



# **GOOD PRACTICE GUIDE**

## **BIODIVERSITY & THE DEVELOPMENT PROCESS IN KINGSTON UPON THAMES**

## TABLE OF CONTENTS

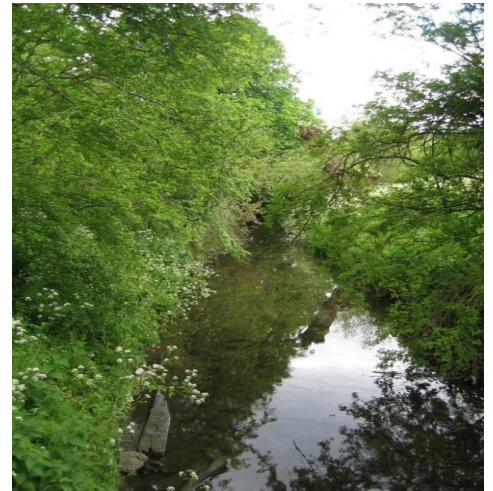
1	<a href="#">Introduction</a>	1
	<a href="#">Biodiversity in Kingston</a>	2
	<a href="#">Nature Conservation Sites in Kingston</a>	3
2	<a href="#">Legislation that Covers Biodiversity</a>	5
3	<a href="#">Guidance for Planners – Applying the Principles</a>	9
4	Guidance for Developers	11
	Stage 1: Surveys and information gathering	11
	Stage 2: <a href="#">Design Stage</a>	19
	Stage 3: Construction	23

## 1. INTRODUCTION

### PURPOSE OF THE DOCUMENT

Biodiversity is the variety of life on earth. The biodiversity of a site or locality is the range of species found there, for example an urban park includes the familiar biodiversity of the blackbird and robin, ducks, butterflies and the trees and grass, as well as many hundreds of species of smaller, more elusive and less familiar organisms such as bats, hoverflies, molluscs and fungi. On the other hand, a site that is identified for nature conservation has habitats that support a range of specific species associated with it, not found beyond the habitat.

New developments, large and small, can have a significant effect on Kingston's wildlife and on the ability of people to experience and enjoy nature. Planners and developers should aim to protect and enhance biodiversity in its widest sense, from the sourcing of construction material to the localised impact on nationally threatened species. Even where there are no significant habitats or protected species present on a site, biodiversity is still an important consideration. All new development should contribute to the enhancement of biodiversity and create habitat wherever possible, from small measures such as installation of a nest box to more comprehensive actions such as design of a fully integrated ecological landscape. This Good Practice Guide (GPG) aims to ensure both new developments and existing buildings make the most of opportunities to promote biodiversity and to maximise its contribution to people's quality of life.



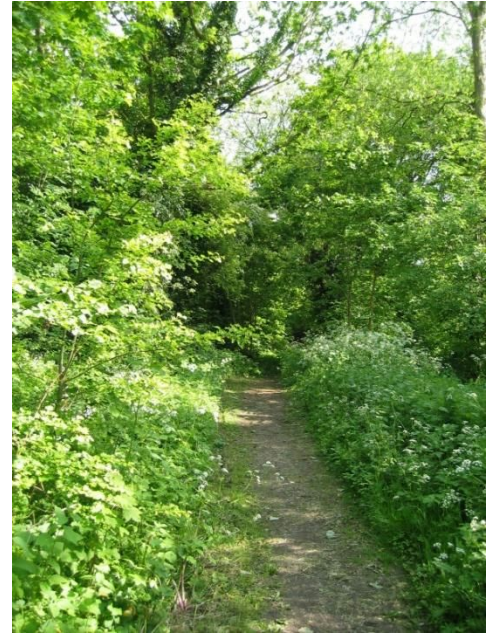
**The guiding principle of the Kingston Biodiversity Good Practice Guide is to allow no further net loss of biodiversity and achieve positive gain.**

### **WHO NEEDS TO KNOW?**

The purpose of this GPG is to guide all those involved with planning applications, including developers, local residents, planners and councillors about the planning process and its implications with regard to biodiversity. The guide will help those involved to make informed decisions which contribute to the maintenance and enhancement of biodiversity in Kingston.

In Section 4 of this document is a biodiversity ‘checklist’ which is aimed specifically at different groups of people who become involved in the planning process. For example:

- Developers
- Householders
- Development Management Planners
- Building Control
- Highways and Transportation Officers



## Biodiversity in Kingston

In Kingston we have a characteristic and unique mix of habitats and species that reflect the Borough's history and culture. These habitats are found on sites that are remnants of semi-natural countryside and/or farmland that have been left during development of the surrounding area. They have become absorbed into the urban setting and act as refuges for both common and rare species. Parks, woodland, meadows, green corridors and private gardens are valuable because they form part of the ecological integrity of the environment in the urban and suburban context.



The majority of the species found on sites are well adapted to the urban environment. They are mobile, tolerant of disturbance and have no specialised habitat requirements but others are susceptible to change because they have very specific requirements. A few are intolerant of human disturbance.



There are 39 Sites of Importance for Nature Conservation and 9 Nature Reserves in the borough of Kingston (See the map on page 3 and Table 1 and 2 for a list of all SINC and Nature Reserve sites in the borough). Some species found on these sites are rare in Kingston such as the pyramidal orchids found on a fragment of old meadow in Nigel Fisher Way, Chessington, or the swaths of loosestrife and meadowsweet found on the ancient Malden Meadow near the Hogsmill River in Surbiton, not recorded anywhere else in the borough. Others are important examples of quality or relict habitats such as traditional field system and ancient species-rich hedgerows of Tolworth Court Farm Fields Local Nature Reserve.

