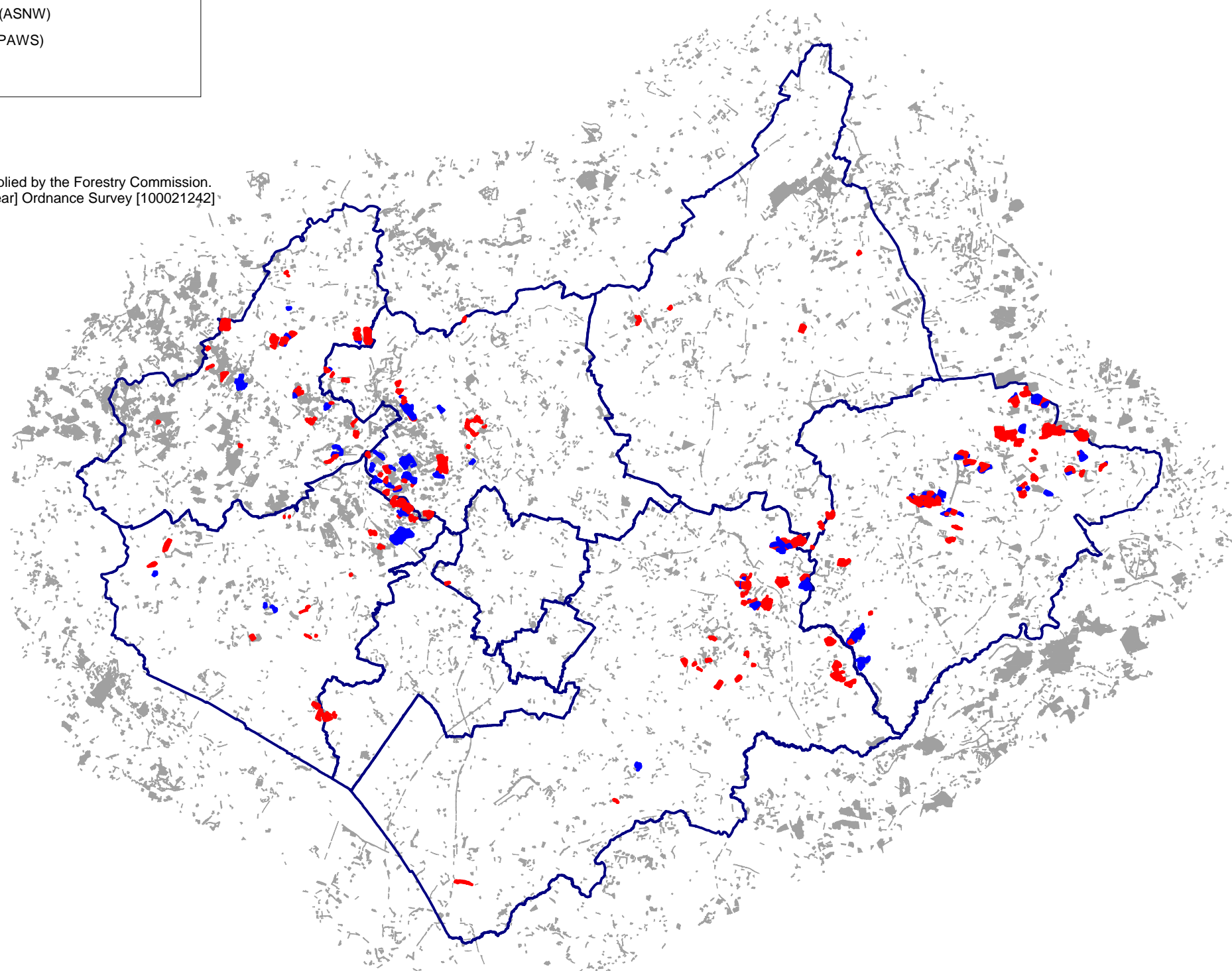
## MAP 1: Woodland

### Leicester, Leicestershire and Rutland BAP 2016: Woodland

#### Woodland in Leicestershire and Rutland LRERC, 2016

- Ancient Semi-Natural Woodland (ASNW)
- Planted Ancient Woodland Site (PAWS)
- Other woodland

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## ***Local Biodiversity Action Plan***

### **Wet woodland**

#### **Action plan objectives**

- **Promote the creation of wet woodland in floodplains whilst avoiding other habitats of high conservation value**
- **No further loss of existing wet woodland**
- **Compile and maintain register of sites**



### **Introduction**

In this context 'wet woodland' is defined as stands of ancient semi-natural woodland where Alder (*Alnus glutinosa*) is the dominant tree, or semi-natural woodland on floodplains with dominant willow, *Salix*, species, and where the water table is at or near the surface for much of the year. On river floodplains all ancient wet woodland was cleared long ago for agriculture. However secondary woodland has formed where willows have colonised features such as flooded gravel pits and ox-bow lakes. Many have developed into species rich sites of high conservation value. Even small areas of just a few trees on swampy ground can hold populations of rare species.

### **Current extent**

A Provisional Inventory was compiled by M. Jeeves in 2005. The resource of ancient semi-natural wet woodland is estimated to be 30 ha, much of which lies in Charnwood Forest. Since then, many other sites have been designated as LWS/candidate LWS on account of wet woodland, at least in part. There are now c. 40 of these designated primarily for wet woodland, and an additional 20 with a wet woodland component. The wet woodland habitat parcels on many of these sites is less than 1ha.

Overall, the known area of wet woodland is estimated at 250ha, but this is likely to be an underestimate as there are probably many small parcels of the habitat that have not been identified or mapped. The national Priority Habitat Inventory does not recognise this as a separate habitat type.

An updated Inventory and map are attached; note that the habitat boundaries and areas are estimates. Note that there is overlap with the Floodplain Wetland Inventory and the Ancient Woodland Inventory.

### **Some characteristic species**

Characteristic tree species include Alder (*Alnus glutinosa*), White Willow (*Salix alba*) and Crack Willow (*Salix fragilis*). Within wet woodlands, especially the ancient ones, can be found species-rich plant communities containing the locally scarce Alder Buckthorn (*Frangula alnus*), Alternate-leaved Golden Saxifrage (*Chrysosplenium alternifolium*) and Smooth-stalked Sedge (*Carex laevigata*). Old willows are important habitat for many rare invertebrates, particularly beetles and crane flies. The nationally scarce Musk Beetle (*Aromia moschata*) is of particular note. Associated butterflies and moths are Brimstone, White Admiral and Concolorous. In winter flocks of Siskin (*Carduelis spinus*) and Redpoll (*Carduelis flammea*) can be found in Alder woodlands.

### **Local Wildlife Site criteria**

Wet woodland can be designated if it is dominated by willow and/or alder with the water table seasonally near or above the surface, and at least 0.25ha. It has most often been designated in association with other wetland or woodland habitats.

### **Most important factors affecting the habitat**

Wet woodland is under greatest threat where it is found on floodplains. Factors include:

- River straightening, dredging and other flood defence works that destroy natural processes in flood plains and prevent regeneration of wet woodland.
- Removal of trees from flood plains because of perceived threat to river flows during floods.
- Drainage of wet areas with trees on flood plains.
- Loss of Alder through spread of *Phytophthora* root disease.
- Development

### **Opportunities**

- Flood prevention and catchment management plans
- The National Forest Company's 'Changing landscapes' grant schemes

## Provisional Inventory of Wet Woodland

Sources: SSSI citations and condition assessment, Natural England; LWS and cLWS Site registers held at LRERC; 2005 provisional Inventory (M Jeeves, LRWT)

<b>Design ation</b>	<b>Condition</b>	<b>Wildlife Site ref no</b>	<b>Site name</b>	<b>Grid ref</b>	<b>Last survey</b>	<b>District</b>	<b>est. area (ha)</b>
cLWS	not known	58796	Kirby Muxloe, Oaks Farm wet woodland	SK512033	2007	Blaby	0.36
pLWS	not known	90635	Lubbesthorpe Brook wet woodland	SK538008	2008	Blaby	0.58
LWS	not known	23286	Narborough Osier Beds	SP538970	2007	Blaby	0.7
pLWS	not known	90643	Whetstone Brook, woodland and grassland	SP561957	2008	Blaby	0.78
LWS	not known	25224	Kirby Muxloe Willow Wood	SK522034	2005	Blaby	0.83
cLWS	not known	90042	Aston Flamville, Pond Spinney	SP465927	1993	Blaby	1.06
LWS	not known	60031	Whetstone Woodland and Brook	SP566944	2007	Blaby	1.53
SSSI	Favourable (NE)		Narborough Bog	SP549979	2010	Blaby	3.45
pLWS	not known	68733	Cossington, Wreake Floodplain Wetland	SK608123	1991?	Charnwood	0.3
LWS	not known	25389	Field West of Ulverscroft Valley SSSI	SK508112	2008	Charnwood	0.33
LWS	not known	54199	Ulverscroft NR	SK495134	2005	Charnwood	0.49
LWS	not known	51245	Brooksby - Melton Railside Wood	SK662157	2004	Charnwood	0.71
LWS	not known	55071	Glebe Way lakes	SK613118	2005	Charnwood	0.83
LWS	not known	49424	River Wreake Oxbow	SK608122	2004	Charnwood	0.86
LWS	not known	25367	Lubcloud Alder Woodland	SK474164	2002	Charnwood	0.97
LWS	not known	25372	Shephed, Black Brook	SK478206	2002	Charnwood	0.98
LWS	not known	51258	Wymeswold Lodge Carr & Ponds	SK628229	2004	Charnwood	1.05
LWS	not known	25381	Ulverscroft	SK491113	2009	Charnwood	1.31
LWS	not known	51255	Rearsby Willow Woodland	SK655146	2004	Charnwood	1.36
LWS	not known	25423	Tom Long's Meadow Extension	SK555166	2002	Charnwood	1.43
LWS	not known	49448	Ulverscroft Mill	SK514105	2004	Charnwood	1.5
LWS	not known	25422	The Grove, Quorn	SK558161	2002	Charnwood	1.57
LWS	not known	25513	Syston Marsh Extension	SK624121	2002	Charnwood	1.62
SSSI	Favourable (NE)		Ulverscroft (Priory alderwood, unit 4)	SK496131	2012	Charnwood	1.71
none	not known		Roecliffe Spinney	SK530127	?	Charnwood	1.76
LWS	not known	25376	Stinking Wood	SK500109	2008	Charnwood	1.89
LWS	not known	25427	Great Fenny Wood	SK562175	2002	Charnwood	2.56
LWS	not known	25321	Charnwood Water Wood	SK549184	1999	Charnwood	2.58
LWS	Good (LRWT)	13811	Holywell Wood	SK507183	1990	Charnwood	2.72
LWS	not known	17216	Swithland Hall Estate	SK564124	1999	Charnwood	4.02

