



St. Helens Council

## NATURE CONSERVATION

## SUPPLEMENTARY PLANNING DOCUMENT

DRAFT

OCTOBER 2020



## **Contents**

1.	Introduction .....	4
2.	The Purpose of this Supplementary Planning Document.....	4
3.	Overview of Nature Conservation in St Helens.....	4
	Context .....	4
	Internationally Important Sites .....	5
	Functionally Linked Land in St Helens.....	5
	Nationally Important Sites.....	5
	Local Nature Reserves .....	6
	Local Wildlife and Geological Sites.....	6
	Protected Species.....	7
	Priority Species and Habitats.....	7
	Brownfield land biodiversity .....	8
	Invasive Non-Native Species .....	9
	The Liverpool City Region Ecological Network .....	10
4	Consideration of planning applications .....	11
	Legal and policy context - overview .....	11
	The need for early discussions with the Council .....	13
	Evidence-based decision-taking .....	13
	When is an ecological appraisal required? .....	14
	What is the aim of an Ecological Appraisal?.....	14
	How will the Council assess the Ecological Appraisal?.....	15
	What information should an Ecological Appraisal contain and who should prepare it?.....	15
	What time of year should an Ecological Appraisal be carried out? .....	17
	The Mitigation Hierarchy.....	17

Avoiding Harm .....	18
Mitigating Harm.....	19
Internationally important sites.....	20
Compensating for Harm.....	21
Internationally important sites.....	21
Other Nature Assets.....	22
Invasive Species .....	23
Permitted Development Rights and the Habitats Regulations .....	23
Prior Notification and/or Approvals for Demolition .....	24
Appendix A: Glossary .....	26
Appendix B: Local Wildlife and Geology Sites in St Helens Borough .....	30
Appendix C: Priority Species and Habitats .....	50
Appendix D: Invasive Non-Native Species .....	52
Appendix E: Legislation .....	53
Appendix F: Information Sources .....	54

*This document has been produced by St Helens Council in conjunction with Merseyside Environmental Advisory Service.*

## **1. Introduction**

- 1.1 St Helens Council published its Biodiversity Supplementary Planning Document (SPD) in 2011. That SPD provided guidance for developers, applicants seeking planning permission and other stakeholders on how the Council will deal with planning applications that may have significant effects on habitats and/or species of international, national and local importance. This document replaces the 2011 SPD, which will be formally revoked when the Council adopts this new SPD.

## **2. The Purpose of this Supplementary Planning Document**

- 2.1. The aim of this SPD is to provide clear and up-to-date guidance to applicants, developers and other stakeholders on how the Council will assess planning applications which may result in a significant effect on designated sites of nature and /or geological conservation importance, Priority Habitats, legally protected species and /or Priority Species and invasive species. It will help applicants for planning consent to meet their responsibility to avoid harm and deliver mitigation and/or compensatory provision.
- 2.2 The St Helens Local Plan contains a range of policies relating to nature conservation. This SPD provides guidance on how these policies will be implemented. The policies which concern this topic include (amongst others):
- LPA09: Green Infrastructure;
  - LPC06: Biodiversity and Geological Conservation;
  - LPC07: Greenways;
  - LPC08: Ecological Network; and
  - LPC10: Trees and Woodland.

## **3. Overview of Nature Conservation in St Helens**

### Context

- 3.1 St Helens Borough contains a mix of urban areas and countryside, much of which is agricultural land and/or designated as Green Belt. Much of the ecological character of the Borough reflects its traditional industries of coal, glass and chemical production. This legacy can still be seen in the landscape as spoil heaps such as the Burgy Banks and Mucky Mountains, former industrial reservoirs such as Carr Mill Dam and Sutton Dam, and the Sankey Canal, which was the catalyst for the rapid industrial expansion in the late 18<sup>th</sup> century.

- 3.2 The Sankey Canal uses the Sankey Brook and Black Brook as its primary water supplies. The Borough is drained by a radial pattern of watercourses that feed into the Sankey Brook, which discharges into the River Mersey at Warrington.
- 3.3 Agricultural land surrounds the urban core and outlying settlements such as Rainford and Billinge. The former mosslands in the northwest of the Borough are of particular importance both in terms of agricultural quality and ecological importance. Areas such as Reeds Moss and Catchdale Moss are important areas for farmland birds such as yellowhammer, corn bunting and tree sparrow.

#### Internationally Important Sites

- 3.4 There are no sites of international importance designated under the European Union (EU) Habitats Directive within St Helens Borough.
- 3.5 There are a number of internationally important sites in neighbouring areas, such as the Mersey Estuary, Ribble Marshes and the Manchester Mosses, which may be affected indirectly by development in St Helens, for example through loss of functionally linked land (see below) to development, through impacts on air quality or increased disturbance levels caused by recreational pressure.

#### Functionally Linked Land in St Helens

- 3.6 Whilst a range of important species such as Golden Plover and Lapwing could be displaced across the Borough, of particular note are Pink Footed Geese, which forage in fields around Rainford and Billinge in flocks often numbering around 10,000 individuals during the autumn and winter. These birds are part of the population which is a qualifying feature of the Ribble and Alt Estuary and Martin Mere Special Protection Areas.

#### Nationally Important Sites

- 3.8 Two designated Sites of Special Scientific Interest (SSSI) lie wholly or partly within St Helens.
- 3.9 A small area (0.14 hectare) of Highfield Moss SSSI, which straddles the boundary with Wigan Borough lies within St Helens. The site is designated for its mixed valley mire communities and acidic grassland habitats and is classified by Natural England as being in “Unfavourable, Recovering” condition.
- 3.10 Stanley Bank Meadows SSSI is the only designated site of national importance which lies wholly within St. Helens. The site is designated primarily due to its wet neutral lowland grassland and is sensitive to changes in

hydrology. It is classified by Natural England as being in “Favourable” condition.

### Local Nature Reserves

- 3.11 Under the National Parks and Access to the Countryside Act 1949, local authorities can, in consultation with Natural England, declare areas as Local Nature Reserves (LNRs) for the study and protection of the natural environment.
- 3.12 As at October 2020, there are seven LNRs in St Helens Borough which collectively cover an area of 11.27 hectares. These are listed in table 1 below.

**Table 1) Local Nature Reserves in St Helens**

LNR Name	O/S Grid Reference	Principle Habitats
Stanley Bank	SJ534,971	Neutral Wet grassland, Ancient Semi-Natural Woodland
Siding Lane	SD463,020	Broadleaf Woodland
Thatto Heath Meadows	SJ508,936	Neutral grassland, Stream, Hedgerows
Parr Hall Millennium Green	SJ527,961	Marshy Grassland, Wetland Reedbed, River
Colliers Moss Common (North)	SJ543,939	Lowland Heath, Raised Bog, Reedbed, Wetland, Scrub
Clinkham Wood	SJ515,980	Broadleaf Woodland
Mill Brow consisting of: <ul style="list-style-type: none"> <li>• Mill Wood</li> <li>• Mill Brook Parish Nature Reserve</li> </ul>	SJ486,955 SJ488,957	Wet Woodland, River, Marshy Grassland, Wetland, River

### Local Wildlife and Geological Sites

- 3.13 St Helens Borough currently (as at October 2020) includes 116 Local Wildlife Sites. These are listed in Appendix B of this document. However, new information may require that further sites be designated as Local Wildlife Sites. Conversely, a site may be deselected if it no longer meets the selection criteria and there is no likelihood of restoration. There are a further 11 sites that are of Local Geological Importance.
- 3.14 The active register of Local Sites will be maintained on the Council’s website <https://www.sthelens.gov.uk/planning-building-control/planning-policy/research-evidence-and-monitoring/>. The location of these sites and

other natural assets can be found at <http://www.activenaturalist.org.uk/lcren/> and <https://www.magic.gov.uk>.

### Protected Species

- 3.15 Some species recognised as being rare or threatened within a European context are protected under the Conservation of Habitats and Species Regulations 2010. Of these, the species most likely to be encountered in St Helens are Great Crested Newts and bats including Common Pipistrelle, Soprano Pipistrelle, Noctule, Brown Long-eared and Daubentons.
- 3.16 The Wildlife and Countryside Act 1981(as amended) provides protection for a number of species including Bats, Eel, Water vole, English Bluebell and Barn owl. All of these species are present in St Helens. The Act also protects all species of wild bird, their eggs and nests whilst in use.
- 3.17 Badgers are protected under the Protection of Badgers Act 1992 and occur in low numbers in St Helens.
- 3.18 The presence of protected species on or close to a development site will normally constitute a material consideration which must be addressed by developers and land managers. The presence or possible presence of protected species should be factored into all development proposals and plans.

### Priority Species and Habitats

- 3.19 Priority Species and Habitats<sup>1</sup> are identified in three distinct ways:
- Internationally important habitats and species that are listed under Annexe 1 and Annexe II and IV respectively of the Habitats Directive<sup>2</sup>;
  - Nationally important habitats and species of principle importance that are listed in Section 41 of the Natural Environment and Rural Communities Act 2006, and which may be within or outside designated sites; and
  - Habitats and species set out in North Merseyside Biodiversity Action Plan<sup>3</sup>.

---

<sup>1</sup> Each type of priority habitat and species is assessed against a series of selection criteria for international, national and local importance. The levels of importance may overlap dependant on habitats and species presence.

<sup>2</sup> European Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, European Council 21 May 1992.

<sup>3</sup> See [www.merseysidebiodiversity.org.uk](http://www.merseysidebiodiversity.org.uk) for further details

- 3.20 Ancient semi-natural woodland is of special importance and is considered irreplaceable. St Helens has seven confirmed ancient woodlands, although more small remnants may also exist as “clough woodlands” in farmland areas.