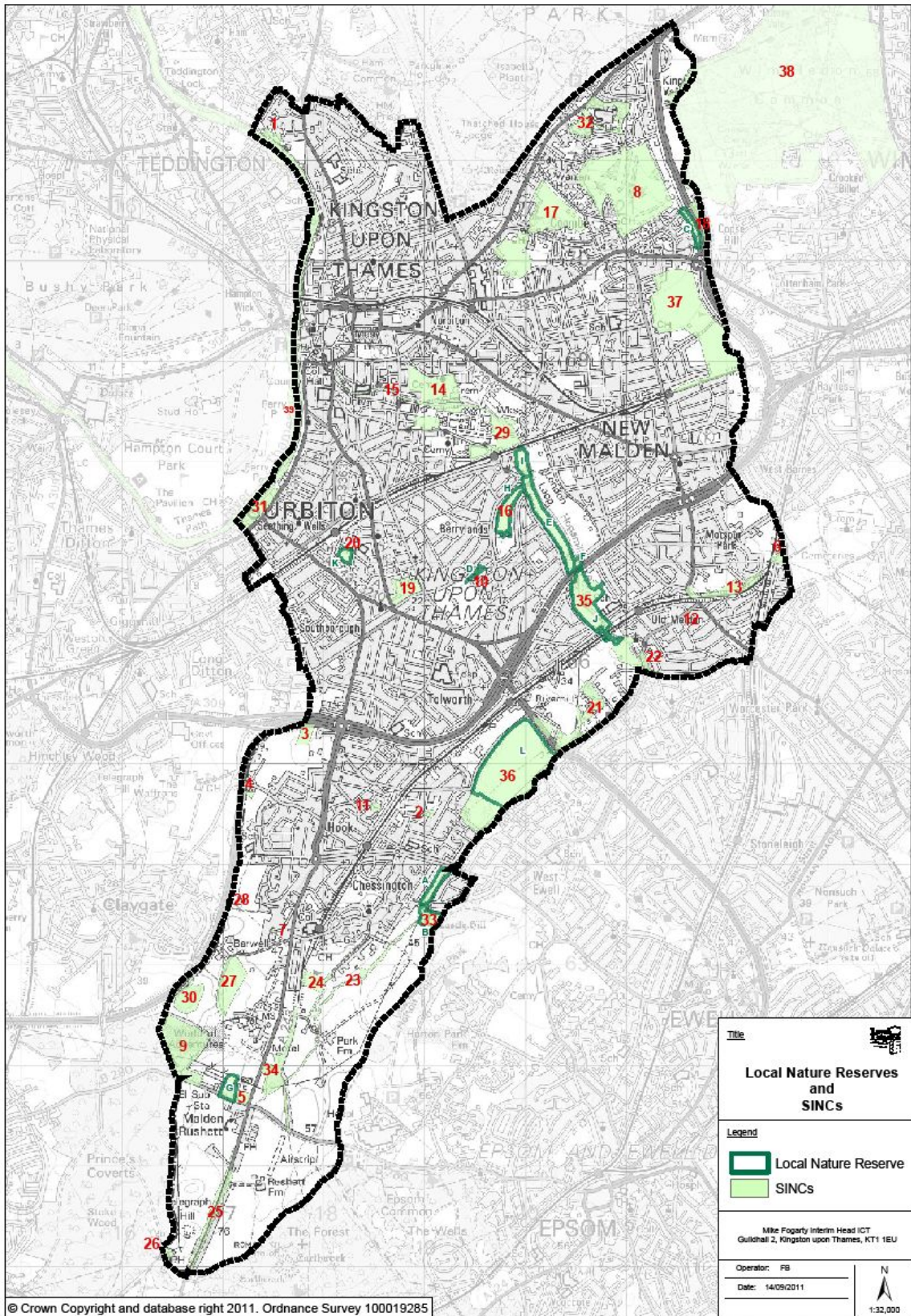
Kingston has 9 of the priority and important habitats and 9 of the priority and important species identified in the London Biodiversity Action Plan. Please refer to [www.lbp.org.uk](http://www.lbp.org.uk)



The key to conserving Kingston's biodiversity is by the protection and enhancement of wildlife habitat, ultimately achieved through planning policies. The Core Strategy Policies CS 3 and DM 6 on biodiversity are based on the 'key principles' in PPS 9 and draft NPPF guidance on Natural Environment. The policy seeks to guide development so that it:

- Conserve or enhance biodiversity and geological conservation interests.
- Avoids adverse impacts on important biodiversity resources, secures appropriate mitigation and compensation where harm cannot be avoided for reasons that outweigh nature conservation interests.
- Guide the achievement of appropriately located biodiversity enhancements.