<i>Design ation</i>	<i>Condition</i>	<i>Wildlife Site ref no</i>	<i>Site name</i>	<i>Grid ref</i>	<i>Last survey</i>	<i>District</i>	<i>est. area (ha)</i>
LWS	not known	55070	Watermead N (northern part)	SK604110	2013	Charnwood	4.02
SSSI	Unfavourable recovering (NE)		Sheet Hedges Wood	SK529085	2013	Charnwood	4.59
LWS	not known	25500	Mountsorrel Osier Bed	SK580158	2005	Charnwood	5.15
LWS	not known	49423	Shephed, Hermitage Estate	SK489201	2004	Charnwood	6.16
LWS	not known	55070	Watermead N (southern part)	SK604098	2013	Charnwood	6.33
SSSI	Favourable (NE)		Buddon Wood (unit 3)	SK556153	2014	Charnwood	6.69
SSSI	Unfavourable (NE)		Swithland Wood - The Brand (units 1 & 3)	SK535131	2013	Charnwood	7.57
SSSI	Favourable/recovering (NE)		The Outwoods (units 8 & 14)	SK511171	2014	Charnwood	8.44
SSSI	Unfavourable recovering (NE)		Swithland Wood	SK540122	2008	Charnwood	13.39
SSSI	Unfavourable recovering (NE)		Swithland Reservoir (units 9 & 12)	SK5513	2014	Charnwood	30.17
cLWS	not known	90327	Shackerstone, River Sence wet woodland	SK375074	2011	H&B	0.38
SSSI	Favourable (NE)		Grobby Pool Woods	SK519081	2015	H&B	8.99
cLWS	not known	57221	Husbands Bosworth Glebe Farm Spinney Woodland	SP640819	2006	Harborough	0.74
LWS	not known	57054	Smeeton Westerby Stream Spinney	SP669918	2006	Harborough	0.83
cLWS	not known	53756	Misterton, Mosaic Wetlands	SP564841	2002	Harborough	0.87
LWS	not known	61823	Dunton Bassett Wet Woodland	SP543893	2007	Harborough	0.89
cLWS	not known	57178	Mill Dam Spinney, Peatling Parva	SP591898	2006	Harborough	1.51
cLWS	not known	56897	Bitteswell, Fox Covert / Marsh	SP540871	2006	Harborough	2.81
LWS	not known	25852	Dunton Bassett Quarry	SP536898	2007	Harborough	5.03
SSSI	Favourable (NE)		Skeffington Wood, Leighfield Forest	SK7503	2010	Harborough	7.1
SSSI	Unfavourable recovering (NE)		Owston Wood	SK782061	2012	Harborough	12.7
pLWS	not known	90387	Harston Valley Grassland	SK842311	2010	Melton	5.2
pLWS	not known	62391	Ibstock Grange Wet Woodland & Pond	SK418095	2007	NWL	0.27
cLWS	not known	74001	Stretton Wet Woodland	SK297104	2008	NWL	0.3
cLWS	not known	62265	Belton Wet Woodland	SK439212	2007	NWL	0.43
cLWS	not known	62253	Castle Donington	SK446291	2007	NWL	0.47
cLWS	not known	70238	Belton Alder Woodland	SK441189	2008	NWL	0.52
cLWS	not known	61779	Coalville Wet Woodland	SK436133	2007	NWL	0.56
cLWS	not known	62437	Hugglescote Wet Woodland / Marsh	SK430126	2007	NWL	0.62
cLWS	not known	70587	Griffydham Wet Woodland	SK410188	2008	NWL	0.63
cLWS	not known	65172	Snarestone, Wynn's Wood	SK359107	2015	NWL	0.78
cLWS	not known	61101	Oakthorpe Woodland	SK317132	2007	NWL	0.81
cLWS	not known	73919	Lockington Wet Wood, Marsh and Pond	SK482295	2008	NWL	0.91
cLWS	not known	64696	Sweepstone Road Wetland, Stanhope House	SK354116	2007	NWL	0.95
cLWS	not known	65152	Sweepstone Wet Woodland	SK354110	2007	NWL	0.96
LWS	Good (LRWT)	39274	Burrow Wood	SK477144	2002	NWL	1.09



<i><b>Design ation</b></i>	<i><b>Condition</b></i>	<i><b>Wildlife Site ref no</b></i>	<i><b>Site name</b></i>	<i><b>Grid ref</b></i>	<i><b>Last survey</b></i>	<i><b>District</b></i>	<i><b>est. area (ha)</b></i>
SSSI	not known	91145	Hermitage Woodland and pond	SK452172	2014	NWL	1.62
cLWS	not known	64993	Swainspark Wet Woodland	SK298166	2007	NWL	1.83
cLWS	not known	90908	Grace Dieu Brook, adj Coalville Meadows	SK445151	2013	NWL	2.16
cLWS	not known	61371	Acresford Plantation	SK304136	2007	NWL	2.49
cLWS	not known	61784	Saltersford Wood, Lakes, Grassland	SK318134	2007	NWL	2.66
SSSI	Favourable (NE)		Lockington Marshes (unit 1)	SK489299	2014	NWL	4.48
cLWS	not known	71010	Hemington Gravel Pits	SK463294	2012	NWL	6.61
SSSI	unfavourable (no change) (NE)		Spring Wood	SK378224	2010	NWL	10.7
SSSI	Unfavourable recovering (NE)		Grace Dieu Wood	SK4317	2015	NWL	11.18
cLWS	not known	75883	Alton Woodland (Daisy Plantation)	SK382144	2008	NWL	13.47

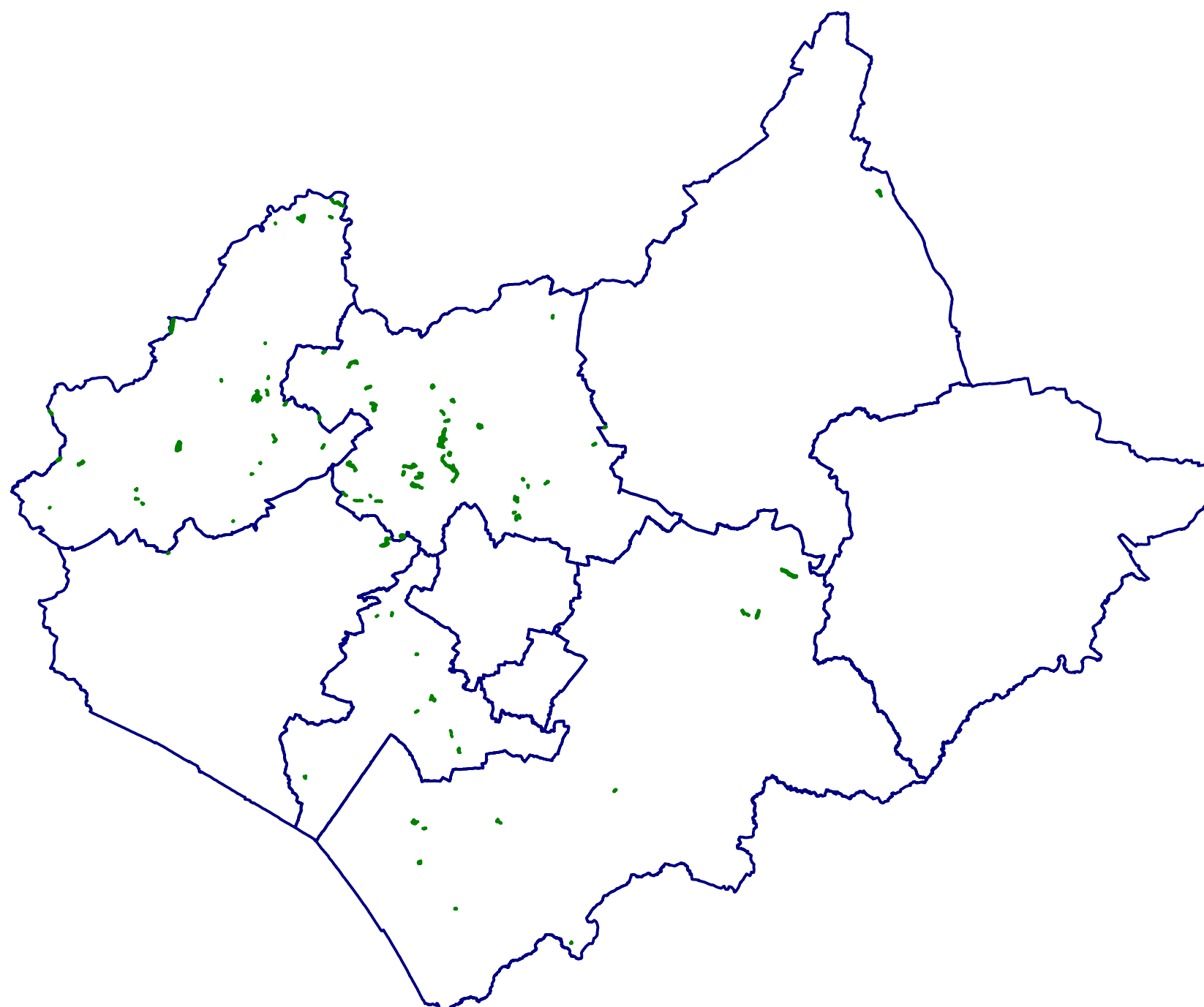
*Compiled by LRERC, January 2016*

# Leicestershire & Rutland Environmental Records Centre

Leicestershire County Council

## Map 2: Wet Woodland

### Leicester, Leicestershire and Rutland BAP 2016: Wet Woodland



## ***Local Biodiversity Action Plan***

### **Lowland Wood-Pasture and Parkland Action plan objectives**

- **Create new wood-pasture adjacent to existing site**
- **Promote management of existing wood-pasture and parkland by restoring pollarding; natural regeneration or planting; and grazing**
- **Compile and maintain register of sites of local BAP and UKBAP quality**



### **Introduction**

Typically wood-pasture contains large open grown trees (often pollards) at various densities in a matrix of grazed grassland. Formerly grazing was maintained by cattle or deer, but in some areas it has been replaced by arable cultivation or planted woodland. Bradgate and Donington Parks are the only wood-pasture sites in Leicestershire and Rutland that are still deer parks, and both are SSSIs, together with part of Croxton Park and Stanford Park. Quorn House Park and parts of Braunstone Park (Leicester), Staunton Harold and Garendon Park are designated as Local Wildlife Sites, and individual trees or other habitats are designated in some of the other historic Parks.

The main interest of these sites is associated with their ancient trees. The conservation value of the trees is described in the Mature Trees Action Plan. The grassland matrix may also be of conservation value in its own right, and many of the LWS in the historic parks are designated for grassland.

These sites can have historic, cultural and landscape importance. Parklands of more recent origin, containing mature trees, are also of conservation value.

Very few of the historic parklands have been surveyed, and most outside the City are in private ownership. It is likely that the resource is severely under-represented in our suite of Wildlife Sites.

## Current extent

English Nature produced a provisional Inventory of parkland and wood-pasture in the East Midlands in 2004, which included 38 sites in Leicester and Leicestershire and 6 in Rutland; these are on the attached list. It was a desk-top exercise, and the aim of English Nature was to collate baseline parkland information where available, including such characteristics as site location and ecological interest, with a view to identifying those sites likely to be of significance for nature conservation. Not all of the sites are still present, and the value of each has not been assessed. It is clear that more work needs to be done to assess these sites before a definitive Inventory can be compiled; also there are known to be sites that were not been picked up in the desktop search, such as Rothley Park.