*Stanley Bank Wood Ancient Semi-Natural Woodland*

- 3.21 A list of Priority Species and Priority Habitats relevant to St Helens is included in Appendix C of this document.

Brownfield land biodiversity

- 3.22 The emerging St Helens Borough Local Plan<sup>4</sup> encourages the re-use of previously developed land for housing and other forms of development. However, some brownfield land can have a high conservation value. The Open Mosaic Habitats on Previously Developed Land Habitat Action Plan<sup>5</sup> recognises this and sets the following criteria for identifying such habitats

**Table 2) “Open Mosaic” criteria for identifying habitats on previously developed land**

	<b>Criteria (all must be met)</b>
1	The area of open mosaic habitat is at least 0.25ha in size.

<sup>4</sup> St Helens Borough Local Plan 2020-2035: Submission Draft - Policy LPA02 “Spatial Strategy”

<sup>5</sup> Open Mosaic Habitats on Previously Developed Land (Updated July 2010)

<http://jncc.defra.gov.uk/page-5706>

2	Known history of disturbance at the site or evidence that soil has been removed or severely modified by previous use(s) of the site. Extraneous materials/substrates such as industrial spoil may have been added.
3	The site contains some vegetation. This will comprise early successional communities consisting mainly of stress-tolerant species (e.g. indicative of low nutrient status or drought). Early successional communities are composed of (a) annuals, or (b) mosses/liverworts, or (c) lichens, or (d) ruderals, or (e) inundation species, or (f) open grassland, or (g) flower-rich grassland, or (h) heathland.
4	The site contains un-vegetated, loose bare substrate and pools may be present.
5	The site shows spatial variation, forming a mosaic of one or more of the early successional communities (a)–(h) above (criterion 3) plus bare substrate, within 0.25ha.

3.23 Open mosaic habitat can support important invertebrates, ground-nesting birds such as Little Ringed Plover and Skylark as well as grassland, scrub, marsh and wetland habitats. St Helens has a considerable stock of previously developed land. Prospective developers should investigate the ecological value of their site, even where the site has been identified (for example by inclusion on the Council’s Brownfield Land Register<sup>6</sup>) as being suitable in principle for development.

Invasive Non-Native Species

3.24 The spread of some non-native invasive species is a major threat to environmental and economic wellbeing with the cost of controlling them in Britain estimated as being £1.7billion annually<sup>7</sup>. Some of these plants and animals such as Japanese Knotweed and Himalayan Balsam are controlled under the Wildlife and Countryside Act 1981 Section 14 Schedule 9.

3.25 A list of these species is included in Appendix D of this document. Where invasive species are present on a development site, the Council may require a control plan to be agreed and implemented, as part of any planning permission.

---

<sup>6</sup> The St Helens Brownfield Land Register 2019 identifies 112 brownfield sites (with a total area of over 198ha hectares) as being suitable in principle for housing development

<sup>7</sup> “The Economic Cost of Invasive Non-Native Species on Great Britain” Williams *et al* CABI 2010



Japanese Knotweed (*Fallopia japonica*)  
*glandulifera*)



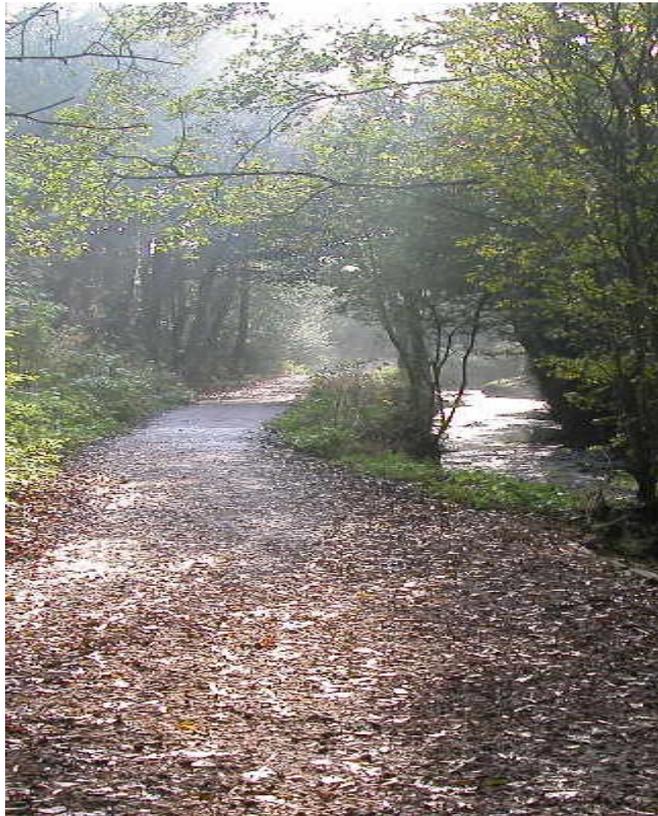
Himalayan Balsam (*Impatiens*

#### The Liverpool City Region Ecological Network

- 3.26 The local authorities in the Liverpool City Region (namely Halton, Knowsley, Liverpool, Sefton, St Helens and Wirral Councils and the Liverpool City Region Combined Authority) have worked together to plan for biodiversity and natural assets at a landscape scale.
- 3.27 The jointly prepared Liverpool City Region Ecological Network identifies a Core Biodiversity Area and a Nature Improvement Area (NIA) and acts as a City Region evidence base. The Network sets out strategic and district priorities for protection, management and enhancement of all the City Region's natural assets including designated sites, Priority Habitats, Priority Species and legally protected species, linear features and stepping stone sites.
- 3.28 The Nature Improvement Area comprises of 17 Focus Areas, for each of which there is a profile description which identifies the habitat management and creation opportunities within the area. Focus Areas 05 "Black Brook Valley and Sankey Valley Corridor" and 06 "Knowsley and St Helens Mosslands" lie wholly or partly within St Helens<sup>8</sup>. Policy LPC08 of the Local Plan identifies that particular priority will be given to habitat management, enhancement, restoration and creation within the NIA, and sets out strict criteria controlling development within the NIA.

---

<sup>8</sup> See <http://www.activenaturalist.org.uk/lcren/imap/mb8.html#> for further details



*The Black Brook Valley – part of the Liverpool City Region Nature Improvement Area*

## **4 Consideration of planning applications**

### Legal and policy context - overview

- 4.1 National legislation (see Appendix E) sets out stringent obligations concerning the protection and enhancement of the natural environment which must be addressed by planning applicants and developers. Relevant policy and guidance is set out in the National Planning Policy Framework (NPPF), National Planning Practice Guidance and in policies LPA09, LPC06, LPC07, LPC08 and LPC10 of the St Helens Borough Local Plan. Circular 06/2005<sup>9</sup> provides further guidance on the statutory obligations for biodiversity and geological conservation and their relationship with the land use planning system. The Government has also, in its 25 year Environment Plan<sup>10</sup>, set out a broad ranging vision for the future, for example concerning the sustainable

---

<sup>9</sup> Government Circular 06/2005 “Biodiversity and Geological Conservation – Statutory Obligations and their impact on the planning system” ODPM/Defra, August 2005

<sup>10</sup> “A Green Future: Our 25 Year Plan to Improve the Environment”, HM Government 2018

use and management of land and the need to recover nature and enhance landscapes.

4.2 Whilst section 15 of the NPPF (2019) deals with conserving and enhancing the natural environment, paragraph 175 sets out the principles which local planning authorities such as St Helens should follow when determining planning applications. The NPPF is clear (in paragraph 170) that planning decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity. Biodiversity net gain delivers measurable improvements for biodiversity by creating or enhancing habitats in association with development. Biodiversity net gain can be achieved on-site, off-site or through a combination of on-site and off-site measures.

4.3 National Planning Practice Guidance sets out how biodiversity should be taken into account in preparing a planning application. This says that<sup>11</sup>:

*“...Information on biodiversity and geodiversity impacts and [opportunities](#) needs to inform all stages of development (including site selection and design, [pre-application consultation](#) and the application itself). An ecological survey will be necessary in advance of a planning application if the type and location of development could have a significant impact on biodiversity and existing information is lacking or inadequate. Pre-application discussions can help to scope whether this is the case and, if so, the survey work required.*

*Even where an [Environmental Impact Assessment](#) is not needed, it might still be appropriate to undertake an ecological survey, for example, where protected species may be present or where biodiverse habitats may be lost....”.*

4.4 The PPG (same section) also states that

*“...As with other supporting information, local planning authorities should require ecological surveys only where clearly justified. Assessments should be proportionate to the nature and scale of development proposed and the likely impact on biodiversity. Further guidance on information requirements is set out in [making an application](#).*

*[Planning conditions](#), [legal agreements](#) or undertakings may be appropriate in order to provide for monitoring and/or biodiversity management plans where these are needed...”.*

---

<sup>11</sup> Paragraph: 018 Reference ID: 8-018-20190721 <https://www.gov.uk/guidance/natural-environment>

- 4.5 It should be noted that national policy and guidance can change from time to time. When considering planning proposals, the Council will take account of relevant policy and guidance in the form that it exists at the time of the decision on the planning application.