# Nature Conservation Sites in Kingston



<b>Site ID</b>	<b>Table 1 SINC Sites</b>
<b>1</b>	Royal Park Gate Open Space
<b>2</b>	Mount Road Open Space
<b>3</b>	Kelvin Grove Allotments
<b>4</b>	Clayton Road Wood
<b>5</b>	Jubilee Meadows
<b>6</b>	Beverley Brook in Kingston
<b>7</b>	The Meadowlands Orchid Reserve
<b>8</b>	Coombe Hill Golf Course
<b>9</b>	Sixty Acre Wood and Jubilee Wood
<b>10</b>	Edith Garden Allotments
<b>11</b>	Causeway Copse
<b>12</b>	Old Malden Pond
<b>13</b>	Manor Park
<b>14</b>	Kingston Cemetery
<b>15</b>	Hogsmill River in Central Kingston
<b>16</b>	Raeburn Open Space
<b>17</b>	Coombe Wood Golf Course
<b>18</b>	Coombe Wood
<b>19</b>	Fishponds
<b>20</b>	Oakhill, "The Woods" and Richard Jefferies Bird Sanctuary
<b>21</b>	Riverhill House
<b>22</b>	The Leyfield (or Old Malden Common)
<b>23</b>	Bonesgate Stream
<b>24</b>	Green Lane
<b>25</b>	Rushett Farm, Rushett Common & Telegraph Hill
<b>26</b>	World's End
<b>27</b>	Winey Hill
<b>28</b>	The Grapsome
<b>29</b>	Hogsmill Valley Sewage Works and Hogsmill River
<b>30</b>	Barwell Estate Lake
<b>31</b>	Seething Wells Filter Beds
<b>32</b>	Kingston University, Kingston Hill
<b>33</b>	Castle Hill and Bonesgate Open Space
<b>34</b>	Chessington Wood
<b>35</b>	Hogsmill Valley
<b>36</b>	Tolworth Court Farm Fields and Medieval Moated Manor
<b>37</b>	Malden Golf Course and Thames Water Pipe Track

<b>38</b>	Wimbledon Common and Putney Heath
<b>39</b>	The River Thames and Tidal Tributaries

<b>Site ID</b>	<b>Table 2 Nature Reserves</b>
<b>A</b>	Bonesgate Local Nature Reserve
<b>B</b>	Castle Hill Local Nature Reserve
<b>C</b>	Coombe Hill Wood Local Nature Reserve
<b>D</b>	Edith Gardens Local Nature Reserve
<b>E,F,I , J</b>	The Hogsmill River Park (comprising of Elmbridge Open Space Local Nature Reserve <b>(e)</b> , Hogsmill Wood Local Nature Reserve <b>(f)</b> , Rose Walk Local Nature Reserve <b>(i)</b> and Southwood Open Space Local Nature Reserve <b>(j)</b> )
<b>G</b>	Jubilee Wood Local Nature Reserve
<b>H</b>	Raeburn Open Space Local Nature Reserve
<b>K</b>	The Wood & Richard Jeffries Bird Sanctuary Local Nature Reserve
<b>L</b>	Tolworth Court Farm Fields Local Nature Reserve



## Section 2: Legislation that covers Biodiversity

International
<p><b>Rio Summit 1992:</b>                      In 1992 the UK was one of over 150 countries that signed up to the Convention of Biological Diversity at the Earth Summit in Rio de Janeiro. This convention importantly required countries to develop national strategies for the conservation of biological diversity and sustainable use of biological resources. The convention was drawn up in recognition of significant declines in wildlife across the globe.</p>
<p><b>EU Biodiversity Strategy:</b>                      As signatory to the CBD the European Union has set itself targets to tackle biodiversity loss. The EU admitted that the 2010 target to halt biodiversity loss had not been achieved and cites poor implementation of legal measures, poor integration with other EU sectors, inadequate funding, insufficient data, and poor communication as reasons for failure. However although the target was not achieved many important projects and frameworks were implemented under this strategy and the EU has renewed its commitment to biodiversity and set itself a more ambitious target for 2020 which includes restoring degraded habitats. EU Biodiversity post 2010 target - 'halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss'.</p>
<p><b>EU Birds and Habitats Directives &amp; Natura 2000 Network:</b>                      As part of its biodiversity strategy the EU has developed binding legal instruments which include the Birds and Habitats Directive (a list of species and habitats which must be conserved) and a network of sites across Europe (the Natura 2000 Network) to conserve them. The Directives and the Natura 2000 network have great potential for conservation and restoration of species and habitats and provision of ecosystem services. Sufficient funds must be committed by the EU and member states to achieve this.</p>
National
<p><b>Countryside and Rights of Way Act 2000:</b>                      Section 74 states that 'It is the duty of [Government] in carrying out...its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biological diversity in accordance with the Convention' (on Biological Diversity following the Rio Earth Summit in 1992). Section 74 also contains a list published by the Secretary of State for Environment, Food and Rural Affairs of habitats and species that are of principal importance to biodiversity conservation in England.</p>
<p><b>Natural Environment and Rural Communities Act 2006</b>                      Section 40 of the NERC Act states that:                      'Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Where conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat'. Detailed information about the implications of the NERC Act for local authorities has been produced nationally.</p>
<p><b>Planning and Compulsory Purchase Act 2004</b>                      Section 38 indicates that determination of planning applications should be in accordance with the policies in the development plan. In Kingston this is currently the Local Development Framework. This contains policies for the protection of wildlife and all new development should accord with these policies.</p>

**Circular 6/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System**

This circular provides administrative guidance on the application of the law to planning and nature conservation. It complements PPS 9 and its accompanying Good Practice Guide and the draft NPPF guidance on Natural Environment.

**Planning Policy Statement 9- Biodiversity and Geological Conservation and draft NPPF on Natural Environment**

PPS 9 and draft NPPF on Natural Environment sets out the government’s national planning policies on protection of biodiversity and geological conservation through the planning system.

PPS 9 and draft NPPF guidance on Natural Environment also includes information on how biodiversity should be handled through the planning system and highlights the importance of international, national and local sites for nature conservation.