The Inventory report includes this summary information, which was in line with data for the rest of the East Midlands:

	Leicestershire	Rutland
<i>No. of sites in Inventory</i>	38	6
<i>Area of Inventory sites (ha)</i>	3883ha	958ha
<i>% of sites known to contain old trees</i>	16%	16%
<i>% of sites lacking wildlife information</i>	79%	83%

Source: Harvey et al. *English Nature Research Report 595: A provisional Inventory of parkland and wood-pasture in the East Midlands, July 2004* <http://publications.naturalengland.org.uk/publication/63018?category=554048>

## Some characteristic species

Wood-pasture and parkland are characterised by their ancient trees. Oak (*Quercus robur*) is probably ubiquitous on these sites, but other species including many non-native species of great age, are common. The key species of this habitat are associated with mature trees, and live on or in hollows, rotting wood and dead branches. As well as being valuable for fungi, locally this habitat is associated with 5 Red Data Book (RDB) species of beetle, 2 RDB species of spider and two RDB species of lichen.

Other key species include the Noctule bat (*Nyctalus noctula*).

## Local Wildlife Site criteria

There is no specific LWS criterion associated with this habitat; however, the Mature Trees criteria allow for parkland or wood-pasture sites to be designated as LWS if they contain a density of mature trees with evidence of heart-rot of 20 trees or more per hectare, or in a 300m linear habitat such as a hedgerow or riverbank. Grassland, woodland and other habitats within the park may also be designated under the relevant set of criteria.

## Most important factors affecting the habitat

- A lack of younger generations of trees producing an uneven age structure, leading to breaks in continuity of deadwood habitat and loss of specialised dependent species.
- Neglect and loss of expertise of traditional tree management techniques (e.g. pollarding)
- Removal of deadwood through perceptions of tidiness is occurring at sites with high community use.
- Felling of veteran trees due to perceived and actual safety problems.
- Damaged trees and roots from soil compaction and erosion can be caused by excessive trampling by livestock and people and compounded by physiological stress due to drought.
- Isolation and fragmentation of the remaining parkland and wood-pasture sites in the landscape.
- Conversion of pasture to arable land with close ploughing resulting in tree root damage.
- Damage to epiphyte communities from agrochemicals, fertilisers and air pollution.

## Opportunities

- Countryside Stewardship grants are currently available for wood-pasture and parkland management
- National Forest Wood Pasture/parkland grants  
[http://www.nationalforest.org/document/creatingwoodland/parkland\\_wood\\_pasture\\_guidelines.pdf](http://www.nationalforest.org/document/creatingwoodland/parkland_wood_pasture_guidelines.pdf)

*Lowland Wood-pasture and Parkland***Historic parklands in Leicestershire and Rutland**

Based on English Nature Research Report 595: *A provisional Inventory of parkland and wood-pasture in the East Midlands, July 2004*. Additions/changes by S Timms 2016, marked with ‘\*’

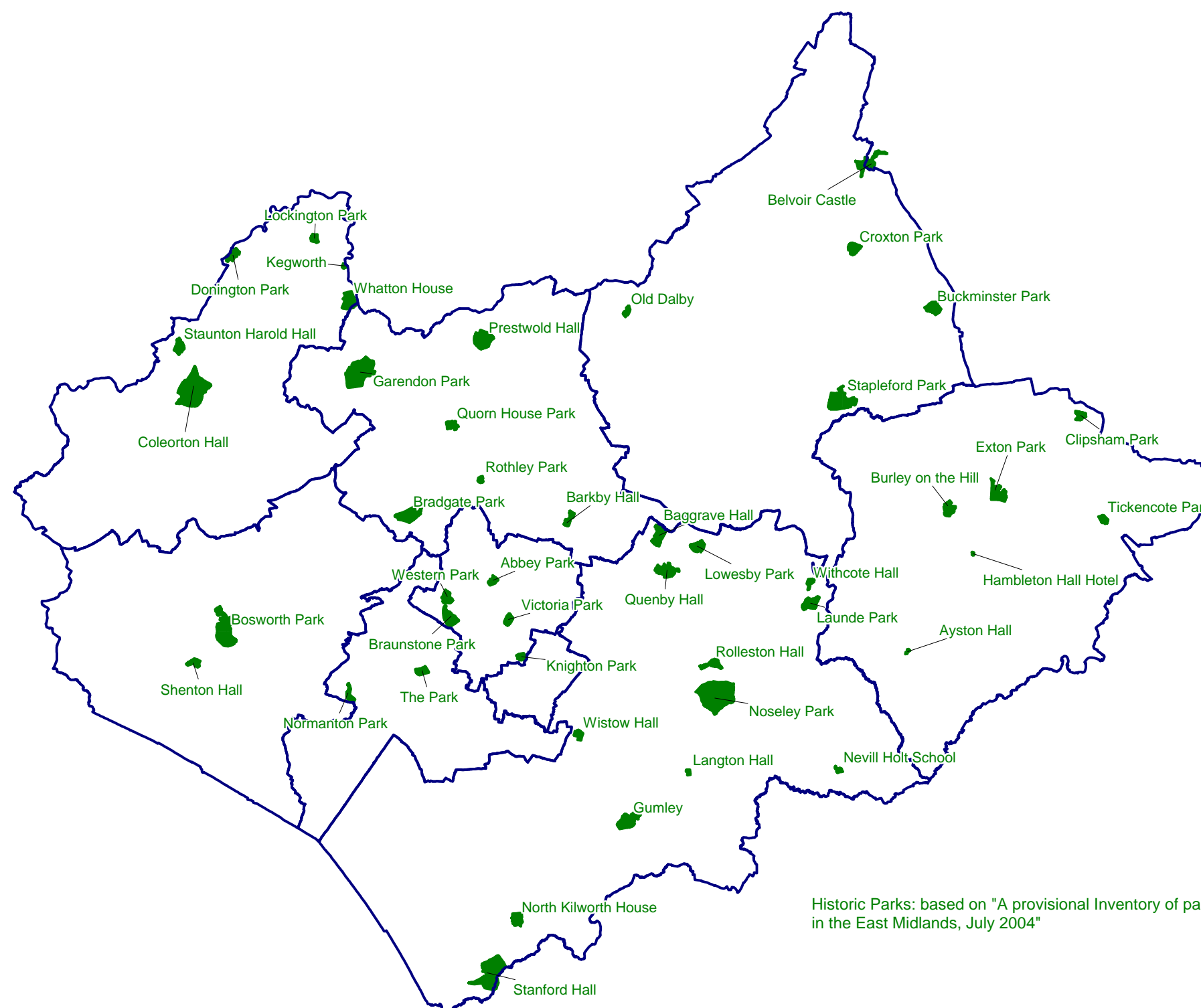
<b>Parkland</b>	<b>District/ County/City</b>	<b>Designation</b>	<b>Notes/ Wildlife site reference numbers</b>
Normanton Park	Blaby	none	
The Park (Enderby)	Blaby	Part cLWS	90414-90120. 7 Mature trees
*Rothley Park	Charnwood	none	Not on 2004 Inventory. Known to have many mature trees
Barkby Hall (N)	Charnwood	none	
Barkby Hall (S)	Charnwood	none	
Bradgate Park	Charnwood	SSSI	Mature trees. Public open space
Garendon Park	Charnwood	Part LWS/cLWS	49423, 25395, 91316, 91317. Woodland, wet woodland, stream, grassland, hedge
Prestwold Hall	Charnwood	none	
Quorn House Park	Charnwood	LWS	25421. Mature trees, grassland, stream, wet woodland
Baggrave Hall	Harborough	none	
Gumley	Harborough	none	
Langton Hall	Harborough	none	
Launde Park	Harborough	none	
Lowesby Park	Harborough	none	
Nevill Holt School	Harborough	LWS	51900 Grassland (in quarry)
North Kilworth House	Harborough	none	
Noseley Park	Harborough	none	
Quenby Hall	Harborough	none	
Rolleston Hall	Harborough	none	
Stanford Hall	Harborough	Part SSSI	Parkland, lichens
Wistow Hall	Harborough	none	
Withcote Hall	Harborough	none	
Bosworth Park (N)	Hinck & Bos	none	
Bosworth Park (S)	Hinck & Bos	none	Public open space
Shenton Hall	Hinck & Bos	none	
Abbey Park	Leicester	none	Public open space
Braunstone Park	Leicester	Part LWS	26174, 26186. Parkland, mature trees, grassland. Public open space
Knighton Park	Leicester	Part LWS	26184, 80005, 80097, 80117. Woodland, hedges, mature tree, stream. Public open space
Victoria Park	Leicester	none	Public open space
Western Park	Leicester	Part LWS	80001, 80106. Mature trees, hedge. Public open space
Belvoir Castle	Melton	none	
Buckminster Park	Melton	none	
Croxton Park	Melton	Part SSSI	Acid grassland, marsh, woodland, scrub, ponds
Old Dalby	Melton	none	
Stapleford Park	Melton	none	
Coleorton Hall	NW Leics	Part LWS/cLWS, LNR	40112, 80073, 62302, 62346, 62701, 70783, 90055, 91232. Grassland, ponds, secondary woodland (inc. New Lount). Much of Park lost to coal-mining
Donington Park	NW Leics	SSSI	Parkland, mature trees
Kegworth	NW Leics	none	
Lockington Park	NW Leics	Part cLWS	90886 Mature tree
Staunton Harold Hall	NW Leics	Part LWS/cLWS	80070, 80072, 75188, 75164. Mature trees, grassland, ancient woodland
Whatton House	NW Leics	none	
*Burley on the Hill	Rutland	none	Boundary amended to include part of Park missed off 2004 Inventory
Ayston Hall	Rutland	none	
Clipsham Park	Rutland	none	
Exton Park	Rutland	none	
Hambleton Hall Hotel	Rutland	none	
Tickencote Park	Rutland	none	

# Leicestershire & Rutland Environmental Records Centre

Leicestershire County Council

## Map 3: Historic Parks

### Leicester, Leicestershire and Rutland BAP 2016: Historic Parks







## ***Local Biodiversity Action Plan***

### **Hedgerows**

#### **Action plan objectives**

- **Promote planting of new hedges**
- **Promote sympathetic management of existing ancient and species-rich hedges**
- **Prevent further loss of ancient and species-rich hedges**



### **Introduction**

Hedgerows are particularly important in Leicestershire and Rutland as the two counties have a low percentage of woodland cover. Hedges act as a substitute habitat and as corridors linking other habitats. Hedgerows are important habitat for many species of bird, bats and insects.

Older or more species-rich hedges have greater biodiversity value, and may support ancient woodland indicator species of plants and invertebrates. Old hedges often have associated features such as banks, ditches, trees and deadwood habitats that add to their wildlife value.

The Hedgerows Regulations 1997 protect most species-rich countryside hedgerows from being removed; local planning authorities can refuse permission for hedgerow removal if the hedge meets specific biodiversity criteria. Hedgerow loss is relatively minor now, although many miles were lost in the last century to create larger fields. However, hedges are still being planted, and most roadside hedges and many hedges along rights of way, administrative and ownership boundaries (often species-rich) have been retained. Overall the resource of hedges is probably stable or subject to minor loss.

## Current extent

In 2003, the extent of all hedgerows in Leicestershire and Rutland was estimated at 16774.44 km, based on 100 2500m<sup>2</sup> sample plots.

Source of data: Peat, L. *Hedgerow Length Estimation, Leicestershire and Rutland. (2003) LRERC*

About 180km of species-rich hedges are designated as Wildlife Sites – just over 1% - but this is certainly an under-estimate of the actual resource. Recent Phase 1 surveys in the north and west of the county have shown that (in these areas) many hedges along roads and public rights of way are likely to meet the LWS criteria for designation.