The need for early discussions with the Council

- 4.6 Applicants will need to seek views from a suitably experienced ecologist at an early stage where there may be biodiversity issues to be considered as part of the development proposals. This is because an ecological appraisal and survey information is required at the same time as the planning application is submitted. Such appraisals must also consider any biodiversity issues which extend beyond the boundary of the development site. In some cases, surveys may only be carried out at certain times of the year, so applicants need to be aware of this as early as possible in the development process.
- 4.7 The Council offers a pre-application service<sup>12</sup> where applicants can, on payment of a fee, obtain advice from planning officers before submitting a planning application. Pre-application discussions are encouraged and can provide an opportunity to address potential issues at an early stage, thereby reducing the chances of an application being refused or delayed.
- 4.8 Such advice will cover the scope of any ecological surveys and appraisals required to support a planning application and the potential to incorporate biodiversity into the proposal as part of mitigation and/or compensation and so help achieve biodiversity net gain. The Council seeks the advice of Merseyside Environmental Advisory Service as part of this service. Applicants will be directed to sources of information that can help to inform the design and layout of their proposal. This information will assist the applicant or their ecological consultant to provide the right information when the planning application is submitted to help in determining the application.

Evidence-based decision-taking

- 4.9 This section sets out how biodiversity and natural assets should be integrated into the planning application process. Many proposals for development can impact on biodiversity in some way through (for example):
- Providing an opportunity to improve biodiversity on site;
  - Direct loss of habitats and species;
  - Reduction in value of habitats and their ability to support the species that depend on them;

---

<sup>12</sup> See details at <https://www.sthelens.gov.uk/planning-building-control/planning/>

- Increased recreational pressure and disturbance; and/or
- Destruction, degradation, maintenance, enhancement, restoration and/or creation of ecological network functionality.

4.10 It is essential that the potential benefits and negative impacts of a proposal on biodiversity are carefully considered before a development scheme is designed and before a planning application is submitted. To inform that consideration, evidence is required. **The evidence should be proportionate to the issues but should include relevant surveys, undertaken at the appropriate time of year by suitably qualified, experienced and where needed, appropriately licenced, ecological surveyors.** The outcome of the surveys should be included in an 'ecological appraisal'. Information sources to inform such surveys are listed in Appendix F.

When is an ecological appraisal required?

4.11 Ecological appraisals are required by the following policies in the Local Plan:

- **Local Plan Policy LPC06 part 1:** states that *“development that is likely to have a significant effect (either alone or in combination with other plans or projects) on one or more internationally important site(s), including any areas of supporting habitat that are functionally linked to the site(s), must be accompanied by sufficient evidence to enable the Council to make a Habitats Regulations Assessment.”*
- **Local Plan Policy LPC06 part 5:** states that *“Development proposals that would affect a nationally or locally designated nature conservation site, Priority Habitat(s), legally protected species or Priority Species must be supported by an Ecological Appraisal and include details of any necessary avoidance, mitigation and / or compensation proposals, and of any proposed management measures”.*
- **Local Plan Policy LPC08 part 2:** requires that development within the Liverpool City Region Nature Improvement Area should *“...a) enable or contribute towards the effective functioning of the NIA; and b) contribute to the creation and / or management of habitats as set out in the NIA Focus Area Profiles”.*

What is the aim of an Ecological Appraisal?

4.12 An Ecological Appraisal submitted in support of a planning application in St Helens should:

- Identify and describe potential development impacts likely to harm Priority Habitats and Priority Species, other biodiversity features and the

Liverpool City Region (LCR) Ecological Network and take account of neighbouring ecological networks;

- consider any direct and/or indirect effects both during construction and afterwards; and
- Identify how the development proposal would avoid, mitigate and /or compensate for significant harm.

4.13 The Ecological Appraisal should provide sufficient information to allow the Council to make an informed judgement about the impact of a development proposal on biodiversity. This information will assist the Local Planning Authority in taking a planning decision.

How will the Council assess the Ecological Appraisal?

4.14 Ecological Appraisals and surveys will be reviewed by the Council's ecological advisors. The Council will seek further information in writing from the applicant if necessary.

What information should an Ecological Appraisal contain and who should prepare it?

4.15 An Ecological Appraisal must be carried out by one or more suitably qualified and experienced person(s)<sup>13</sup> using appropriate standard survey methods and guidance in accordance with BS42020:2013 Code of Practice (or any national best practice which may supersede this). Figure 2 below sets out general requirements about what information a detailed Ecological Appraisal should contain. The required scope of an ecological appraisal will depend on the biodiversity interests on and surrounding a development site. Appraisals should be proportionate to the nature and scale of development proposed and the development site.

**Figure 2 – Required contents of submitted ecological surveys**

- a desktop study, prepared in accordance with relevant CIEEM guidelines<sup>14</sup> and following consultation with Merseyside BioBank Local Environment Record Centre, which identifies any records of designated site(s), protected and/or Priority Species and Habitats on site or within the surrounding area which may be

<sup>13</sup> Competencies for Species Surveys(CSS)-publications-CIEEM-Chartered Institute of Ecology and Environmental Management (see <https://www.cieem.net/competencies-for-species-survey-css-> )

<sup>14</sup> See the "Guidelines for Preliminary Ecological Appraisal (GPEAS)-Publications-CIEEM-Charter Institute of Ecology and Environmental Management, April 2013 (available at <https://www.cieem.net/guidance-on-preliminary-ecological-appraisal-gpea-> ) and any successor documents

affected by the proposal; and

- An Extended Phase 1 Habitat Survey identifying the habitats present on and adjoining the site, with maps, target notes and habitat area (hectares) included within the report, prepared in accordance with methods set out in the JNCC Handbook for Phase 1 Habitat Survey (2010), together with identification of Priority Habitats; and
- An assessment of whether protected and /or Priority Species may be present and any requirements for specialist surveys e.g. breeding birds, bats, and water vole. Where further specialist survey(s) is/are needed, the report should confirm when these will or have been undertaken; and
- An assessment of likely ecological impacts upon any protected and /or Priority Species or Habitats and (for designated sites) upon the reasons for designation, including geological features, as a result of construction work or future site use and /or operation and suggested measures for avoidance and /or mitigation and /or compensatory provision; and
- An assessment of any invasive species, as listed within the Wildlife and Countryside Act 1981 (as amended) which are present on the site or within 7m of the site boundary. The location and extent of any invasive species should be shown on an appropriately scaled plan included with the survey report); and
- An assessment of appropriate opportunities for the proposed development to improve biodiversity and achieve biodiversity net gain in line with the National Planning Policy Framework and of how this would contribute towards meeting the biodiversity duty (*Natural Environment and Rural Communities Act 2006*).

- 4.16 Applicants should be aware that the standards, guidelines and information sources referred to above continue to be updated and information used to support planning applications should be the most up-to-date. Ecological survey information has a time-limited lifespan, which varies depending on the species or habitat and site characteristics.

What time of year should an Ecological Appraisal be carried out?

- 4.17 For some species and habitats, surveys and assessments can be carried out at any time of the year. For other species, particular times of the year are required to provide reliable results that can be used in taking decisions. Surveys must be carried out at an appropriate time and month of the year, in suitable weather conditions and using nationally recognised survey guidelines and methods where available. An Ecological Survey Calendar to help applicants plan when surveys to support planning applications can be undertaken is included in Appendix G.
- 4.18 Where development is proposed within the Nature Improvement Area of the Liverpool City Region (LCR) Ecological Network, planning applications must include an appropriate ecological appraisal and demonstrate that the functionality of the Nature Improvement Area will, as a minimum, be maintained.

The Mitigation Hierarchy

- 4.19 Paragraph 175 of the NPPF states *“When determining planning applications, local planning authorities should apply the following principle:*
- (a) *If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or as a last resort, compensated for, then planning permission should be refused.”*
- 4.20 Planning Practice Guidance<sup>15</sup> sets out further guidance on the mitigation hierarchy and how it should be applied as follows:
- Avoidance – can significant harm to wildlife species and habitats be avoided, for example, through locating on an alternative site with less harmful impacts?
  - Mitigation – where significant harm cannot be wholly or partially avoided, can it be minimised by design or by use of effective mitigation measures that can be secured by, for example, conditions or planning obligations?
  - Compensation – where, despite whatever mitigation would be effective, there would be significant residual harm, as a last resort, can that harm be properly compensated for by measures to provide for an equivalent value of biodiversity?

---

<sup>15</sup> <http://planningguidance.communities.gov.uk/blog/guidance/natural-environment/biodiversity-ecosystems-and-green-infrastructure/>, paragraph 018referenceID:8-018-20140306

4.21 Local Plan Policy **LPC06** states, “*a hierarchical approach will be taken to the protection and enhancement of St Helens’ natural assets according to their significance*”.

#### Avoiding Harm

4.22 The first step in the mitigation hierarchy is that proposals for development should avoid harm to habitats and species. Based on the Ecological Appraisal, options for avoiding harm may include:

- Locating the proposal on an alternative site with less harmful impacts;
- Reducing the scale of the proposed development to make space for biodiversity;
- Locating the development on an alternative part of the development site to avoid areas of biodiversity value;
- Providing a sufficient buffer to habitats and species;
- Eradicating and preventing spread of invasive species;
- Ensuring that proposals are designed so that important biodiversity features and ecological connectivity between them and features outside of the development site are retained;
- Retaining and managing bat roost within the development by ensuring that the bat roost remains undisturbed as this will protect roost sites for European and UK protected bat species;
- Retaining length(s) of hedgerow within the development site to maintain ecological connections with hedgerows outside the development site and provide nesting habitats for breeding birds; and
- Maintaining a minimum 5 metre<sup>16</sup> ecological buffer zone between water courses, such as ditches, brooks and rivers, and the development, and including proposals for management of that ecological buffer zone, for example to help protect habitats for legally protected species such as water voles and otters.

---

<sup>16</sup> The ecological buffer zone of 5 metres (from the top of the bank) will fit within The Environment Agency’s byelaws, which require an 8 metre buffer on each side of main rivers to allow maintenance. The Lead Local Flood Authority has a similar policy on Ordinary watercourses.