**Planning for Biodiversity and Geological Conservation: A Guide to Good Practice**, March 2006. The companion guide to PPS 9 and the Government Circular 6/2005.

**Working with the Grain of Nature (2011):** A Biodiversity Strategy for England. Aims to ensure that planning, conservation, regeneration and development has minimal impacts on biodiversity and enhances it wherever possible. The document sets out a number of key principles to be considered in development plan policies, including:

- use of up-to-date information to underpin plan policies
- plan policies should aim to maintain, restore and enhance or add to biodiversity and geological conservation interest
- spatial distribution of development should take a strategic approach to the conservation, enhancement, and restoration of biodiversity and geology
- policies should promote a design approach that incorporates beneficial biodiversity and geological features within development
- schemes where the principal objective is to conserve or enhance biodiversity and geological interest should be permitted

**Regional**

**London Plan: Spatial Development Strategy for Greater London (July 2011)**

The London Plan: is the strategic plan setting out an integrated social, economic and environmental framework for the future development of London, looking forward 15-20 years.

London Plan Policy 7.19 Biodiversity and access to nature states that : The Mayor will work with all relevant partners to ensure a proactive approach to the protection, enhancement, creation, promotion and management of biodiversity in support of the Mayor's Biodiversity Strategy. This means planning for nature from the beginning of the development process and taking opportunities for positive gains for nature through the layout, design and materials of development proposals and appropriate biodiversity action plans.

**The Mayor Biodiversity Strategy**

The production of a Biodiversity Strategy is a statutory requirement of the Mayor of the Greater London Authority, under the Greater London Authority Act 1999. The Biodiversity Strategy `Connecting with London’s Nature’ (July 2002) highlights London’s wildlife habitats and rare species. It sets out policies, proposals and the Mayor’s vision for London. The document also sets out how this strategy compliments the

Mayor’s other strategies, including the ‘London Plan (Spatial Development Strategy)’. The Biodiversity Strategy goes towards “establishing a London wide framework for maintaining London’s diversity of wildlife, as part of an integrated set of strategies to achieve sustainable economic growth and raise the quality of life for London’s seven million residents.”

One of the key objectives of the Mayor’s Biodiversity Strategy is to ensure that all Londoners have ready access to wildlife and natural green spaces. This is particularly important where there is a shortage of green space and in areas for regeneration. Access can be improved by making places more attractive and safer, enhancing or creating new wildlife habitats and opening up access to existing habitats. Wherever appropriate, new development should include new or enhanced habitat, or design (such as green roofs) and landscaping that promotes biodiversity, and provision for their management.

## Local

Kingston Local Development Framework’s Core Strategy (As Intended to be Adopted April 2012) includes a range of policies (CS3, DM 5 DM 6, CS 4 and DM7) on nature conservation. In particular, CS3 and DM 6 sets out the Council’s policy on biodiversity:

### Core Strategy Policies

**CS 3 :** The Council will protect and improve Kingston’s valued natural and green environment by:

- a. Seeking to ensure that residents have access to an interconnected network of safe, well managed and maintained areas of Open space through the implementation of: The South West London Greenways Strategy; Kingston’s Green Spaces Strategy; Parks Management Plan and Annual Implementation Plans
- b. Protecting Kingston’s open space network from inappropriate development through its open spaces designations: Green Belt, Metropolitan Open Land (MOL), Thames Policy Area, Sites of Importance for Nature Conservation (SINCs), Local Nature Reserves, Local Open Space; School Open Space; Green Corridors, Green Chains and Allotments, as shown on the Proposals Map
- c. Facilitating regeneration, infrastructure upgrades and environmental improvement to the Hogsmill Environs
- d. Incorporating appropriate elements of public open space into new developments and/or making a financial contribution to improving existing open spaces, with additional facilities and better management to Green Flag standards
- e. Promoting the management of biodiversity in light of the threats arising from climate change and future development growth, by working in partnership with a range of organisations on projects to protect and enhance Kingston Open Space Network, which will not only provide increased wildlife habitats but will also link wider parts of Kingston, allowing easier movement and reducing isolation of habitats
- f. Protecting and enhancing Kingston’s playing fields and ensuring that opportunities for extension of existing provision or for new recreation, children’s play and sports facilities be encouraged, especially those that meet identified needs

**DM 6:** The Council will:

- a. Ensure new developments protect and promote biodiversity as part of sustainable design, through the inclusion of sustainable drainage, tree planting, soft landscaping, habitat enhancement and/or improvement, green roofs and new or improved semi-natural habitats, where appropriate.

- b. Require an ecological assessment on major development proposals, or where a site contains or is next to significant areas of habitat or wildlife potential. This should be completed before design work or submission of the planning application.
- c. Ensure that new development does not result in a net loss of biodiversity and where appropriate should include new or improved habitats and provision for natural and semi-natural public green space, as set out in the Planning Obligations SPD or Community Infrastructure Levy charge.

### Green Spaces Strategy

The Green Spaces Strategy 2015-2021 (awaiting adoption by CYL in June 2015), is a key step towards protecting and improving Kingston's green spaces. It provides a vision and objectives for how the Council would like to see green spaces planned and managed. It is intended to help secure attractive, safe and easily accessible public open spaces for all to enjoy.

The Green Spaces Strategy covers green spaces that are freely available to the public for informal recreation activities such as walking, playing and relaxing. It includes green spaces that are managed specifically for recreation, such as the parks, and other green spaces which are more informally managed or are managed for wildlife.