## Some characteristic species

The most common hedgerow shrub is Hawthorn (*Crataegus monogyna*), but older hedgerows contain a wide variety of species often characteristic of woodland, including Field Maple (*Acer campestre*), Dogwood (*Cornus sanguineus*) and Buckthorn (*Rhamnus catharticus*).

A dense, tall hedge provides nesting sites for a number of bird species, including Blackbird (*Turdus merula*), Dunnock (*Prunella modularis*) and Song Thrush (*Turdus philomelos*). Hedgerow trees such as Ash (*Fraxinus excelsior*) and Oak (*Quercus robur*) provide additional habitat for birds and bats species including Daubenton's, Natterer's and Noctule (all BAP priorities).

Old hedges often contain mature trees (covered by a separate BAP habitat plan), many of which have been managed by pollarding. They are a particularly important habitat for species of fungus and invertebrate, which live on dead wood.

Characteristic hedgerow butterfly species include Brimstone, Purple and White-letter Hairstreaks and Holly Blue.

## Local Wildlife Site criteria

Hedges can be designated if they have up to 6 or more locally native trees and shrubs per 30m section, on average; or if they have 5 species plus additional habitat features of biodiversity value.

## Most important factors affecting the habitat

- Over management, annual flailing
- Agricultural spray drift (herbicides and pesticides) and fertiliser applications
- Close ploughing
- Browsing by stock
- Deliberate herbicide treatment of vegetation in the hedge bottom
- Loss to development on greenfield sites, including damage due to use as garden boundary hedges in new development.

## Opportunities

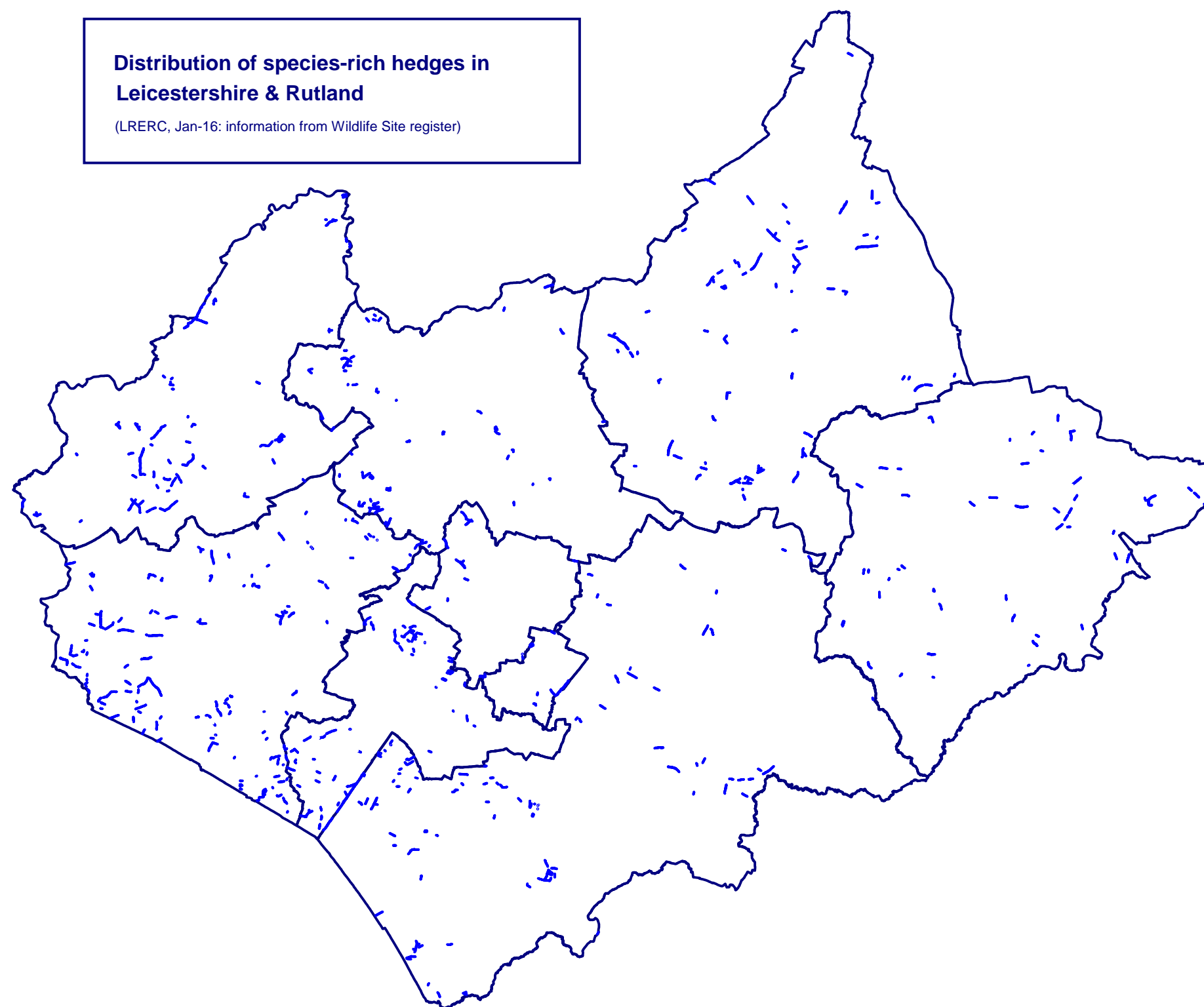
- Planting and restoration of hedges on development and minerals restoration sites
- Countryside Stewardship – grants are available for planting new hedges, and for management and gapping up of existing hedges.

# Leicestershire & Rutland Environmental Records Centre

Leicestershire County Council

## Map 4: Hedgerows

### Leicester, Leicestershire and Rutland BAP 2016: Hedgerows





## ***Local Biodiversity Action Plan***

### **Mature trees**

#### **Action plan objectives**

- **Promote tree pollarding as a management option for mature trees**
- **Encourage public appreciation of mature tree through participation in surveys such as the Ancient Tree Hunt**
- **Compile and maintain register of mature trees**



### **Introduction**

An important feature of mature trees is that they are either hollow or contain rotting heartwood. Dead and decaying wood is essential for many species particularly fungi and insects.

Maturing tree species differ in their characteristics. Birch trees mature relatively quickly in 50 years, whilst oak trees can live for several hundred years.

Many ancient trees in hedgerows and along watercourses were once actively managed by pollarding. This is a traditional method of managing trees, akin to coppicing, which effectively prolongs their life and ensures continuity of habitat for many species dependant on dead wood.

## Current extent

An Inventory of Mature trees was compiled by LRERC in 2011, based on Local Wildlife Site data, public surveys and Heritage Wardens reports, Phase 1 surveys, SSSI citations and sites identified in Derek Lott's report *Identification of Nationally and Regionally Important Sites for Saproxyllic Beetles in Leicestershire and Rutland*, LMARS, 2004.

The date range for the data collection was 1997 – 2010. 1480 trees were identified from these sources, and 48 sites, but it was felt that this is a small fraction of the actual number; it was estimated that 'perhaps 10-15% of individual mature trees in Leicestershire and Rutland have currently been identified.' Over three-quarters of the species listed were Oak, Ash or Willow, and the largest tree was an English Oak of 9.9m girth.

Since the Inventory was compiled, c. 600 other mature trees have been added to the Wildlife Site database.

## Some characteristic species

Mature trees are an important habitat for many species. In Leicestershire and Rutland they provide roosting sites for seven species of bat including Daubenton's, Whiskered and Natterer's, all covered by the Bat Species Action Plan. Birds such as the Stock Dove, Green Woodpecker, Redstart and Barn Owl (the latter two both LLRBAP species) use hollow trees as nesting sites. Mature trees are particularly important for invertebrates, and more than 75 species of beetle of national importance have been recorded living in such trees within our area. Being long-lived mature trees develop a large community of lichen species of which at least 50 are known to be locally rare.

## Local Wildlife Site criteria

Individual trees may be designated as LWS if they have dead branches or evidence of heart-rot in the form of visible rot, hollows or bracket fungi, and meet the size thresholds below:

Species	Girth (in m) at 1.3m above roots
Native oak species	3.77
beech	3.77
willow	3.77
sweet chestnut	3.77
lime	3.77
<i>Populus</i> sp. (Poplars and Aspen)	3.77
horse chestnut	3.77
ash	3
elm	3

A parkland or site with a collection of mature trees can also be designated if it contains a density of trees of the above species with evidence of heart-rot of 20 trees or more per hectare, or in a 300m linear habitat such as a hedgerow or riverbank.

## **Most important factors affecting the habitat**

- Urban development and agricultural practices
- Removal of trees for safety reasons
- Lack of management e.g. pollarding
- Unsympathetic pollarding