### Mitigating Harm

- 4.23 Local Plan Policy **LPC06 part 4** sets out a sequential approach to target where mitigation can be delivered as follows:
- a) *“on the development site;*
  - b) *locations within the immediate locality and/or supporting LCR Ecological Network;*
  - c) *locations that fall within the LCR Nature Improvement Area and within the Borough; and lastly*
  - d) *locations that fall within the LCR Nature Improvement Area but outside the Borough.”*
- 4.24 The Liverpool City Region Nature Improvement Area (NIA) profiles provide guidance on the priorities for habitat management and creation that would benefit the continuing function of the LCR Ecological Network. For St Helens, this information is set out in the Nature Improvement Area Focus Area profiles for NIA05 Knowsley and St Helens Mosslands and NIA06 Black Brook and Sankey Valley Corridor. These documents are a key information source for applicants and their consultants to consider in designing avoidance, mitigation and/or compensatory provision. Where mitigation measures would be located within the NIA then they should take account of the NIA Focus Area profiles.
- 4.25 Applicants should set out the measures that would be undertaken to minimise harm and achieve at least 10% biodiversity net gain as part of their development proposals, based on specialist, technical advice. When agreeing the scope of work with an ecological consultant it is important to ensure the provision of mitigation measures is required as the applicant’s Ecological Appraisal should include this information. The mitigation measures should be specific to biodiversity likely to be harmed on and off-site from the type and scale of proposed development. With larger developments the applicant will be required to:
- Assess net losses and gains in biodiversity with reports submitted alongside existing environmental reporting and assessments using information that would normally be collected for the purpose of EIA or ecological surveys;
  - Each application will be required to complete a current standard DEFRA biodiversity metric sheet with habitat information gained from the site assessment and landscape plans. This must be completed by a suitably qualified ecologist and the Council / MEAS will assess its conclusions as part of the planning process;

- Each development proposal will need to consider how a mix of preservation, creation and restoration of habitat on site will help achieve biodiversity net gain within site boundary and include this information; and
- Any planning permission granted will then provide a mechanism via planning conditions to secure protection, enhancement and provision of habitat through the development as described in the net gain proposal.

*Internationally important sites*

- 4.26 National and local policy expects the biodiversity net gain to be achieved on site. However, in the exceptional circumstances where off site compensation is required the biodiversity metric will provide information that can be used to discuss off site compensation. In such circumstances the developer would be expected to sign up to a predictable condition or payment by planning obligation to secure biodiversity net gain off site.
- 4.27 Further work will be carried out to look at how such payments can be invested in biodiversity net gain. It will though look to seek the enhancement and creation of similar habitats to those harmed and achieve either in the locality of the development or in key areas identified for habitat management and ecological enhancement e.g. the Sankey Catchment or Bold Forest Park etc.

What is Biodiversity Net Gain?

Biodiversity net gain is a new approach to development. It aims to leave the natural environment in a measurably better state than beforehand.

It will require developers to ensure habitats for wildlife are enhanced and requires a demonstrable increase in habitat value compared to the pre-development baseline.

By measuring the value of existing habitats in biodiversity units the net gain approach firstly encourages habitats of higher biodiversity to be avoided or preserved, given the difficulty and cost in compensating for them as well as integrating wildlife enhancing features to achieve further biodiversity net gain.

- 4.27 The developer is responsible for making sure that suitable arrangements are in place to fund, access, operate, maintain, and manage mitigation measures, and for monitoring and review. These arrangements must be for the lifetime of the development, to the satisfaction of St Helens Council and be secured through legal agreement(s) or other mechanisms. They are also responsible for on-going provision of relevant contact details.

4.28 Examples of mitigation measures to safeguard wildlife and habitats that can be designed into developments (or provided off-site but linked to the development) include:

- providing alternative nesting provision for species such as swallow, swift and barn owl prior to the onset of the breeding season, before demolishing or converting buildings;
- providing hedgehog friendly boundaries that allow hedgehogs (which are a Priority Species) to go under hedgerows or fences in order to maintain connectivity between gardens and with habitat outside the development area;
- creating new areas of grassland and managing existing grassland to provide habitat for important invertebrates such as butterflies, moths and spiders; and
- creating new ponds and wetlands, and managing existing ponds and wetlands, to provide habitat for dragonflies, great crested newts, frogs and toads;

#### Compensating for Harm

4.29 If harm cannot be avoided or adequately mitigated, the next step in the 'mitigation hierarchy' is to consider how the residual harm can be overcome by providing compensatory provision.

#### *Internationally important sites*

4.30 There is a legal requirement under the Habitats Regulations to provide compensatory provision that delivers the same function as that which would be significantly affected through development, before the development commences. In St Helens, this will largely be confined to functionally linked land, which supports a number of qualifying species linked to a Special Protection Area and /or Ramsar site. St Helens Council is the competent authority for undertaking Habitat Regulations Assessment for proposals in its area.

4.31 An example of compensatory provision for a significant impact upon functionally linked land is:

- entering into a management agreement with a landowner to provide suitable feeding resource for passage and overwintering birds (e.g. pink footed geese, golden plover, lapwing) in perpetuity, to ensure that a feeding resource is retained for that proportion of the qualifying features

(passage and overwintering birds) of the internationally important site which would be affected by the development.

*Other Nature Assets*

- 4.32 For nature assets which are not related to SPA or Ramsar sites, compensatory provision for residual harm should follow the sequential approach in **Policy LPC06 part 4**.
- 4.33 The Liverpool City Region Nature Improvement Area Profiles provide guidance on the priorities for habitat management and creation that would benefit the continuing functioning of the LCR Ecological Network. This information is a key source for developers and their consultants to consider in designing avoidance, mitigation and compensatory provision.
- 4.34 Compensatory provision should be proportionate, reasonable, appropriate and deliverable. It is the applicant's responsibility to ensure that there is sufficient space and resources to enable the compensatory provision to continue to function in perpetuity. **This is the last step in the mitigation Hierarchy and applicants should set out in their application the reasons why - in their view based on the ecological evidence- avoiding harm and mitigating harm are insufficient before identifying compensatory provision.**
- 4.35 These measures may not be mutually exclusive, and a combination of resources and operations may be required. In all cases the aims will be to ensure that there is no net loss of biodiversity, that a net gain is achieved, and to ensure that a functioning ecological network is maintained. Examples of compensatory provision include:
- Creating and managing new habitats to ensure there is no net loss, and preferably a net gain, in the extent of Priority Habitats, and in the contribution that these make to biodiversity;
  - Providing bat roost and foraging habitat to ensure compliance with the Natural Environment and Rural Communities Act and provide replacement roost and foraging provision for bats that would be lost directly or where functionality of roost and feeding resources would be diminished by the proposed development; and
  - Creating or enhancing wetland and watercourse habitat(s) for water vole, otter and amphibians, so as to prevent any net loss, and preferably achieve a net gain, in the extent of these habitats and the contribution that these make to biodiversity.

- 4.36 St Helens Council will review all avoidance, mitigation and compensatory provision measures put forward by the applicant. **Policy LPC06 parts 1 and 2** make it clear that development proposals that would cause significant harm that would not be adequately mitigated or as a last resort compensated will be refused<sup>17</sup>. St Helens Council will consider whether the proposals are necessary, proportionate, reasonable and compliant with legislation and policy, and deliverable to enable development.
- 4.37 The applicant is responsible for making sure that suitable arrangements are in place to fund, operate, maintain and manage any compensatory provision, and for its monitoring and review. These arrangements must be for the lifetime of the associated development and to the satisfaction of St Helens Council. They should be secured through legal agreement(s) or other binding mechanisms. The developer is responsible for on-going provision of relevant contact details.
- 4.38 Where development proposals in St Helens would affect natural assets in other districts, St Helens Council will seek to work together with those districts to ensure the protection, retention and management of those natural assets. This will also apply where the location and type of mitigation and/or compensatory provision are being considered. The Liverpool City Region Ecological Network helps to provide an evidence base to facilitate such co-operation and joint working.

#### Invasive Species

- 4.39 Invasive species present on a development site must be identified through the Ecological Appraisal (see 4.13). The Wildlife and Countryside Act 1981 is the key piece of legislation in respect of invasive non-native species. All invasive species are listed under Schedule 9 of the Act. It is illegal to plant or otherwise cause any invasive species to grow or spread into the wild. When encountered on a development site an Invasive Species Management Plan will be required. St Helens Council will work with developers to eradicate invasive species as part of any development proposal.

#### Permitted Development Rights and the Habitats Regulations

- 4.40 Under national legislation, certain forms of development may be carried out as 'permitted development' i.e. where planning permission is already granted by legislation. Any development which would be carried out under 'permitted

---

<sup>17</sup> This is a summary of these parts of Policy LPC06. Applicants should refer to these policies for the specific tests that will be applied to development affecting functionally linked habitats for European sites, Sites of Special Scientific Interest, Local Wildlife Sites, Local Nature Reserves, Local Geological Sites, Priority Habitats, legally protected species and/or priority species.

development rights which is likely to have a significant effect on internationally important nature sites must not begin until the developer has received written notification of the approval by the local planning authority. **Permitted development rights do not therefore override the need to comply with the Habitat Regulations.** In these cases, applicants must first apply to the Council setting out details of their proposals and provide sufficient information to enable the Council to make a Habitats Regulation Assessment and to assess the application. The scope of the information required should be informed by the Ecological Appraisal (see paragraphs 4.9 to 4.16 of this SPD). These requirements are set out in Regulations 73-76 of the Habitats Regulations.