In 1993 the London Ecology Unit surveyed the borough primarily to compile a database of all London's habitat. This data was used to identify Sites Important for Nature Conservation for designation by the council. This advises the planning process and ecological land management of the sites. The information is documented in Nature Conservation in Kingston upon Thames Ecology Handbook 18. The open space and habitat audit was updated in 2006 by the GLA Biodiversity Unit as part of the rolling programme across London.

All Kingston's ecological data is held by Greenspace Information for Greater London (GIGL). The record centre aims to collate and manage all data for London's green (and brown) space and disseminate it to all of the GIGL partners in London who can then use that data within their work. GIGL is set up according to the guidelines produced by the National Biodiversity Network, a partnership of many of the organisations producing or using biodiversity information in the UK.

**Table 3: Planning Policy Context**

## Section 3: Guidance for Development Control

The guiding principle of the Kingston Biodiversity Good Practice guide is to allow no further net loss of biodiversity and achieve positive gain, this is in keeping with Core Strategy Policy CS 3 and DM 6, planners can achieve this by:

<b>Minor Application</b> <b>Householder Proposals, Listed Building Consents, Change of Use</b>
<ul style="list-style-type: none"> <li>● Most householder applications involve only minor alterations. Make applicants aware of Good Practice Guide.</li> <li>● Further investigation only required if the proposal involves:                             <ul style="list-style-type: none"> <li>○ roofing or roofing works</li> <li>○ demolition (full or partial)</li> <li>○ damage to, or loss of, habitat features such as ponds, hedgerows and trees</li> </ul> </li> <li>● If so <b>check</b> for:                             <ul style="list-style-type: none"> <li>○ bat roosts or bird breeding sites which will be affected</li> <li>○ great crested newts in ponds, TPOs, hedgerow regulations</li> <li>○ Mitigation and/or compensation will be needed. Consult Natural England regarding effects on great crested newts and bats.</li> </ul> </li> <li>● <b>Work Timing</b> – ensure works are carried out at the appropriate time of year to avoid disturbance to species. Please see table 10 on page 18 for Guidance on Appropriate Survey Timing. Any disturbance may be in contravention of national or European law. It is illegal to disturb nesting birds under the Wildlife and Countryside Act 1981. The breeding season lasts from late February to early August.</li> <li>● If loss of habitat features is unavoidable, it is reasonable to request replacement habitats e.g. by including bird boxes or bat ‘bricks’ and ‘shuttering’ in the new design. This can be attached as a <b>condition</b>.</li> </ul>
<b>Major Application</b> <b>Housing and Other Built Development</b>
<p><b>1. SURVEY - information is vital</b></p> <ul style="list-style-type: none"> <li>● Ensure adequate survey data initially. The level of detail will vary according to the size of the development and the habitats and species concerned.</li> <li>● Some developments require an environmental Impact Assessment under the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. Even permitted development can have a significant impact on conservation interests and may require an E.I.A.</li> <li>● Guidance for developers and details of the survey information required can be found in section 4 on page 11 of this document.</li> <li>● Further advice is obtainable from the organisations listed on page 19.</li> </ul>

## **2. PROTECT - existing habitats and species**

- Avoid adverse impacts on designated sites
- Ensure that statutorily protected habitats and species are preserved.
- Site layout and design should retain existing habitats and features of benefit to wildlife, including London Biodiversity Action Plan habitats and species. As part of this, the landscaping scheme should be provided prior to the planning decision.
- It is important to keep features in context rather than as an isolated fragment, hence wildlife corridors and linking habitats are encouraged.

## **3. MITIGATE - against potentially adverse effects**

- Minimise damage to habitats and species wherever possible. Use a planning condition to require a mitigation strategy.
- Natural England provides guidance on the treatment of protected species. Some operations may require a licence.
- Use planning conditions to ensure works are carried out at the appropriate time of year to avoid disturbance to species (See table 10 on page 18). Any disturbance may be in contravention of national or European law. The nesting season extends between late February and early August.

## **4. ENHANCE - existing habitats and create new ones**

- Planners should be proactive at pre-application stage in enhancing habitats and creating new habitats where appropriate, in accordance with London Plan Policy 7.19 and 7.21

## **5. COMPENSATE - where damage is unavoidable**

- Use planning conditions and agreements to ensure re-creation of habitat on or off-site at the expense of the developer.
- A financial contribution to management of nearby existing sites, through a commuted sum, can be requested. This is especially relevant where the development could lead to increased pressure on those sites (e.g. noise and disturbance through increased amenity use of the site).

## **6. MONITORING AND MANAGEMENT**

- Provision must be made for the appropriate management of retained features and of new or enhanced habitat.
- The developer should monitor the site, particularly the establishment of new or enhanced habitat and to ascertain any effects on wildlife during or after works.
- Management should be ensured for as long as possible, initially through a 5 year management plan with the developer. Options for long term management include an agreement with the Wildlife Trust, nature conservation groups, the relevant housing association or local residents group or the local authority itself. A commuted sum for management is generally desirable and can be secured through planning obligations. The London Wildlife Trust can provide an estimate of long-term maintenance costs.
- Planning agreements will also secure the preparation and implementation of a management plan, and long term monitoring in accordance with the agreed management plan objectives.

## Section 4: Guidance for Developers

### Stages in the Process

#### **Stage 1: Surveys and information gathering - Before acquiring land with development potential, commissioning designs or submitting a planning application**

This is arguable the most important stage of the process. It provides an opportunity for developers and residents to create, manage and enhance wildlife habitats and natural landscape. At this stage considering the impact of the proposal, gathering ecological and biological information and having round table meetings with relevant organisations to flush out concerns and ideas, are highly recommended.