# Leicestershire & Rutland Environmental Records Centre

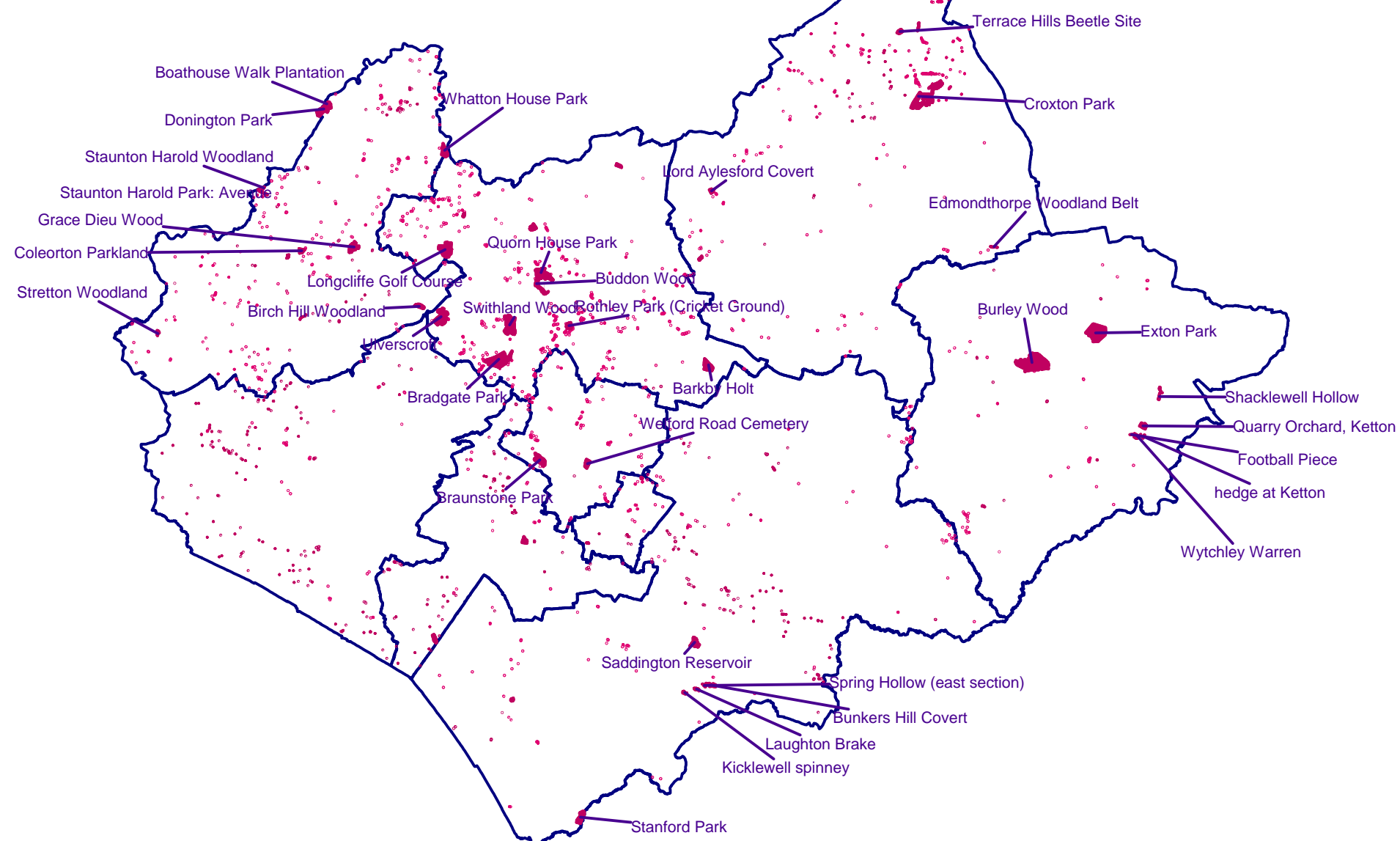
Leicestershire County Council

## Map 5: Mature trees

## Leicester, Leicestershire and Rutland BAP 2016: Mature trees

Information taken from  
Inventory of Mature Trees, LRERC 2011

With supplementary information from  
Wildlife Sites register, Dec 2016





## ***Local Biodiversity Action Plan***

### **Eutrophic Standing Water: Field Ponds, Lakes, Canals and Reservoirs Action plan objectives**

- **No further loss of notable aquatic plant communities**
- **Restoration of field ponds**
- **Creation of new ponds and lakes**
- **Compile and maintain register of sites of local BAP and UKBAP quality**



### **Introduction**

Eutrophic standing water is nutrient rich and is found in field ponds, lakes, canals, gravel pits and reservoirs. In Leicestershire and Rutland reservoirs such as Rutland Water, Eyebrook and Swithland reservoirs have national or international ecological importance. Many of these sites have statutory designations that afford some degree of protection.

However similar designations have failed to protect the notable plant and invertebrate communities associated with the counties' canals. Increasing boat traffic and associated restoration work is threatening the long-term survival of many species in canals.

Field ponds were once a familiar feature of the Leicestershire and Rutland countryside, having been dug wherever a natural water supply for stock to drink from was not available. Although many are small, collectively they represent a significant ecological resource. With the conversion of much grazing land to arable farming, field ponds frequently no longer served a purpose, and so many were filled in. Despite this they are still numerous where pasture land is prevalent, although they are probably declining in quality through agricultural improvement of pastures.

New wetlands have been created in former gravel and clay pits, by accident or design. Where these occur alongside wildlife corridors such as the Rivers Soar, Wreake and Trent, they are of regional significance for waterfowl, as at Watermead to the north of Leicester, Frisby on the Wreake and at Lockington and Hemington along the Trent.

Smaller waterbodies associated with mining subsidence (known as 'flashes') and with the coal industry are frequent in north-west Leicestershire, and these are often excellent amphibian habitats, including the protected Great Crested Newt, which is declining outside these relatively new habitats.

More recently, new wetlands are being created in development sites and along highways schemes as part of 'SUDS' or Sustainable Urban Drainage Systems, and many of these are developing into good small wetland habitats.

## **Current extent**

A provisional inventory of larger open water sites in Leicester, Leicestershire and Rutland is attached, including sites/groups of water bodies over 0.3ha in size. The Inventory includes reservoirs formerly described as mesotrophic, but now considered to be eutrophic. It includes quarry lakes and pools, some of which probably have low nutrient status, especially in hard-rock quarries.

The total area is c.2500 hectares, nearly half of which is Rutland Water and associated water bodies. Outside Rutland Water, large lakes of over 10ha are estimated at covering less than 650ha.

There is c. 125km of canal in Leicestershire and Rutland. Parts of the Ashby Canal, Grand Union Canal and Grantham Canal are designated as SSSIs. The Grantham and Oakham Canals are disused, (the Oakham is mostly infilled) but all the other are still active, even though part of the Ashby Canal is not currently connected to the rest of the network.

It would be difficult to estimate the numbers of field ponds left, as they are subject to rapid change, and there is no register of new SUDS ponds being created.

## **Some characteristic species**

Reservoirs attract large flocks of wildfowl including, at Rutland Water, internationally significant numbers of Gadwall (*Anas strepera*) and Shoveler (*Anas clypeata*). The Grand Union and Ashby Canals are particularly important for aquatic plants such as the nationally scarce Grass-wrack Pondweed (*Potamogeton compressus*) and the rare Flat-stalked Pondweed (*Potamogeton friesii*). The Grantham Canal is notable as being the best site for Odonata (Dragonflies and Damselflies) in the area. 17 species have been recorded and it is the only local site for the rare Variable Damselfly (*Coenagrion pulchellum*). 41 species notable in Leicestershire and Rutland including Great Crested Newt *Triturus cristatus*, other amphibian species, and many invertebrates are associated with field ponds (Lott 1997).

## **Local Wildlife Site criteria**

Most large eutrophic water bodies and canals meet the LWS criteria for Wetlands (Large Rivers and Canals, and Standing Water bodies) as these are mainly based on presence of aquatic vegetation.

## **Most important factors affecting the habitat**

- Eutrophication from fertiliser application to surrounding land.
- Increased recreational use, including boating and fishing, with associated dredging and management.
- Ponds: excessive scrub development around margins and silting up.
- Filling in.

## **Opportunities**

Creation of new wetlands as a result of development and highways 'SUDS', flood prevention schemes and minerals restoration.

## Provisional Inventory of larger water bodies

### Source: OS Mastermap layer 2015, supplemented by additional mapping

- Includes water bodies over 0.3ha.
- Smaller waterbodies area only included where they are part of a larger cluster of water bodies.
- Not all the water bodies in list may still be present.
- List also includes borrow pits, temporary quarry pools and commercial fishing lakes that have minimal current biodiversity value, but which may have potential.
- Note that sites may include several water bodies which have been amalgamated into one site.

Site name	Designation	WS ref	District/LPA	Grid ref	Origin/use	Area (ha)
Fortway Farm, Sapcote	None		Blaby	SP500939	former granite quarry	6.47
Stoney Cove	None		Blaby	SP493940	Granite Quarry (disused)/Diving Centre	5.78
Glen Parva Lodge	None		Blaby	SP554984	Brickpit (disused)	2.99
Fosse Park lake	None		Blaby	SP551998	Parkland/Flood prevention?	1.79
M69, J2 , Aston Firs Borrow Pit	LWS	56422	Blaby	SP460934	Borrow Pit	1.44
Narborough Wood Park	None		Blaby	SK521009		1.29
Sapcote Quarry	None		Blaby	SP497934	Granite quarry (disused)	0.98
Granitethorpe Quarry	None		Blaby	SP494937	Granite Quarry (disused)	0.66
Grand Union Canal, S of Leicester	part SSSI/part LWS/part none		Blaby/ Harborough		Canal	33.20
Swithland Reservoir	SSSI		Charnwood	SK116270	Reservoir	68.15
Cropston Reservoir	SSSI		Charnwood	SK454109	Sand & Gravel (disused)	51.06
Watermead North	LWS	55070	Charnwood	SK6010	Sand & Gravel/ Country Park	41.65
Syston lakes (R Soar)	None		Charnwood	SK6010	Sand & Gravel pits	18.58
Willows Farm, R Soar	None		Charnwood	SK6012	Sand & Gravel (active)	12.84
Cossington Mill	None		Charnwood	SK6012		11.87
Quorn Fields Farm	None		Charnwood	SK555181		11.28
Beedles Lake	None		Charnwood	SK630133		10.56
Cossington	LWS/LRWT	48517	Charnwood	SK5914	Nature Reserve	10.28
Syston Fosse Way lake (Wreake)	None		Charnwood	SK622123	Sand & Gravel pits	8.31
Charnwood (Newhurst) Quarry	SSSI		Charnwood	SK4817	Granite Quarry (disused)	7.92
Barrow Gravel pits	SSSI		Charnwood	SK569166	Sand & Gravel (disused)	7.87
Charnwood Water	LWS	25323	Charnwood	SK546184		5.31
Pillings Lock Marina	None		Charnwood	SK563184	Marina	4.68
Dishley Pool, Loughborough	LWS	21554	Charnwood	SK520215		3.98
Nanpantan Reservoir	LWS	57975	Charnwood	SK507170	Reservoir	3.23
Lakeside Lodge, Eller's gorse	None		Charnwood	SK633236		2.88
Grand Union Canal, Loughborough	None		Charnwood		Canal	2.75

<b>Site name</b>	<b>Designation</b>	<b>WS ref</b>	<b>District/LPA</b>	<b>Grid ref</b>	<b>Origin/use</b>	<b>Area (ha)</b>
Ulverscroft Priory & fishponds	part SSSI		Charnwood	SK499128	Fishponds	2.63
Glebe Way Lakes, Syston	LWS	55071	Charnwood	SK612118	Sand & Gravel	2.22
Wanlip Meadows	LWS	46786	Charnwood	SK603106	Sand & Gravel (disused)	1.50
Raynsway Marina, Syston	None		Charnwood	SK602089	Marina	1.48
The Hermitage lake	LWS	49423	Charnwood	SK499199	Parkland	1.39
Cossington Grange	None		Charnwood	SK604129		1.25
Farnham Bridge Farm (R Soar), Rothley	None		Charnwood	SK594139		1.23
Gaddesby Brook lake, Rearsby	None		Charnwood	SK656132	Parkland	1.03
Grand Union Canal, Syston	None		Charnwood		Canal	0.92
Hilltop	None		Charnwood	SK647167		0.84
Farnham Bridge (R Soar), Rothley	None		Charnwood	SK594132		0.84
Mountsorrel (Hawcliff) disused quarry	None		Charnwood	SK572151	Granite Quarry (disused)	0.83
Hill Farm, Wymeswold	None		Charnwood	SK630230		0.81
Cossington	None		Charnwood	SK602134		0.81
Rearsby	None		Charnwood	SK659147		0.58
Blackbrook Reservoir	SSSI		Charnwood/NWL	SK465171	Reservoir	32.04
Grand Union Canal, Leicester	None		City		Canal	1.66
Braunstone Park lakes	None		City	SK557028	Parkland/POS	1.55
Hamilton lake	None		City	SK626072	Parkland/flood amelioration	1.26
Watermead South	LWS	26160	City/Charnwood	SK6008	Sand & Gravel pits/Country Park	17.01
Ashby Canal, Hinckley - Snarestone	partSSSI/part cLWS/part none		H&B		Canal	32.32
Thornton Reservoir	LWS	25882	H&B	SK472076	Reservoir	29.16
Cadeby Quarry	None		H&B	SK4402	Sand & Gravel (active)	17.64
Grobby Pool	SSSI		H&B	SK521082		12.12
Grobby Quarries	None		H&B	SK5208	Granite quarry	10.12
Bosworth Water Trust	None		H&B	SK384032		7.68
Peckleton Common lakes	None		H&B	SK478010		6.71
Mallory Park lakes	None		H&B	SK448000		6.41
Bradgate quarries	None		H&B	SK5109	Granite Quarry	3.56
Bosworth Park	None		H&B	SK411014	Parkland	3.38
Watling St Lodge	None		H&B	SP391939		3.20
Gopsall Park	part cLWS	90333	H&B	SK359064	Parkland	2.47
Sheepy Magna fishpond	None		H&B	SK328013		2.37
Wykin	None		H&B	SP403949		2.19
Burbage House	None		H&B	SP447906		2.13
Sketchley, adj Brook	None		H&B	SK422928		1.90
Bagworth lakes	cLWS	90370	H&B	SK4506	Coal -subsidence/ Country Park	1.87
Market Bosworth Marina	None		H&B	SK390033	Marina	1.86
Friezeland Farm	None		H&B	SK3803	Angling	1.76
Foundation Lake, Kirkby Mallory	None		H&B	SK448007	Parkland	1.70
Clare's Barn Farm, Twycross	None		H&B	SK327077		1.51
Odstone Hill Quarry, Heather	cLWS	90346	H&B	SK389094	Brickpit (disused)	1.41
Sibson, Grange Farm	None		H&B	SK360013		1.38