#### Prior Notification and/or Approvals for Demolition

- 4.41 Under national legislation, some forms of ‘permitted development’ right are accompanied by a requirement to apply to the Council for prior approval of specified details of the proposed development. In the case of demolition works the applicant has to submit a method of demolition and any proposed restoration of the site. When submitting applications for prior approval and/or approval for demolition consent, applicants may also be required by St Helens Council to submit an Ecological Appraisal. The required scope of the Ecological Appraisal will in most cases be limited to survey for bats and breeding birds such as Swallows, House Martins, Swifts and Barn Owls. Appraisals should be proportionate to the nature and scale of development proposed and the development site.
- 4.42 Any method of demolition statement that is required to be submitted must be informed by the outcome of the surveys for bats and breeding birds. The required scope of a bat survey is dependent on the type of building, location, use, structural condition and surrounding vegetation, particularly trees and hedgerows. Initially, a preliminary roost assessment is required. This involves the categorisation of any building(s) and/or tree(s) on the site for their potential to provide bat roosts. Dependent on the outcome of the preliminary roost assessment further bat surveys may be required. Surveys should follow best practice guidance<sup>18</sup> and any deviation from the guidance must be fully explained in the survey report in accordance with BS42020:2013.
- 4.43 When the ecological surveyor is on site undertaking the bat survey, evidence for use of the buildings for breeding birds should also be recorded.

---

<sup>18</sup> “Bat Surveys for Professional Ecologists: Good Practice Guidelines” (3<sup>rd</sup> Edition) Collins J.(ed.) 2016, The Bat Conservation Trust ISBN-13-978-1-872745-96-1.

- 4.44 A method of demolition statement should take the information from the surveys into account in scheduling the timing and the method of the demolition work. For example, work may need to be restricted to a winter period or certain building features may need to be the subject of a `soft-strip'<sup>19</sup> by hand.

---

<sup>19</sup> Soft-strip includes removal by hand of those features identified as having bat roost potential; this can be external features such as roofs, tiles, soffits, fascias, porches and internal features such as insulation and timbers.

## Appendix A: Glossary

Biodiversity	The variety of all living things.
Biodiversity Duty	A statutory duty on all public organisations to consider the impact of their decisions and actions on biodiversity.
Compensation	The protection of biodiversity assets should be achieved through avoidance and mitigation wherever possible. Compensation, the next step in the hierarchy, should only be used in exceptional circumstances and as a last resort to address residual impacts, which cannot be avoided or mitigated.
Ecological Appraisal	An appraisal of ecological features, their value and importance. This includes identification of the impacts, together with proposals for avoiding impacts, mitigating impacts or compensating for impacts.
Ecological Network	Ecological networks consist of sites containing diverse areas of habitat that support species and have ecological connections between them, which enable species to move. Ecological networks assist in making biodiversity more resilient to climate change.
European Protected Species	Plants and animals legally protected in the UK and Europe. They are listed under Annex II and 1V of the Habitats Directive.
Functionally Linked Land	Land that provides a support function for the qualifying species of the Special Protection Areas. In St Helens this is the Agricultural land.
Habitat Regulations	The Conservation of Habitats and Species Regulations 2010, as amended. This implements the Habitats Directive in UK law. The Regulations set out the steps to consider when making decisions that affect internationally important sites and European Protected Species.
Liverpool City Region	The Liverpool City Region (LCR) is the geographical, economic and political area centred on Liverpool, which also includes Knowsley, Sefton, St Helens, Wirral and

	Halton.
Mitigation	Mitigation measures minimise the negative impacts of a plan or project during or after its completion.
Nature Improvement Area	Nature Improvement Areas are large discrete areas that are intended to deliver a step change in nature conservation, offer significant improvements for wildlife and people through the sustainable use natural resources, provide opportunities to restore and create wildlife habitats and enhance connectivity between local sites.
Priority Habitats	These are Habitats of Principle Importance in England and are listed in Section 41 of the Natural Environment and Rural Communities Act 2006.
Priority Species	These are Species of Principle Importance in England and are listed in Section 41 of the Natural Environment and Rural Communities Act 2006.
Qualifying Features	Habitats or Species, which meet selection criteria for internationally important nature, sites (Special Areas of Conservation, Special Protection Areas and Ramsar Sites). Details of qualifying features can be found in the conservation objectives of each site.
Ramsar Site	A wetland of international importance classified under the 1971 Ramsar Convention which is given the same protection as European nature sites.
Site of Special Scientific Interest	An area designated for nature conservation under The Wildlife and Countryside Act 1981.
Special Area of Conservation	European designated sites classified under the Habitats Directive, which form part of the Natura 200 network of sites.
Special Protection Area	European designated sites classified under the Birds Directive, which form part of the Natura 200 network of sites.
UK Protected Species	Listed on Schedules 1, 5 and 8 of the Wildlife and

	Countryside Act 1981.
--	-----------------------



## Appendix B: Local Wildlife and Geology Sites in St Helens Borough

Table B1 – Local Wildlife Sites

LWS No.	Local Wildlife Site	O/S Grid Reference	Citation Summary
LWS1	Rainford Brook	SJ496987	A reach of brook which supports water voles.
LWS2	Bawdy Brook	SD544007	A reach of brook which supports water voles.
LWS3	Ponds, e of Birch Wood	SD513026	A group of ponds by a small patch of woodland. This site contains a number of wetland and woodland habitats. Flora includes both wetland and woodland species including English Bluebell.
LWS4	Downham Walk, pond and marsh	SD592022	A large pond surrounded by marsh and willow and alder scrub on the boundary of the Borough. The site contains a number of nationally, regionally and locally important wetland plants. The woodland scrub contains English Bluebell.
LWS5	Sidings Lane, Rainford	SD463020	Sidings Lane Local Nature Reserve is a former colliery site, which is now dominated by birch woodland but also supports grassland and pond habitats. The site contains a large number of locally rare plant species and is important for Pippistrelle bats.
LWS6	Shaley Brow, Billinge	SD517018	A long linear woodland along a stream valley. The woodland is dominated by oak, ash and sycamore and with a rich field layer of English bluebell, wood sorrel and dogs mercury.
LWS7	Nursery Plantation	SD465015	A coniferous plantation dominated by Scots Pine which provides habitat for a population of Red Squirrels.

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
LWS8	Randles Brook	SD473013	A reach of brook which supports water voles.
LWS9	Holiday Moss, Rainford	SD496014	A restored landfill site with relict lowland raised mire. Restoration has included the creation of a variety of woodland, grassland and wetland habitats.
LWS10	Shaley Brow, Brownlow	SD517013	A long linear woodland around the line of three small stream valleys. The woodland is dominated by oak, with a ground flora which includes English bluebells, moschatel, ransoms and celandine.
LWS11	Billinge Beacon	SD525013	This site comprises of the summit of the beacon and the restored landfill site. The summit of the beacon supports the only example of upland acid grassland in St. Helens and contains a habitat which is both nationally and regionally important. Oil Beetle has also recently been recorded on the beacon. The restored landfill is large neutral grassland site which is becoming increasingly important for bird species, moths and brown hare.
LWS12	Camholes Wood	SD456011	Plantation woodland on peat dominated by birch, with a dense understory of rhododendron. This woodland supports a population of red squirrels.
LWS13	Wooded Valley at Billinge	SD525010	A steep-sided wooded valley containing both woodland and wetland habitats. The site contains species of both national and local importance including English bluebell.
LWS14	Ashgrove Farm, wood	SD529009	A woodland surrounding a watercourse and pond. This site comprises of a range of woodland and wetland habitats, which are

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
			nationally and regionally important.
LWS15	King's Moss Plantation	SD498007	A coniferous woodland on lowland raised bog. This site contains a range of habitats including woodland, marshy grassland marginal vegetation. The modified bog habitat is immediately adjacent to the plantation. The site contains both regionally and locally important species.
LWS16	Barton Clough, Billinge	SD544007	Ancient semi-natural woodland which runs along the steep banks of a brook. The woodland is predominantly mature oak woodland with willows and alder in the damper sections by the brook. The woodland contains the only known badger sett site in St. Helens.
LWS17	Disused Depot Rainford	SD460003	This depot contains a range of habitats including woodland, grassland and wetland habitats. The site provides habitat for Red squirrels and contains several nationally and locally uncommon plant species
LWS18	Twelve Yarder Pits, Pond and Wood	SD518001	Two linked ponds surrounded by woodland that have been in their present form since 1849. The site contains a number of habitats including woodland and both marginal and wetland habitats. The site contains both nationally and regionally important species.
LWS 19	Mine Spoil, West of Weathercock Hill	SJ544999	A disused mine tip which is now being colonised by plants. The spoil tip contains a variety of ephemeral, woodland and wetland habitats.
LWS 20	Birchley Wood	SJ522997	Mature woodland containing a number of ponds and wetland habitats. The woodland

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
			supports a diverse ground flora including English bluebell and a number of regionally and locally important species.
LWS 21	Rainford Old Delph & Crank Caverns	SJ510995	A broad leaf woodland site above a cave system. The woodland includes several ancient woodland plant indicator species. The cave system is part of the largest known bat roost in north Merseyside.
LWS 22	Fir Wood	SJ517996	Mixed woodland, containing ponds, a stream and associated wetland habitats. The woodland provides habitat for English bluebell and a number of other locally rare species.
LWS 23	Black Brook, Kings Moss	SJ517996	A stretch of Black Brook which provides habitat for Water voles.
LWS 24	Brown Birches	SJ455987	A mixed deciduous and coniferous plantation. This woodland is an important site for both breeding birds and red squirrels. This site abuts a Local Site in Knowsley.
LWS 25	Hill Top Farm Woodland	SJ488987	A Scots pine dominated plantation which provides important bird breeding habitat
LWS26	Small Wood, North-East of Fenny Bank	SJ508985	Predominantly broad leaf woodland with some Pine plantation within it. A diverse mix of woodland, grassland and wetland habitats are present.
LWS 27	Goyt Hey Wood	SJ529984	Ancient semi natural woodland on the steep banks of a stream. The woodland is dominated by oak and supports a rich ground and bryophyte flora including a large number of locally rare species and extensive carpets of Bluebells. The