Where a site contains areas of habitat, wildlife potential or geological features, it will be necessary for the developer to gather information to assess the biodiversity value of the site and the immediate surrounding area. Surveys need to be carried out at the earliest possible stage to inform the design of developments and incorporate biodiversity features in line with PPS 9 and draft NPPF guidance on Natural Environment, this may prevent costly delays later.

Advanced survey information on the presence of protected species and habitats, linked to any required mitigation or compensatory measures, will help avoid infringements of national and international law, help satisfy the legal requirements of both the EIA and Conservation (Natural Habitats) Regulations (as amended) and form the basis of a subsequent licence application, if required (PPS 9 Guide to Good Practice- ODPM).

The checklist below summarises the most likely circumstances where surveys and assessments would be needed and gives details of where to get further information.

## Part 1A – Designated Sites and Priority Habitat (Table 6)

Please answer ALL questions		Please tick as appropriate	
<b>Qa</b>	Is the development of a type as listed in footnote <sup>1</sup> below <b>AND</b> within 2 km of a <a href="#">SAC</a> , <a href="#">SPA</a> or <a href="#">Ramsar</a> site <a href="http://www.natureonthemap.org.uk/">www.natureonthemap.org.uk/</a> <a href="http://www.magic.gov.uk">www.magic.gov.uk</a> Local Plan Proposals Map	<b>YES</b> <input type="checkbox"/>	
<b>Qb</b>	Is the development of a type as listed in footnote <sup>2</sup> below: <b>AND</b> within 500m of a <a href="#">SSSI</a> <a href="http://www.natureonthemap.org.uk">www.natureonthemap.org.uk</a> <a href="http://www.magic.gov.uk">www.magic.gov.uk</a> Local Plan Proposals Map	<b>YES</b> <input type="checkbox"/>	<b>NO</b> <input type="checkbox"/>
<b>Qc</b>	Are any of the London BAP Priority habitats present on or within 100m of the application site? <ul style="list-style-type: none"> <li>• Chalk Grassland</li> <li>• Acid Grassland</li> <li>• Heathland</li> <li>• Parks &amp; urban greenspaces</li> <li>• Rivers &amp; streams</li> <li>• Reedbeds</li> <li>• Standing Water</li> <li>• Tidal Thames</li> <li>• Wasteland</li> <li>• Woodland</li> </ul>	<b>YES</b> <input type="checkbox"/>  <b>If Yes, there may be a SINC or London Priority Habitat within or adjacent to the application site. Contact Kingston Council to find out whether a SINC or Priority Habitat is present</b>	<b>NO</b> <input type="checkbox"/>
<b>Using the answers given above, please answer the following question</b>			

<sup>1</sup>

<sup>21</sup> >0.5ha, >10 units/dwellings, power station, sewage treatment works, fish farm, industrial/agricultural development next to or discharging pollutants into a water course, new road scheme

<sup>2</sup> Power station, sewage treatment works, fish farm, industrial/agricultural development next to or discharging pollutants into a water course, new road scheme, any housing or new industrial units, other infrastructure and services, industrial estate, road/rail line, service station, golf course, leisure centre/stadium, car park, industrial/agricultural unit with large powder/liquid discharges



<b>Qd</b>	Is it likely that the development would have an impact on any designated sites <sup>3</sup> or Priority Habitat (as defined above) <i>prior to</i> applying mitigation <sup>4</sup> .	<b>YES</b> <b>SAC/SPA/Ramsar</b> <input type="checkbox"/> <b>SSSI</b> <input type="checkbox"/> <b>SINCs</b> <input type="checkbox"/> <b>Priority Habitats</b> <input type="checkbox"/>	<b>NO</b> <b>SAC/SPA/Ramsar</b> <input type="checkbox"/> <b>SSSI</b> <input type="checkbox"/> <b>SINCs</b> <input type="checkbox"/> <b>Priority Habitats</b> <input type="checkbox"/>
<b>If you have answered ‘YES’ to ANY elements of Questions above</b>  Further information is required to support your application to show how the proposal has taken the potential impacts into account		<b>Please go to Part 1B</b>	
<b>If you have answered ‘No’ to ALL elements of Questions above</b>		<b>Please go to Part 2A</b>	

**Part 1B (Table 7) - Designated Sites and Priority Habitat Assessments ONLY for proposals that could potentially have an effect on a designated site or priority habitat (answered ‘yes’ section 1A Qd)**

**If the applicant answered ‘yes’ to Qd Part 1A , the application must be submitted with a Biodiversity Statement which demonstrates the following:**

- Extent and location of habitats and features that could be affected
- Likely impacts to designations/priority habitat
- How alternative designs and locations have been considered
- How adverse impacts will be avoided
- How any unavoidable impacts will be mitigated<sup>5</sup> or reduced
- How impacts that cannot be avoided or mitigated<sup>5</sup>, will be compensated<sup>6</sup>
- Any proposals for enhancements of biodiversity (this is particularly relevant and desired for Major Developments<sup>7</sup> and other large developments)

- Any Protected Species statements required as indicated by section 2A/B should be integrated within the biodiversity statement

<sup>3</sup> Please contact Natural England to ascertain whether the development will have an impact on SPA/SAC/SSSI or Ramsar. Any relevant correspondence with Natural England should be submitted with the application

<sup>4</sup> Mitigation = measures which avoid or make the impact less severe

<sup>5</sup> Mitigation = measures which avoid or make the impact less severe

<sup>6</sup> Compensation = measures which counterbalance the impacts, amending damage or loss