<i>Site name</i>	<i>Designation</i>	<i>WS ref</i>	<i>District/LPA</i>	<i>Grid ref</i>	<i>Origin/use</i>	<i>Area (ha)</i>
Sketchley, adj Canal	None		H&B	SP411930		1.38
Big Pit, Hinckley	None		H&B	SP431949	Brickpit (disused)	1.31
Hinckley Marina	None		H&B	SP407935	Marina	1.31
The Mallory	None		H&B	SK452016		1.27
Ratcliffe House Farm, Ratcliffe Culey	None		H&B	SP336987		1.24
Twycross, Harris Bridge	None		H&B	SK346033		0.91
Hill Hole Quarry	None		H&B	SK485103	Granite Quarry (disused)	0.91
Osbaston Hall fishponds	None		H&B	SK424046		0.88
Ratcliffe Pool, Ratcliffe Culey	None		H&B	SP322989		0.83
Bosworth Grange	None		H&B	SK350106		0.74
Little Pit, Hinckley	None		H&B	SP432952	Brickpit (disused)	0.74
Rolleston Hall lake	None		Harborough	SK734001	Parkland	1.79
Withcote Hall lake	None		Harborough	SK797056	Parkland	1.29
Stanford Reservoir	None		Harborough/ Northants	SK3723	Reservoir	59.64
Eye Brook Reservoir	SSSI		Harb/Rutland	SP851946	Reservoir	158.92
Saddington Reservoir	SSSI		Harborough	SP663911	Reservoir	14.42
Shawell Quarry	None		Harborough	SP5380	Sand and Gravel (active)	6.97
Slip Inn Quarry, Dunton Bassett	None		Harborough	SP5388	Sand & Gravel (disused)	4.53
Peatling Lodge Farm lakes	None		Harborough	SP590892		4.21
Husbands Bosworth Quarry	None		Harborough	SP6482	Sand & Gravel (part disused)	3.87
Bruntingthorpe/Mill House farm, Gawney Lane	None		Harborough	SP580885		3.07
Magna Park	None		Harborough	SP510858	Flood alleviation	2.91
Frolesworth, pond West of village	None		Harborough	SP496906		2.91
Kilworth Sticks farm	None		Harborough	SP606842	Angling	2.91
Nevill Holt Quarry	LWS	51900	Harborough	SP815933	Sand & Gravel (disused)	2.81
Dunton Bassett Quarry	LWS	25952	Harborough	SP533896	Sand & Gravel (disused)	2.25
Arkwright Hill Farm, Dunton Bassett	None		Harborough	SP548922		2.15
Boat house pond, Thorpe Langton	None		Harborough	SP756912	Parkland	2.08
Misterton Hall lake	None		Harborough	SP558838	Parkland	1.85
Newton Harcourt, pond west of village	None		Harborough	SP632971		1.69
Astley Grange Farm, East Langton	None		Harborough	SP729921		1.37
Gumley Wood Pool	None		Harborough	SP681902	Parkland	1.34
Frolesworth, pond East of village	None		Harborough	SP512904		1.28
Grange Farm, East Langton	None		Harborough	SP723922		1.23
Great Glen, Burton Brook fishpond	None		Harborough	SP659974	Fishpond	1.09
Tugby, lake west of village	None		Harborough	SK759011		0.73
Peatling Pools	None		Harborough	SP590894		0.64
Walcote pond, adj R Swift	None		Harborough	SP567841		0.51
Peatling Parva ponds	None		Harborough	SP587892		0.35
Frisby/Kirby Lakes	None		Melton	SK6918	Sand & Gravel (disused)	25.65
Knipton Reservoir	pLWS	90483	Melton	SK814301	Reservoir	17.97

<b>Site name</b>	<b>Designation</b>	<b>WS ref</b>	<b>District/LPA</b>	<b>Grid ref</b>	<b>Origin/use</b>	<b>Area (ha)</b>
Priory Water (and adj lakes)	None		Melton	SK7118	Sand & Gravel (disused)	17.26
Grantham Canal	SSSI/cLWS		Melton		Canal	11.69
Belvoir Castle lakes	None		Melton	SK8332		11.51
Melton Country Park	LWS	80080	Melton	SK758205	Parkland/POS	5.53
Brooksby Quarry	None		Melton	SK6715	Sand & Gravel (active)	5.27
Six Hills golf-course	None		Melton	SK649214	Golf-course	4.83
Eye Kettleby lakes	None		Melton	SK7317	Angling	4.65
Asfordby	cLWS	90718	Melton	SK7121	Coal mining: reclaimed	4.59
Stapleford Park lake	None		Melton	SK816181	Parkland	4.54
Lakeview farm Landyke Lane	None		Melton	SK7425	Angling	4.03
Goadby Marwood Park	None		Melton	SK774266	Parkland	3.45
Buckminster Park lake	None		Melton	SK878238	Parkland	2.82
Lake House Farm, Goadby	None		Melton	SP754998		2.47
Croxton Park lakes	SSSI		Melton	SK822276	Parkland	2.24
Saltby	None		Melton	SK832263		2.05
Twinlakes Amusement Park	None		Melton	SK771210	Angling	1.35
Frog hollow, Granby Wood (Belvoir estate)	None		Melton	SK817322		1.21
Gaddesby Brook lake	None		Melton	SK682127		1.19
Wartnaby fishpond	None		Melton	SK708220	Parkland	1.17
Leesthorpe Hall lake	None		Melton	SK791133	Parkland	0.62
Ully Gulley (Trent Valley)	LWS/cLWS	58183 /68	NWL	SK4630	Sand and Gravel (disused)	30.29
Albert Village lake	cLWS	65116	NWL	SK305175	Coal mining, reclaimed	17.72
Lockington Grounds Pits	part cLWS	71936	NWL	SK4729	Sand and Gravel	15.46
Willesley Park lake	None		NWL	SK338147	Parkland	9.22
Salterford Brook flashes	cLWS	61784 /5/7, 90000	NWL	SK3113	Coal mining (subsidence)	8.30
Whitwick Quarry	cLWS	90910	NWL	SK448159	Granite Quarry (mothballed)	6.38
Sence Valley Forest Park	cLWS	62514	NWL	SK3911	Coal mining, reclaimed/	6.36
Staunton Harold Hall lakes	part LWS	80070	NWL	SK3721	Parkland	6.36
Sawley Marina	None		NWL	SK472307	Marina	5.81
Hick's Lodge	None		NWL	SK325151	Coal - Reclamation	4.66
Tucker's Holt, Heather	None		NWL	SK383094	Angling lake/former brickpit?	4.44
Cliffe hill quarry	None		NWL	SK457108	Granite quarry (active)	4.41
Netherfield Lane, Hemington	cLWS	71010	NWL	SK462295	Sand and Gravel (disused)	4.14
Hermitage Lake, Whitwick	None		NWL	SK572151		4.06
Kelham Bridge	LWS/LRWT	40411	NWL	SK410119	Former sewage works/nature reserve	3.71
Heather brickworks	None		NWL	SK392104	Brickpit (disused)	3.64
Bramborough Farm (adj Hicks Lodge)	part cLWS	62604	NWL	SK3214		3.57
Queen Elizabeth II Diamond Jubilee Plantation lake	None		NWL	SK390128	National Forest plantation/OS	3.23
Ashby Canal, Moira	cLWS	61192	NWL		Canal	3.11
Brooklet Farm, Isley cum Langley	None		NWL	SK435252		2.73

<b>Site name</b>	<b>Designation</b>	<b>WS ref</b>	<b>District/LPA</b>	<b>Grid ref</b>	<b>Origin/use</b>	<b>Area (ha)</b>
Cavendish Farm	part cLWS	71909	NWL	SK448295	Sand and Gravel (disused)	2.58
Thorntree Farm, Ravenstone	None		NWL	SK394119	Coal mining, reclaimed	2.49
Willesley Wood lake	None		NWL	SK332141	Coal mining (subsidence)	2.29
Conkers	None		NWL	SK3016		2.19
Rycroft Rd Hemington	part cLWS	71747	NWL	SK461292	Sand and Gravel (disused)	2.12
Donington Island Albert Village	part cLWS	65015 /6484 4	NWL	SK3017	Coal mining, reclaimed	2.05
Measham Brickpits	None		NWL	SK331109	Claypit (active)	1.83
Merriman's Farm, Moira	None		NWL	SK330136		1.81
Cliftonthorpe, Ashby de la Zouch	part cLWS	61204	NWL	SK355182		1.79
Ellistown claypit	None		NWL	SK434108	Former brickworks	1.74
Chilcote, Manor Farm	None		NWL	SK280108		1.48
Langley Priory Lakes	None		NWL	SK434235	Parkland	1.46
Maybury Wood, Moira	cLWS	61100	NWL	SK3116		1.45
Coleorton	None		NWL	SK399171		1.45
Saltersford Bridge	None		NWL	SK312126		1.34
Nature Alive, Coalville	LWS/cLWS	72575	NWL	SK421150	Coal mining, reclaimed	1.26
Thorntree lake 2	None		NWL	SK402126	former coal	1.18
Willesley Lane pond	None		NWL	SK334146		1.15
Donington Quarry, adj Feanedock Covert	cLWS	65042	NWL	SK3117	Coal mining, reclaimed	1.12
Ludlam's Wood pond, Sweptstone	cLWS	91240	NWL	SK376104		0.96
Grace Dieu Priory/Manor Farm	LWS	65308	NWL	SK4318		0.90
Chilcote, Hurst Court	None		NWL	SK282114		0.75
A50 flood pond, Hemington	cLWS	71748	NWL	SK457293		0.71
Staunton Harold Reservoir	None		NWL/Derbs	SK3823	Parkland/ Reservoir	85.78
Clifton's Bridge (adj Grand Union Canal, Wigston)	SSSI		O&W	SP615968		1.23
Navvy's Pit, Kilby Bridge	LWS	80029	O&W	SP601976	Brickpit (disused)	0.94
Wash Brook	None		O&W	SK641000	Flood prevention	0.68
Southmeads	LWS	26188	O&W	SK622013	Parkland	0.31
Rutland Water	SPA/SSSI		Rutland	SK9007	Reservoir	1220.54
Fort Henry lakes	None		Rutland	SK949120	Parkland	7.26
Leigh Lodge fishponds, Leighfield	None		Rutland	SK829038	Parkland	4.24
Chapel Farm, Burley	None		Rutland	SK900159		2.87
Oakham Canal	None		Rutland		Canal	2.15
Whissendine Lodge ponds	None		Rutland	SK807142	Parkland	1.86
Grange Top Quarry, Ketton	None		Rutland	SK980071	Limestone Quarry (active)	1.77
Pond by Priory wood, Leighfield	None		Rutland	SK826054		1.67
Stretton Lakes	None		Rutland	SK959166	angling	1.39