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
			woodland is an important breeding bird site.
LWS 28	Hollins Hey Woods	SJ532983	Broadleaf woodland adjacent to Carr Mill Dam and contiguous with Goyt Hey Wood. The woodland provides habitat for Willow tit and Purple Hair-streak.
<b>LWS 29</b>	<b>Berrington's Lane</b>		<b>Deleted</b>
LWS 30	Plantation Copse and Ponds, Haydock	SJ572982	A small mixed deciduous copse with ponds and rough grassland. The site contains a number of nationally, regionally and locally important habitats and plants. The ponds and surrounding habitats provide habitat for Great Crested Newts.
LWS 31	Haydock Cross	SJ573981	Great crested newts were translocated to this site in 1998. Monitoring of the site has shown that the translocated Great crested newt population has established and is being maintained on this site. In addition, this is a botanically diverse site with a number of nationally, regionally and locally important habitats.
LWS 32	Mossborough Moss woodland and land	SJ461982	A mixed plantation with Scots Pine and an understorey of Rhododendron. The woodland is an important breeding site for woodland birds.
LWS 33	Moss Plantation	SJ482981	A mixed deciduous and coniferous plantation on mossland, which provides habitat for Red squirrels and contains regionally and locally rare habitats and locally rare species.
LWS 34	Carr Mill Dam	SJ526981	Originally, a mill dam but enlarged in the 1820s to provide water to the St. Helens Canal system. The dam supports a range of aquatic and marginal habitats and

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
			species as well as acid grassland and woodland.
LWS 35	Woodland beside Old Garswood Railway	SJ531981	A broadleaf woodland formerly part of Old Garswood Park. The woodland is dominated by oak with a diverse ground flora including English bluebell. Wet and marshy areas provide habitat for a number of locally rare species.
LWS 36	Clinkham Wood	SJ515980	This broadleaf deciduous woodland managed as a community woodland site. The woodland contains a diverse range of habitats including a stream and rock outcrops which support a range on nationally, regionally and locally important species including a number of bryophytes.
LWS 37	Brook Wood	SJ500979	A broadleaf deciduous woodland with containing a pond and wetland habitats. The woodland is notable for the presence of English bluebell.
LWS 38	Haydock Park Woods	SJ592977	Broadleaf deciduous woodland dominated by Oak and Sycamore which contains a rookery and provides a roost site for Pipistrelle bat.
LWS 39	Windle Park Wood	SJ505978	A broadleaf woodland dominated by sycamore, oak and beech with ponds and a stream.
LWS 40	Kilbuck Lane Grassland		Deleted
LWS 41	Emma Wood	SJ463975	A mixed deciduous / coniferous plantation containing a number regionally and locally important habitats as well as English Bluebell. The woodland is an important site for breeding birds.

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
LWS 42	Windlehurst Sedgemarksh	SJ508973	The only example of a sedgemarksh in St. Helens. The site has not received any management in the last 20 years and has formed a wet woodland cover with the sedge marsh intact beneath it.
LWS 43	Glasshouse Close Wood	SJ531972	Ancient semi natural woodland on the banks of the Black Brook and St Helens Canal. The woodland is dominated by acidic oak woodland with alder and willow carr in the lower wetter areas. The woodland supports a diverse flora including English Bluebell as well as a number of regionally and locally important species. In addition, the woodland is a known breeding site for Purple hairstreak butterfly.
LWS 44	Fox Covert, including Cow Hey Dam	SJ588972	A semi-natural woodland and adjacent Cow Hey Dam. The woodland is dominated by oak and sycamore with a ground flora containing stands of English bluebell. The dam has extensive reed beds including Bulrush and Reed canary-grass.
LWS 45	Stanley Bank Meadow, Ponds and Wood	SJ534971	This site forms part of Stanley Bank Local Nature Reserve. The site comprises Stanley Bank Meadow SSSI, the largest area of lowland damp neutral grassland in Merseyside, and Stanley Bank Wood ancient semi-natural woodland. This is a diverse range of habitats and over 200 plant species are supported, a number of which are nationally, regionally and locally important.
LWS 46	Wicken Hedge and Ellams Brook	SJ578971	A woodland surrounding Ellams Brook and associated wetland habitats. The woodland is dominated by a beech and sycamore canopy with a ground flora

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
			including species such as English bluebell, Dog's Mercury and Hairy brome.
LWS 47	Pilkington's Glass Factory Grounds	SJ512970	A diverse range of habitats are present including woodland, wetland and grasslands. Most of the site is underlain by alkali waste material providing ideal conditions for the Southern Marsh Orchid.
LWS 48	Cambourne Avenue Pond	SJ582969	A pond within Sankey Valley Park, which is an important breeding site for dragonfly and damselfly species.
LWS 49	Windlehurst Quarry	SJ504969	An in-filled quarry left to re-colonise. Several sandstone rock exposures remain. Diverse grassland, scrub and wetland habitats are present on the edge of the urban area of the borough.
LWS 50	Windle Brook	SJ482969	A section of Windle Brook which provides habitat for water voles.
LWS 51	Ellams Brook	SJ582969	A stretch of Ellams Brook, which provides habitat for Water voles.
LWS 52	Wood Pit Covert	SJ570967	Woodland, which has regenerated on a spoil heap of the former Wood Pit. The woodland has a diverse range of habitats including acid grassland, ponds and marginal vegetation and supports a large number of locally rare species, particularly bryophytes.
LWS 53	Islands Brow Burgy	SJ522967	The burgy banks formed from the waste material from the glass making industry. The site contains a diverse range of habitats including acid, neutral, sand dune and wetland communities. This site has

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
			high species diversity including a large number of regionally and locally important and rare species.
LWS 54	St. Helens Canal	SJ534967	A disused stretch of the St. Helens canal at the end of the Blackbrook branch. This section of the canal has extensive emergent vegetation and aquatic vegetation dominated by common reed and reedmace.
LWS 55	Haresfinch Bank	SJ520964	A waste tip from the glass industry which has now developed into a diverse site containing a range of acid, neutral and alkaline communities. Due to the diversity of the site a large number of plant species are present including nationally, regionally and locally important species.
LWS 56	St. Helens Canal, South of Haresfinch Burgy	SJ518962	A canalised section of Rainford Brook with good water quality. The north bank and slope are composed of burgy waste from glass manufacture and contain a number of regionally and locally important species including species more usually associated with salt marshes.
LWS 57	Parr Hall Millennium Green	SJ525962	An exceptionally rich and varied marsh and grassland which has existed for at least 200 years. The site consists of both marsh and grassland and the site contains a number of regionally and locally important species. Water voles are also present on this stretch of the St. Helens canal.
LWS 58	Grassland, west of Wagon Lane	SJ545962	An extensive area of unimproved grassland bounded by Wagon Lane on the west and a damp ditch running almost the length of the eastern side. The grassland contains a range of grass and herb species including Northern Marsh-orchid and Greater Burnet-

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
			saxifrage.
LWS 59	Castle Hill	SJ595962	A sandstone hill, which is an ancient motte site. The site is predominantly grassland with many orchids. At the foot of the hill a swamp area has developed which is dominated by Reed Canary-grass.
LWS 60	Wood Pit Tip, Grassland	SJ568961	This site has developed around the foot of a disused slag heap and comprises of an extensive area of species rich marshy grassland which surrounds a pond and associated marginal vegetation. The site supports a number of regionally and locally important wetland species.
LWS 61	Cloghe Wood and Grassland	SJ557960	Ancient semi-natural woodland and associated grassland, which runs along the steep banks of Cloghe Brook. The woodland is highly diverse with a stream and associated wetland habitats, including marsh and willow / alder carr woodland. The woodland and grassland contain a number of regionally and locally rare species.
LWS 62	Lyme Pit Tip	SJ565960	An extensive area of grassland which has developed around the foot of a disused slag heap. Both acid and neutral habitats are present. The grassland is species rich with over 200 species recorded including a number of regionally and locally important species.
LWS 63	Mill Brook 04	SJ487958	A continuation of Mill Brook. This section of brook provides habitat for Water vole. Good habitat diversity with open flowing water course.
LWS	St. Helens Canal, Broad	SJ542958	This site includes St. Helens Canal and a series of three ponds which support a good

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
64	Oak Basin and Frog Hall		range of marginal and aquatic plants. Diverse acid grassland surrounds the canal. Both the canal and grassland support a number of regionally and locally important plant species.
LWS 65	Ashton's Green Reclaimed tip (Southport St Open Space)	SJ545957	A former colliery site and then a landfill site, this site has now colonised naturally to form acid and neutral grassland. Other habitats on site include woodland and scrub and wetland habitats.
LWS 66	Havannah Flash	SJ548957	A subsidence flash formed in the second half of the nineteenth century. The water quality is good, and the flash has developed rich aquatic and marginal vegetation, with regionally and locally rare species including Rigid hornwort, Spiked water-milfoil and Small sweet-grass.
LWS 67	Newton Lake and Southern Woodland	SJ594957	A large lake within Willow Park with associated swamp habitats and a sandstone outcrop on the eastern shore. The woodland contains one of two known rookery sites within St Helens.
LWS 68	Mill Brook	SJ484956	Fast flowing water course in Eccleston which also provides habitat for Water voles.
LWS 69	Crow Lane Copse	SJ574956	An old clay pit with a partial cover of mature oak plantation. The site contains a mosaic of habitats including acid grassland, ponds and woodland.
LWS 70	Mill Wood, Eccleston	SJ487955	One of the few wet broad leaf woodland sites in St. Helens. Carex riparia present in its only urban site in the borough. Drainage ditches were dug to enable woodland planting to take place possibly in the early