<sup>7</sup> A major application = more than 10 units, more than 0.5 Ha, or more than 1000m<sup>2</sup> floor area in non-residential development

- These reports may form part of a wider Environmental Impact Assessment
- Reports may not be required where applicants are able to provide pre-application correspondence from Natural England which confirms that they are satisfied that the proposal will not have an adverse impact on any **SAC, SPA, SSSI OR RAMSAR**
- Reports may not be required where applicants are able to provide pre-application correspondence from the Local Authority which confirms that they are satisfied that the proposal will not have an adverse impact on any **SINC** or **PRIORITY HABITAT**

**PART 2A (Table 8) – PROTECTED SPECIES**

PLEASE MARK 'X' IN COLUMN B NEXT TO ANY OF THE QUESTIONS IN COLUMN A THAT APPLY TO THE DEVELOPMENT

FOR EACH QUESTION MARKED X, COLUMN C INDICATES (BLACK DOTS) THE SPECIES SURVEYS REQUIRED

PLEASE MARK 'X' IN SHADED ROW (FOLLOWING PAGE) AGAINST ALL SPECIES SURVEYS REQUIRED

(Column A) PROPOSALS FOR DEVELOPMENT THAT WILL TRIGGER A PROTECTED SPECIES SURVEY	(B) Mark X	Species Likely To Be Affected					
		B a t s	B a r n O w l s	B r e e d i n g B i r d s	Gt . Cr es te d Ne wt s	O t t e r s	D o r m o u s e

Good Practice Guide – Biodiversity

<p>Proposed development which includes the modification conversion, demolition or removal of buildings and structures (especially roof voids) involving the following:</p> <ul style="list-style-type: none"> <li>all agricultural buildings (e.g. farmhouses and barns) particularly of traditional brick or stone construction and/or with exposed wooden beams greater than 20cm thick;</li> <li>all buildings with weather boarding and/or hanging tiles that are within 200m of woodland and/or water;</li> <li>pre-1960 detached buildings and structures within 200m of woodland and/or water;</li> <li>pre-1914 buildings within 400m of woodland and/or water;</li> <li>pre-1914 buildings with gable ends or slate roofs, regardless of location;</li> <li>all tunnels, mines, kilns, ice-houses, adits, military fortifications, air raid shelters, cellars and similar underground ducts and structures;</li> <li>all bridge structures, aqueducts and viaducts (especially over water and wet ground).</li> </ul>		•	•	•			
<p>Proposals involving lighting of churches and listed buildings or flood lighting of green space within 50m of woodland, water, field hedgerows or lines of trees with obvious connectivity to woodland or water.</p>		•	•	•			
<p>Proposals affecting woodland, or field hedgerows and/or lines of trees with obvious connectivity to woodland or water bodies.</p>		•		•		•	
<p>Proposed tree work (felling or lopping) and/or development affecting:</p> <ul style="list-style-type: none"> <li>old and veteran trees that are older than 100 years;</li> <li>trees with obvious holes, cracks or cavities,</li> <li>trees with a girth greater than 1m at chest height;</li> </ul>		•		•			
<p>Proposals affecting gravel pits or quarries and natural cliff faces and rock outcrops with crevices, caves or swallets.</p>		•		•			
<p>Major proposals within 500*m of a pond or Minor proposals within 100*m of pond (Note: A major proposals is one that is more than 10 dwellings or more than 0.5 hectares or for non-residential development is more than 1000m<sup>2</sup> floor area or more than 1 hectare)</p>					•		
<p>Proposals affecting or within 200*m of rivers, streams, canals, lakes, or other aquatic habitats.</p>		•		•		•	
<p>Proposals affecting 'derelict' land (brownfield sites), allotments and railway land.</p>				•	•		
<p>Proposed development affecting any buildings, structures, feature or locations where <u>protected species are known to be present</u> **.</p>		•	•	•	•	•	•
<p>Other potential criteria (to be inserted by LPA on consultation with local biodiversity partners) or above criteria amended to suit local requirements</p>							
<p>* Distances may be amended to suit local circumstance on the advice of the local Natural England team and/or Local Biodiversity Partnership  ** Confirmed as present by either a data search (for instance via the local environmental records centre) or as notified to the developer by the local planning authority, and/or by Natural England, the Environment Agency or other nature conservation organisation.</p>		B a t s	B a r n O w l s	B r e e d i n g B i r	Gr ea t Cr es te d Ne wt	O t t e r s	D o r m o u s e

**Exceptions for When a Full Species Survey and Assessment may not be Required**

- \* Following consultation by the applicant at the pre-application stage, the LPA has stated in writing that no protected species surveys and assessments are required.
- \* If it is clear that no protected species are present, despite the guidance in the above table indicating that they are likely, the applicant should provide evidence with this might be in the form of a letter or brief report from a suitably qualified and experienced person, or a relevant local nature conservation organisation).
- \* If it is clear that the development proposal will not affect any protected species present, then only limited information needs to be submitted. This information should include a statement acknowledging that the applicant is aware that it is a criminal offence to disturb or harm protected species should any be present.

In some situations, it may be appropriate for an applicant to provide a protected species survey and report for only one or a few of the species shown in the Table above. The report should make clear which species are included in the report and which are not because exceptions apply.

**PART2 B (Table 9) - PROTECTED SPECIES**

**Assessments ONLY for those proposals that could potentially have an affect on PROTECTED SPECIES (IDENTIFIED IN SECTION 2A)**

If PART 2A identified that species may potentially be affected, the following should be carried out.