Compiled by LRERC, February 2016



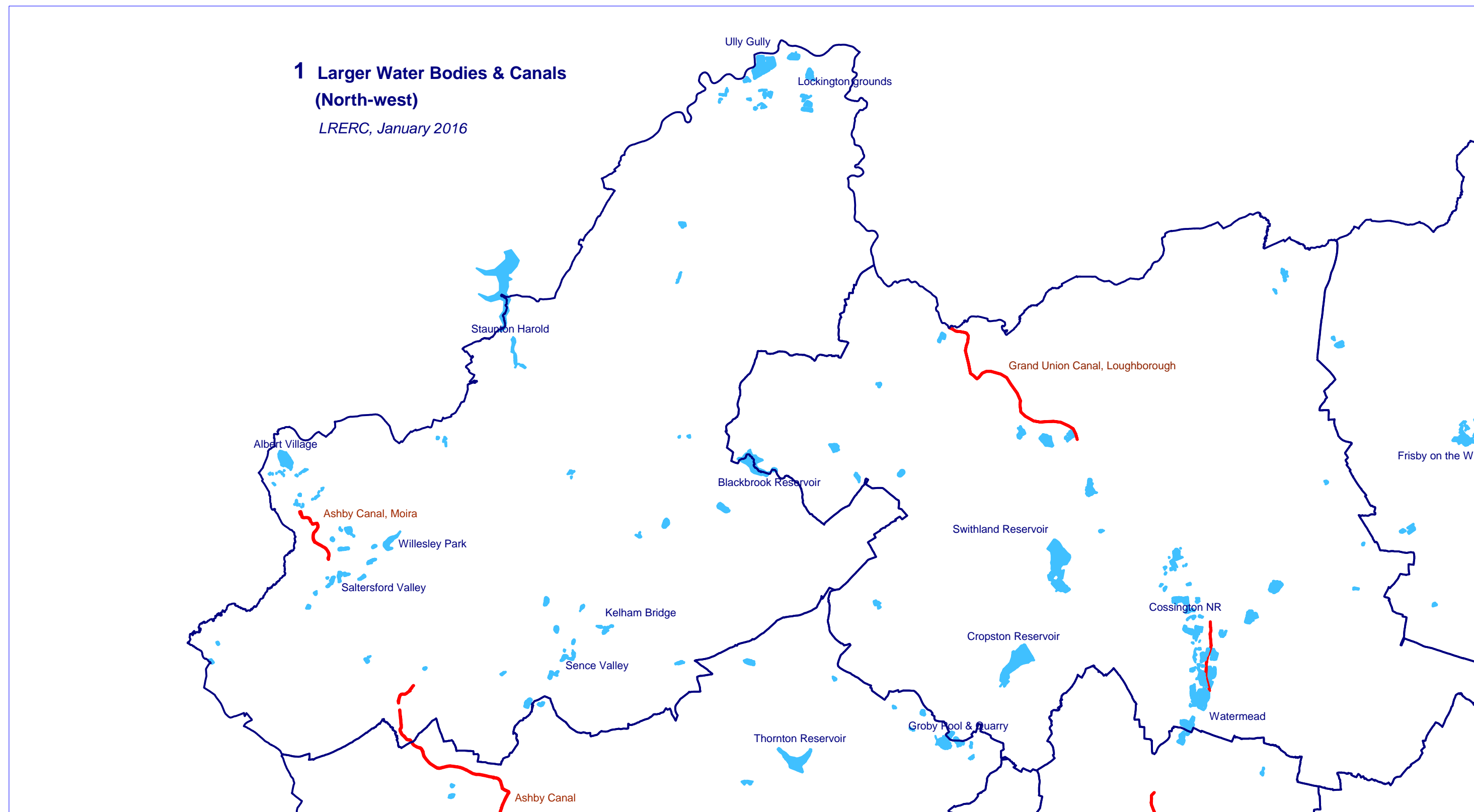
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## Leicester, Leicestershire and Rutland BAP 2016

### Map 6.1: Standing Water (NW)

Scale 1: 125,000



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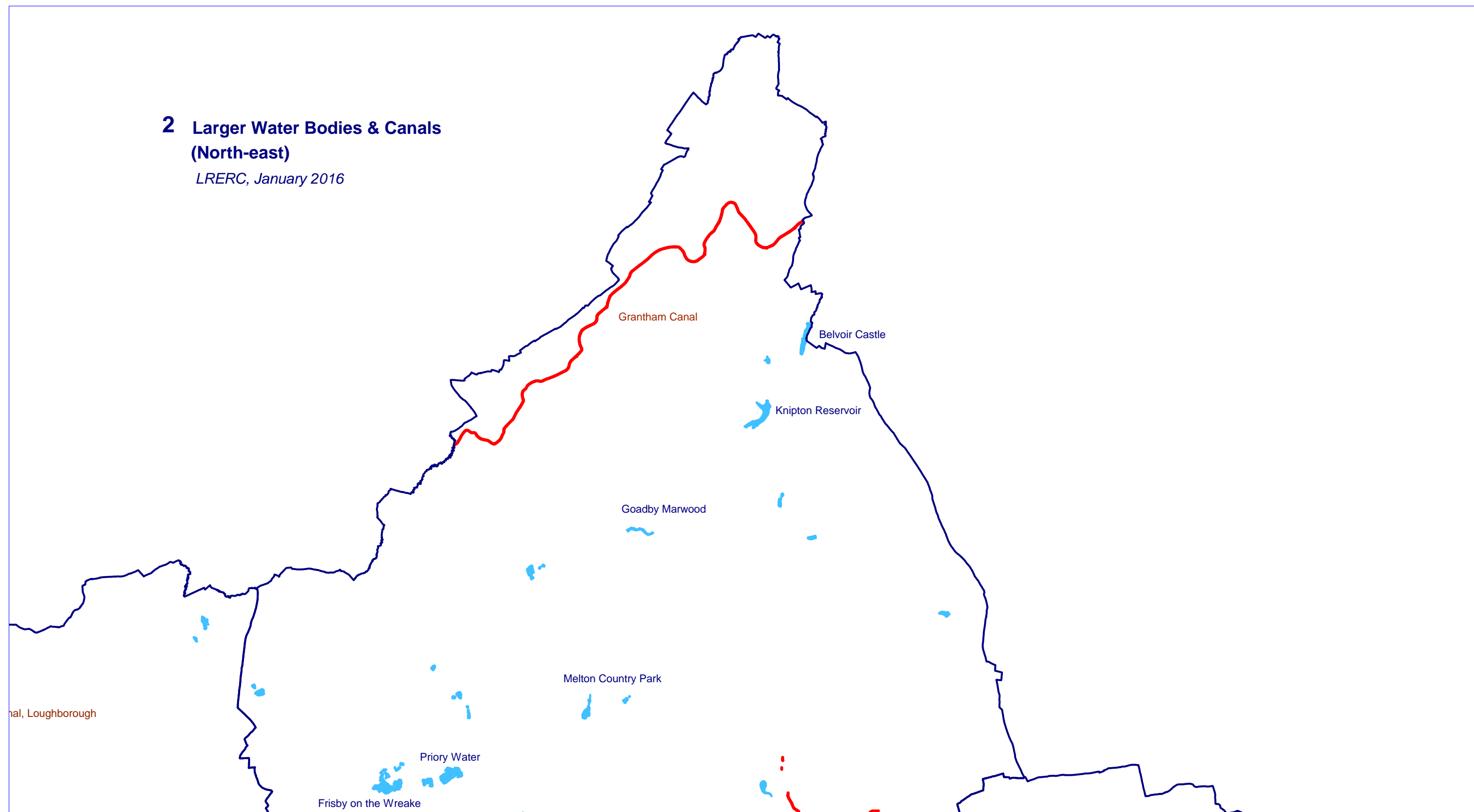
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### Map 6.2: Standing Water (NE)

Scale 1: 125,000

#### 2 Larger Water Bodies & Canals (North-east)

LRERC, January 2016



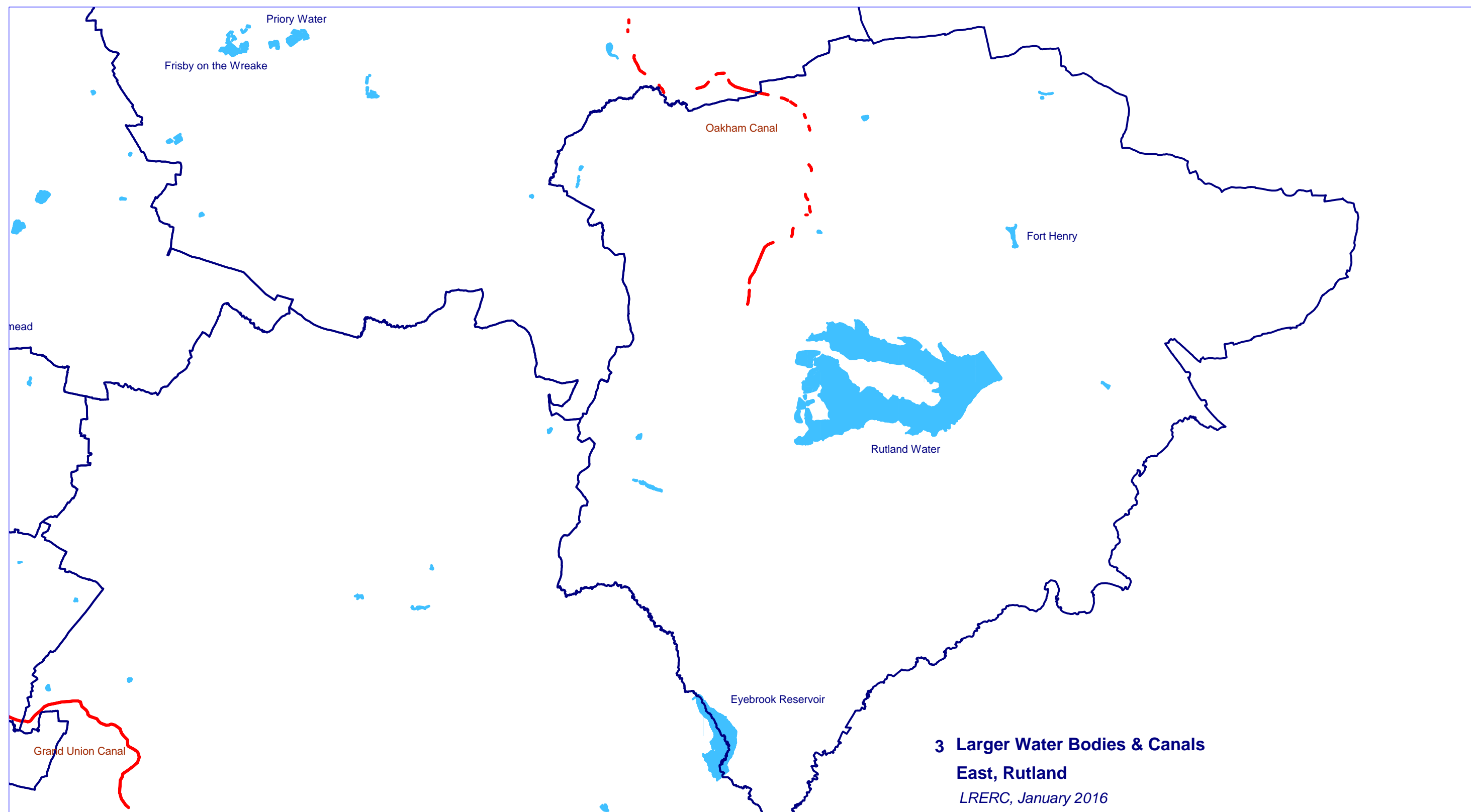
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### Map 6.3: Standing Water (E)