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
			20th century.
LWS 71	Willow Park	SJ593955	Willow Park contains a range of habitats including woodland, neutral grassland, marshy grassland, a stream and marginal vegetation. The park supports a number of nationally and locally important plants including English Bluebell and Ragged robin.
LWS72	Collingwood Road open space	SJ578954	Neutral unimproved grassland and marshy grassland within an area of open space used for informal recreation. The grassland contains a number of regionally and locally important species including, Comfrey and Smooth tare.
LWS 73	Mesnes Park and Stream	SJ588954	This site includes the stream area within Mesnes Park. This site contains a range of habitats including, scrub, neutral grassland and small areas of developing wet woodland beside the stream providing habitat for locally rare species.
LWS 74	Newton Common and Pond	SJ559952	Field ponds with well-developed marginal vegetation. Marshy grassland including remnants of relict heath surrounds the ponds. Previous survey found Great crested newts; however further survey is required to meet amphibian criteria A1.
LWS 75	Sankey Brook	SJ553952	A stretch of Sankey Brook which provides habitat for Water voles.
LWS 76	Eccleston Top Dam	SJ489951	A disused industrial dam providing aquatic habitat for locally rare aquatic species. The dam is surrounded by acid and neutral grassland, both nationally important habitats.

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
LWS 77	Leg O' Mutton Dam and Woodland	SJ491951	A disused industrial dam with aquatic, marsh and marginal habitats. The lake is surrounded by both wet and dry semi-natural woodland providing habitat for nationally, regionally and locally rare plant species as well as a breeding site for a number of damselfly and dragonfly species.
LWS78	Hospital Grounds, Eccleston		Deleted
LWS 79	The Dingle, Newton	SJ565950	A small and rich sedge marsh surviving on the edge of a former sandstone quarry. The site supports populations of marsh orchid as well as plants such as Bog pimpernel and Bristle club-rush. Within the marsh is a small patch of dry heath dominated by heather.
LWS 80	Gillars Green Wood	SJ476948	Naturally regenerating woodland on colliery spoil. The woodland is dominated by birch and oak and with an understorey of English bluebell and other regionally and locally rare species.
LWS 81	Old Joan's Plantation	SJ484948	Plantation woodland dominated by oak, sycamore and English elm including English bluebell. The woodland contains a pond that is developing marginal and wet woodland vegetation.
LWS 82	Grassland, North of Sankey Brook		Deleted.
LWS 83	Grassland South of Towpath, Sankey Valley	SJ567948	An extensive grassland area within Sankey Valley Park which provides important butterfly habitat. Other habitats include swamp and woodland adding to the

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
	Park		diversity of the site.
LWS 84	Eccleston Mere	SJ481947	The mere was a former extraction site for glass works in the area. Swamp is developing at the mere margins as well as alder and willow carr. To the south of the mere is an area of oak dominated woodland.
LWS 85	Red Brow Wood	SJ578947	An ancient semi natural Oak woodland occupying a small valley leading down to St. Helens canal. The woodland has a diverse flora including species such as English bluebell, Ramsons and Wood anemone. Wetland features including standing water and a dry ditch add to the diversity to this woodland.
LWS 86	Newton Brook 05	SJ590947	A section of Newton Brook with adjacent flood plain habitat. This section of the brook is diverse and includes stream, marginal vegetation, scrub and sandstone bank habitats. The site supports a number of nationally, regionally and locally important species.
LWS 87	Eccleston Golf Course, West Ponds	SJ484945	A group of ponds with associated ditches within the rough area of the golf course. The ponds are surrounded by alder dominated scrub and woodland which contains English bluebell.
LWS 88	Mucky Mountains	SJ575945	Woodland East of Wargrave Road.
LWS 89	Woodland East of Wargrave Road	SJ583945	A small stand of mature woodland within the site of a former garden. The site contains a number of habitats including woodland, wetland and hedgerows

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
			contributing to a diverse range of species.
LWS 90	Grassland by Parr Flat	SJ546943	A grassland site containing a mosaic of acid, neutral and marshy grassland. The marshy grassland supports a large number of marsh orchids. Wetland communities are developing where old field drains have become blocked.
LWS 91	Parr Flat	SJ547943	This site is one of the few lowland heath sites in St. Helens. The site is adjacent to Colliers Moss Common LNR. The site supports a number of regionally important and locally rare wetland species such as Adder's-tongue fern.
LWS 92	Ravenhead Ponds	SJ515942	This site is part of the Ravenhead Greenway and consists of two ponds with swamp and marginal vegetation. The site contains a number of regionally and locally important species including several species associated with coastal habitats.
LWS 93	Old Hey Wood	SJ579942	A narrow strip of woodland on steep banks leading down to St. Helens canal with marginal vegetation occurring along the banks of the St. Helens Canal. The site contains stands of English bluebell and is important for bryophytes.
LWS 94	Sales Wood / Gorse Plantation	SJ478941	A broadleaf woodland with several ancient woodland plant indicator species recorded. The woodland is an important breeding bird site.
LWS 95	Alexandra Colliery	SJ501941	This site occupies a disused mine working and spoil heap. A range of habitats have now developed on this site including, acid and neutral grasslands which contain a number of regionally and locally important

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
			species.
LWS 96	Colliers Moss Common Local Nature Reserve	SJ538941	This local nature reserve was designated in 2005 and is the site of disused colliery spoil heap. Remnants of the mossland on which the spoil heap sits remain around the perimeter of the site. A diverse range of habitats has developed on the site including acid and neutral grassland and heath. Whilst lagoons provide wetland habitats and breeding sites for a number of dragonfly and damselfly species.
LWS 97	Gallows Croft	SJ597941	Mature broad-leaved woodland on the banks of a stream. The woodland is dominated by oak and sycamore with ground flora including species such as English bluebell, Creeping-jenny and Moschatel.
LWS 98	Thatto Heath Dam	SJ496939	A disused reservoir with swamp and marginal habitats also used for angling. Notable for the presence of the aquatic plant Hornwort ( <i>Ceratophyllum demersum</i> ).
LWS 99	Prescot Reservoirs Nos 3 & 4	SJ470938	This site comprises of two reservoirs and a disused dry reservoir. The disused reservoir and areas surrounding reservoirs 3 & 4 have now been colonised by a diverse and species rich grassland including species such as, Northern Marsh orchid and Common Spotted orchid.
LWS 100	Thatto Heath Meadow	SJ507937	A remnant meadow system within the urban area. The meadows consist of unimproved grassland with a network of hedgerows. A stream valley runs through

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
			the site.
LWS 101	Sutton Brook	SJ532935	A diverse stretch of Sutton Brook. Much of the diversity is as a result of part industrial use with leblanc waste forming parts of the banks of the brook in sections forming a mosaic of acid, neutral and alkaline grassland. The brook and its banks contain a number of regionally and locally important plant species as well as supporting a population of Water voles.
LWS 102	Sherdley Park and Golf Course	SJ515934	The Victorian designed Sherdley Park includes several areas of relict woodlands and wetlands. The European protected species great crested newt is present, and the site offers an excellent variety of habitats for plants, invertebrates, amphibians and mammals.
LWS 103	Newton Brook 05	SJ590947	A section of Newton Brook providing good habitat for water voles.
LWS 104	Land, West of Gerrards Lane	SJ528930	The site is a surviving section of the valley of Sutton Mill Brook. The site is predominantly unimproved neutral grassland which contains a number of regionally and locally rare species.
LWS 105	Rough Grassland around Sutton Dam Stream	SJ527925	This site contains a mosaic of habitats including neutral grassland, scrub, broadleaf woodland and wetland and marsh areas around Sutton Mill Brook that runs through the centre of the site. The site contains a number of nationally and regionally important species.
LWS 106	Reeve Court Woodland	SJ495924	Diverse range of habitats present including woodlands, wetlands, grasslands and a

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
	(Former Rainhill Hospital)		rock exposure.
LWS 107	Sutton Mill Dam	SJ523923	A water body created by the damming of Sutton Mill Brook. The site contains a number of nationally and regionally important habitats and plant species including the nationally scarce species Tasteless water-pepper ( <i>Persicaria mitis</i> ).
LWS 108	Field, North of Gorsey Lane/Tunstalls Farm	SJ534921	. A group of small agricultural fields with an extensive ditch and hedgerow network. The field is now under Environmental Stewardship and is developing into a species rich meadow including, regionally and locally important species. The ponds and ditches on site provide habitat for water vole and great crested newts.
LWS 109	Ansdell's Wood	SJ505916	A semi-natural oak woodland containing a number of nationally and regionally important habitats including neutral grassland, a pond and marsh. The site contains English bluebell and a number of regionally and locally important species.
LWS 110	Old Mineral Line, Lea Green	SJ513915	A mix of grasslands established on colliery spoil. Scrub has developed since the site was first designated. Recent management work has occurred that has enabled vegetation colonisation to begin again
LWS 111	Dog Kennel Plantation	SJ542913	A mature plantation of beech, oak and sycamore providing an important bird breeding.
LWS 112	Pendlebury Brook	SJ502912	A stretch of Pendlebury Brook which supports a population of Water voles.