Scale 1: 125,000



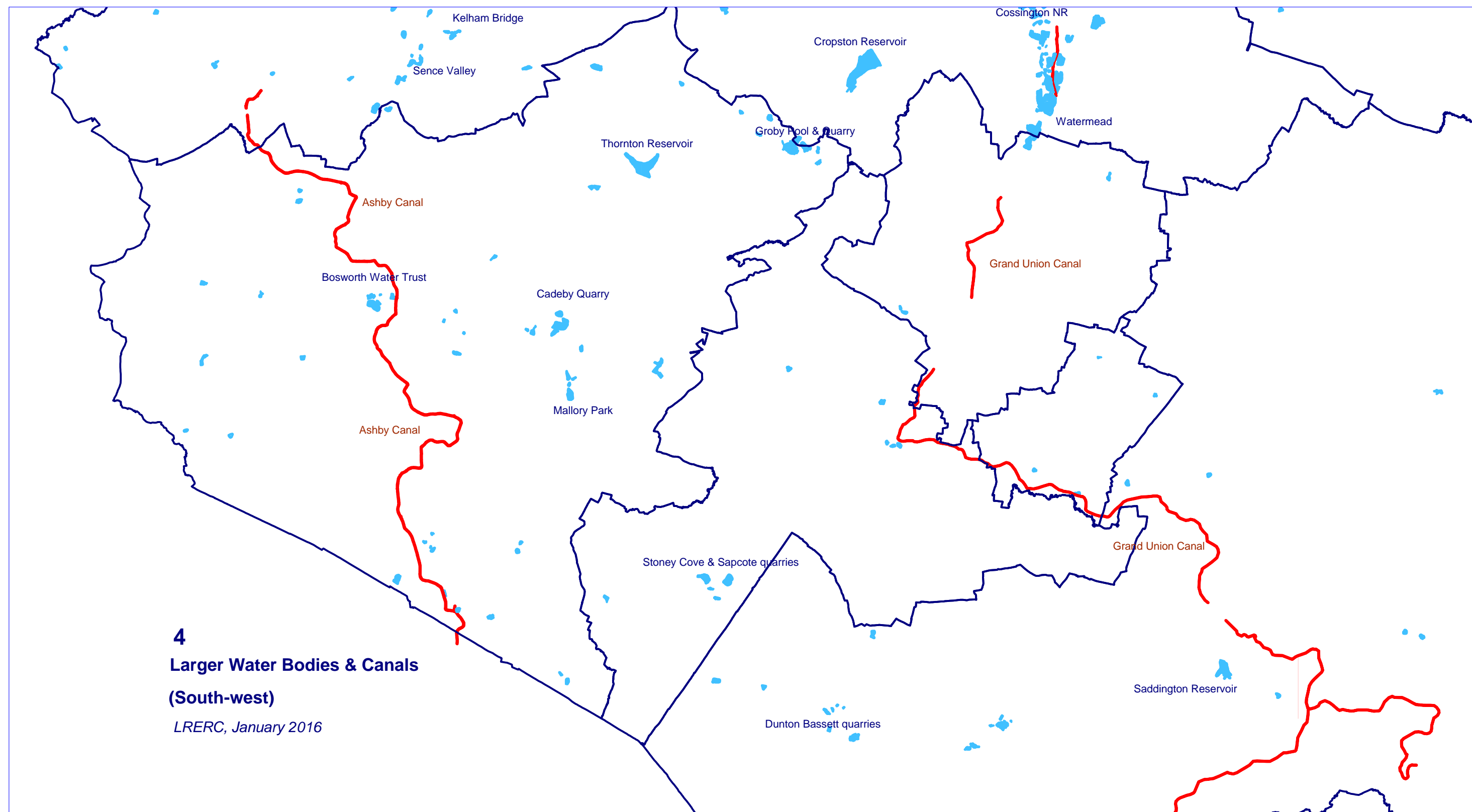
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### Map 6.4: Standing Water (SW)

Scale 1: 125,000



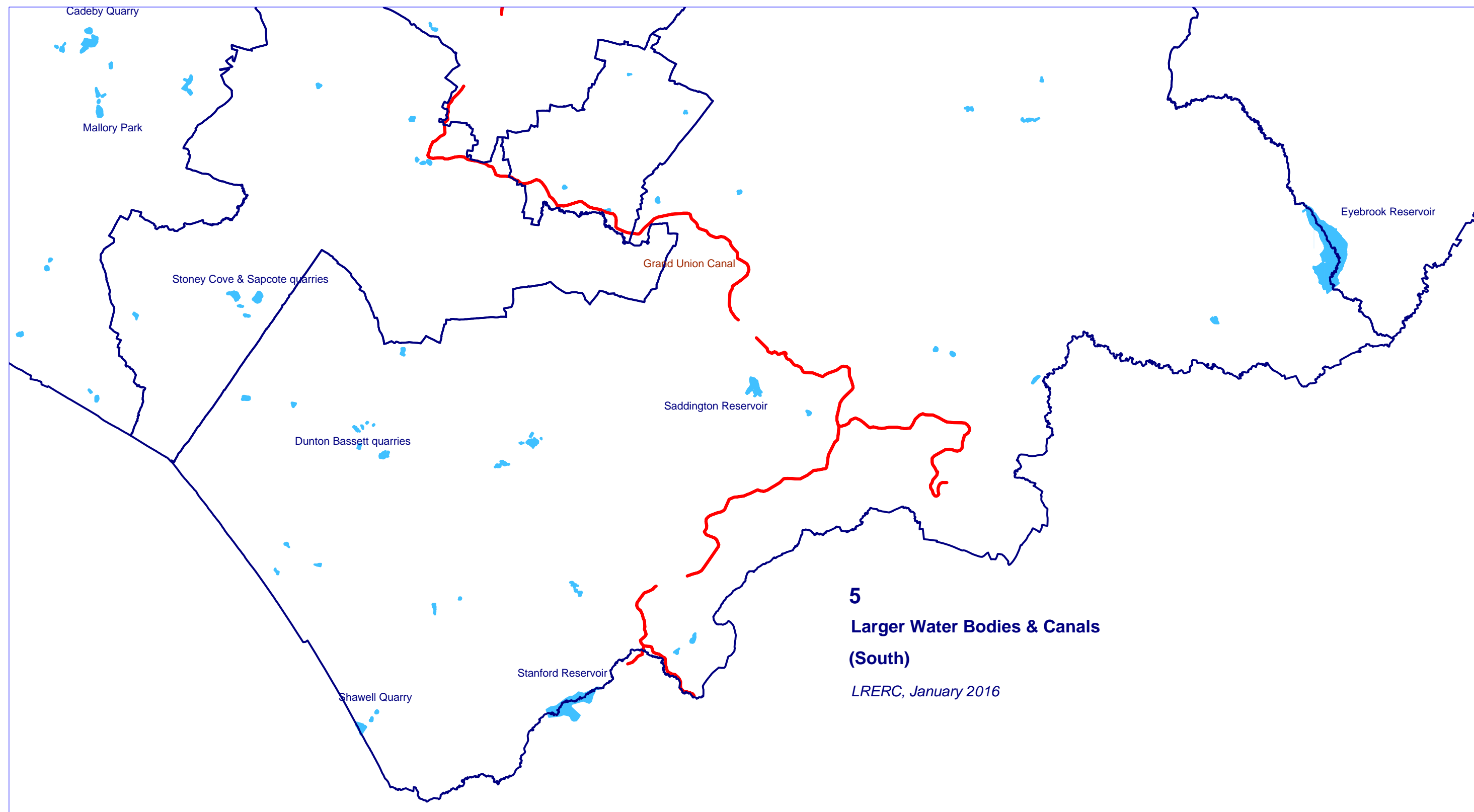
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### Map 6.5: Standing Water (S)

Scale 1: 125,000





## ***Local Biodiversity Action Plan***

### **Mesotrophic lakes**

#### **Action plan objectives**

- **No further loss of characteristic aquatic and marginal species**



### **Introduction**

This habitat is rare in the UK and largely confined to the margins of upland areas in the north and west. The lakes are characterised by having a narrow range of nutrients, the important ones being inorganic nitrogen (N) and total phosphorus (P). In Leicestershire three large sites historically fell within this definition of mesotrophic standing water; Cropston Reservoir, Blackbrook Reservoir and Thornton Reservoir. All have been affected by nutrient enrichment and are no longer mesotrophic.

These sites are within or adjacent to the Charnwood Forest which is the only 'upland-like' area in Leicestershire. Locally several nationally scarce species are associated with this habitat. Restoration of mesotrophic lakes in Leicestershire is not a realistic option and conservation efforts need to concentrate on maintaining as many of the remaining populations of locally scarce aquatic and marginal plant species as is possible under the changed environmental circumstances.

### **Current extent**

Together, the three lakes cover 170 hectares.

## Some characteristic species

The characteristic species associated with mesotrophic lakes in Leicestershire are aquatic and marginal plants such as Shoreweed (*Littorella uniflora*), Thread Rush (*Juncus filiformis*), Floating Clubrush (*Eleogiton fluitans*) and Small Water-pepper (*Persicaria minor*). Large areas of open water are also important breeding and over wintering sites for many species of duck, including Shoveler (*Anas clypeata*), Teal (*Anas crecca*) and Gadwall (*Anas strepera*).

## Local Wildlife Site criteria

There are no LWS criteria specifically for mesotrophic lakes, but the general Standing Water Bodies criteria could be applied. However, this is academic, as all three lakes are designated as SSSIs.

## Most important factors affecting the habitat

- Nutrient enrichment due to fertiliser run off from agricultural land into streams feeding into the lakes, input of treated sewage into streams feeding the lakes, and pumping of nutrient rich water into Cropston Reservoir from Swithland Reservoir.
- Increased sediment from soil erosion as a result of ploughing and drainage of arable land.
- Insufficient or inappropriate water level management.

## Opportunities

- SSSI Management agreements and advice from Natural England: there is a Countryside Stewardship option available for restoration of large water bodies.