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
LWS 113	Parrens Covert	SJ479906	A relict heath with broadleaf woodland and pond. Surrounded by deep ditches with water and suffers from active community uses.
LWS 114	Booth's Wood	SJ547904	Deciduous plantation woodland dominated by Sycamore, Horse chestnut and Oak. A stream and ditch network run through the woodland. The large pond in the south of the woodland is surrounded by rush pasture providing wetland habitat for a number of locally rare wetland species
LWS 115	Blundell Hills Golf Course	SJ486903	A golf course containing a range of habitats including, woodland, scrub, wetlands and hedgerows. These habitats support a high diversity of species and include a number of nationally, regionally and locally rare species.
LWS 116	The Rough, Woodland	SJ491901	A semi-natural woodland dominated by oak and sycamore; the woodland contains abundant stands of English bluebell as well as locally rare plant species.
LWS 117	Whittle Brook	SJ522901	A stretch of Whittle Brook which provides habitat for water voles.
LWS 118	Mersey Valley Golf Course	SJ542893	A golf course containing a number of ponds and hedgerows. The ponds provide habitat for the regionally important species Rigid Hornwort, whilst the hedgerows contain a number of locally rare species.
LWS 119	Clock Face Colliery Country Park pond	SJ536915	A pond within the country park which contains a population of great crested newts. Habitats within the country park will also provide important terrestrial habitat for this population.
LWS	Sutton Manor	SJ 515902	An extensive mosaic of grassland, scrub,

<b>LWS No.</b>	<b>Local Wildlife Site</b>	<b>O/S Grid Reference</b>	<b>Citation Summary</b>
120			woodland and wetland habitats created on a former colliery. The site is owned and managed by the Forestry Commission and has a large expanse of developing plantation woodland intersected by grasslands. The geology of the site means it retains water and a large amount of wetland and marsh present. Water voles have been recorded on site and the site is well populated with bird species.

Table B2: Local Geological Sites

SH1	Windlehurst Quarry	Disused quarry
SH2	Crank Caverns	Quarry and Adits
SH3	Wargrave Quarry (Red Brow Wood)	Disused quarry
SH5	Carr Mill Dam	Disused quarry
SH15	Billinge Plants	Disused quarry
SH19	Billinge Quarry	Disused quarry
SH25	Shaley Brow Quarry	Disused quarry
SH27	Brook, 150m NE of Houghwood Golf Course	Road Cutting
SH28	Brook, 130m NE of Houghwood Golf Course	Stream Section / Waterfall
SH30	Clinkham Wood (N), Mossbank	Disused quarry
SH33	Taylor Park Quarry	Disused quarry

## Appendix C: Priority Species and Habitats

### Priority Species

#### *Annexe II and IV Priority Species in St Helens – international importance*

Great Crested Newt	Common Pippistrelle
Soprano Pippistrelle	Noctule Bat
Daubenton's bat	Brown Long-eared Bat
Common Lizard	Whiskered Bat

#### *Examples of Protected and Priority Species to potentially be found on or near development sites in St Helens - International and National Importance*

Amphibians including Great Crested Newt
Barn Owl
Common Lizard
Water Vole
Bats
Pink Footed Goose
European Eel
Red Squirrel

#### *North Merseyside Biodiversity Action Plan Priority Species in St Helens – local importance*

Corn Bunting	Common lizard
Lapwing,	Great crested newt
Grey Partridge	Bats
Skylark	Bluebell

Water vole	Brown hare
Urban birds	Dragonflies
Song Thrush	Purple Ramping Fumitory.

## Priority Habitats

### *Priority habitats in St Helens –national importance*

Lowland raised bog	Reedbed
Lowland heath	Wet woodland
Lowland meadows	Lowland mixed deciduous woodland

### *BAP Priority habitats in St Helens –local importance*

Canal	Ponds
Field Boundaries	Wet woodland
Urban trees	Lowland mixed broadleaf woodland
Reedbeds	Lowland acid grassland
Urban green infrastructure	Urban grasslands

## Appendix D: Invasive Non-Native Species

Japanese knotweed	Rhododendron
Montbretia	Cotoneaster
Curly pondweed	Japanese rose
Himalayan Balsam	Variegated Yellow Archangel

## Appendix E: Legislation

### *Key legislation relating to biodiversity and nature conservation*

<p><b>The Anti-social Behaviour, Crime and Policing Act 2014:</b> Introduces a means to enforce treatment of invasive species such as Japanese knotweed through a Community Protection Notice.</p>
<p><b>The Conservation of Species and Habitats Regulations 2010:</b> The Regulations provide for the designation and protection of 'European' sites, the protection of 'European protected species' and the adaptation of planning and other controls for the protection of European sites.</p>
<p><b>Natural Environment and Rural Communities Act 2006:</b> This includes the duty on public bodies, including local planning authorities, to have proper regard to conserving biodiversity in the exercise of their functions. It also lists species and habitats of principle importance for biodiversity in England (Priority Habitats and Species).</p>
<p><b>Wildlife and Countryside Act 1981:</b> This covers the protection of wildlife (birds, some animals and plants), the countryside and designation of protected areas including Sites of Special Scientific Interest (SSSIs) that are identified for their plant, animal, geology or physical features.</p>
<p><b>Water Framework Directive:</b> It applies to all surface freshwater bodies (including lakes, rivers, and streams), groundwater, groundwater dependent ecosystems, estuaries and coastal waters out to one mile from mean low water. The overall aim is for all inland and coastal waterbodies to reach good ecological status by 2015.</p>
<p><b>The Hedgerow Regulations 1997:</b> These Regulations protect important hedgerows from being removed. Important hedgerows are identified for biodiversity or historic reasons.</p>

## Appendix F: Information Sources

<p>British Standards Institute BS42020:2013  <a href="http://shop.bsigroup.com/ProductDetail/?pid=000000000030258704">http://shop.bsigroup.com/ProductDetail/?pid=000000000030258704</a></p>
<p>Circular 05/2006  <a href="http://websearch.nationalarchives.gov.uk/20120919132719/www.communities.gov.uk/documents/planningandbuilding/pdf/147537.pdf">http://websearch.nationalarchives.gov.uk/20120919132719/www.communities.gov.uk/documents/planningandbuilding/pdf/147537.pdf</a></p>
<p>Information and data requests via the local environmental record centre, Merseyside BioBank and also details of Local Wildlife Sites and Local Geological Sites information <a href="http://www.merseysidebiobank.org.uk">http://www.merseysidebiobank.org.uk</a></p>
<p>Information on important nature sites from international to local  <a href="http://jncc.defra.gov.uk/page-1527">http://jncc.defra.gov.uk/page-1527</a></p>
<p>LCR Ecological Network  <a href="http://www.activenaturalist.org.uk/lcren/">http://www.activenaturalist.org.uk/lcren/</a></p>
<p>Local Nature Reserve information  <a href="http://www.lnr.naturalengland.org.uk/Special/lnr/lnr_search.asp">http://www.lnr.naturalengland.org.uk/Special/lnr/lnr_search.asp</a></p>
<p>National planning guidance including National Planning Policy framework and all planning practice guidance <a href="http://planningguidance.communities.gov.uk">http://planningguidance.communities.gov.uk</a></p>
<p>Nature Connected-Local Nature Partnership for the Liverpool City Region  <a href="http://www.natureconnected.gov.uk">http://www.natureconnected.gov.uk</a></p>
<p>North Merseyside Biodiversity Action Plan <a href="http://www.merseysidebiodiversity.org.uk">http://www.merseysidebiodiversity.org.uk</a></p>
<p>Planning practice guidance for the natural environment  <a href="http://planningguidance.communities.gov.uk/blog/guidance/natural-environment/">http://planningguidance.communities.gov.uk/blog/guidance/natural-environment/</a></p>
<p>Priority Habitats information <a href="http://www.magic.gov.uk">http://www.magic.gov.uk</a></p>
<p>Site of Special Scientific Interest Information  <a href="https://designatedsites.naturalengland.orf.uk">https://designatedsites.naturalengland.orf.uk</a></p>
<p>UK legislation including Acts of Parliament, Statutory Instruments, Circulars  <a href="https://www.legislation.gov.uk">https://www.legislation.gov.uk</a></p>

## Appendix G: Ecological Survey Calendar

Species	Jan	Feb	Marc	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Amphibian (general breeding)	Red	Red	Green	Green	Green	Red						
Bat roost potential	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Bat activity / emergence/re-entry	Red	Red	Red	Yellow	Green	Green	Green	Green	Red	Red	Red	Red
Bat swarming	Red	Red	Red	Red	Red	Red	Red	Green	Green	Yellow	Red	Red
Bat hibernation	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Green
Birds (breeding)	Red	Red	Red	Yellow	Green	Green	Green	Yellow	Red	Red	Red	Red
Birds (non-breeding)	Green	Green	Green	Green	Red	Red	Yellow	Green	Green	Green	Green	Green
Gt Crested Newt (eDNA)	Red	Red	Red	15 April- 30 June			Red	Red	Red	Red	Red	Red
Gt Crested Newt (traditional)	Red	Red	Red	Green	Green	Red						
Plants (general)	Red	Red	Red	Red	Green	Green	Green	Green	Yellow	Red	Red	Red
Red Squirrel	Red	Red	Green	Green	Yellow	Yellow	Yellow	Yellow	Green	Green	Red	Red
Reptiles	Red	Red	Green	Green	Yellow	Yellow	Yellow	Green	Green	Red	Red	Red
Water vole	Red	Red	Red	Green	Green	Yellow	Yellow	Green	Red	Red	Red	Red
Woodland (Plants)	Red	Red	Red	Green	Green	Yellow	Yellow	Yellow	Yellow	Red	Red	Red
Badger	Yellow	Green	Green	Green	Yellow	Yellow	Yellow	Green	Green	Green	Yellow	Yellow

Optimum time
  Survey may be possible and acceptable
  Survey likely to be unacceptable