1. Contact GIGL for any existing records for the area.
2. Conduct preliminary survey to establish potential for habitat to support the species
3. Use the results of the preliminary survey to ascertain whether A or B below applies.

Please mark relevant box below and attach corresponding assessment to application

X

<p><b>A: IF THE PRELIMINARY SURVEY INDICATES MODERATE/HIGH LIKELIHOOD OF PROTECTED SPECIES BEING PRESENT, A ‘FULL SURVEY AND MITIGATION’ STATEMENT IS REQUIRED.</b></p> <p><b>PLEASE INCLUDE:</b></p> <p>Extent and location of species populations (including supporting habitats and features) that could be affected (more detailed surveys will be required)</p> <p>Likely impacts to species populations</p> <p>How alternative designs and location have been considered</p> <p>How adverse affects will be avoided wherever possible</p> <p>How unavoidable impacts will be mitigated or reduced</p> <p>How impacts that cannot be avoided or mitigated against will be compensated</p> <p>Any proposals for enhancements of biodiversity/species population (All Major Development and other large development are strongly encouraged to provide enhancements)</p> <p><b>Please note – a protected species licence may be required in order to carry out these works – please refer to Natural England guidance</b></p>	
<p><b>B: IF PRELIMINARY SURVEY INDICATES LITTLE OR NO LIKELIHOOD OF PROTECTED SPECIES BEING PRESENT, OR THERE ARE NO LIKELY IMPACTS TO SPECIES, FULL SURVEY IS NOT REQUIRED</b></p> <p>Please provide the information required to demonstrate that there will be little or no likelihood of protected species being present, or there are no likely impacts to species. This can be in the form of a brief statement or letter from a suitably qualified person.</p> <p><b>Please note that in all circumstances legislation pertaining to protected species still applies and it is the responsibility of the developer to ensure that protected species are not impacted as a result of this development. If protected species are found during the course of the development, we recommend that work is halted and advice is sought.</b></p>	

**If a biodiversity statement is to be submitted within the application as required by Part 1B, then please integrate any species within the biodiversity statement.**

### **Validation of planning applications**

If an application for a development affected by the above list is submitted without sufficient survey information or assessment then the local planning authority is entitled to ask for more information and may refuse planning permission due to a lack of information.

### **Ecological expertise**

Employing an ecological or environmental consultant is likely to prove cost effective in the long term. Consultants can be contacted through the yellow pages (under Environmental consultants) and through internet directories. A useful source is the Institute of Ecology and Environmental Management (IEEM). Please refer to [www.ieem.net](http://www.ieem.net). Costs will vary depending on the scale and location of the work proposed, but an initial simple inspection for protected species can cost relatively little. GIGL offer a desktop search service and can provide maps and charts. A fee will be charged for the service.

### **Timing of ecological surveys**

An extended Phase 1 habitat survey by a competent ecologist will identify important ecological and geological features on the site and its immediate surrounding area, and determine the need for further detailed species surveys. The level of survey data needed and the time taken to collect it will vary according to the size of the development and the habitats and species concerned. There are certain times of year when surveys are best conducted for different species and this needs to be taken into account. **See Table 10 on page 18 for details on the appropriate time for carrying out surveys for different species.**

### **Tree surveys and development**

Larger developments and developments within close proximity to protected trees often require a tree survey which follows BS5837:2005. Tree surveys concentrate on the health and amenity value of trees rather than their biodiversity importance. Old trees and those with cracks, splits, lifted bark and rot holes can be very valuable to wildlife including protected species such as bats and barn owls. It is recommended that the tree survey and ecological survey are considered together to ensure that trees of importance to wildlife and trees of high visual amenity and landscape value are retained as part of a development.

### **Survey Information**

*It is important to collect survey information **BEFORE** submitting a planning application. This will save time and demonstrate that biodiversity has been considered as an integral part of the application.*

On larger development proposals, or where a site contains significant areas of habitat or wildlife potential any ecological assessments, which may include detailed surveys, should be completed before design work or submission of the planning application. Ecological Assessments completed ahead of applying for planning permission could save time and money.

### **Consultation and Scoping**

As previously discussed information may already exist for the site. Consultation with the relevant statutory and non-statutory nature conservation organisations may provide information. All ecological data that the local authority is aware of is held on GIGL (for contact (see section on the Green Spaces Strategy). This information has been collected by

a range of methods including field surveys undertaken by a trained ecologist and local interest groups.

Initially a trained ecologist needs to complete a scoping study to identify any ecological constraints and/or opportunities and the nature of any further field survey work.



**Ecological Surveys**

When there is no existing ecological data available for the site, or it is incomplete or out of date, ecological surveys must be commissioned. Desktop research can often be misleading therefore the *timing* of these surveys can be critical. Many plants and animals are not evident at certain times of the year – carrying out surveys at inappropriate times will be of limited use in judging the interest of a site. Detailed surveys – especially of protected species – may take months to complete. An experienced and knowledgeable field ecologist or natural historian should carry out surveys. Always consider using an ecological surveyor who is a member of a professional association such as the Institute of Ecological and Environmental Managers (IEEM). When dealing with protected species the surveyor may need a licence. Anecdotal evidence can only be used if supported by qualitative and in some cases, quantitative data.

If an application is submitted on a site without an appropriate survey the Council will normally request one to be undertaken and this may delay an application. Table 10 (below) sets out the appropriate time for each survey type to be carried out. For larger or sensitive developments **always** employ a professional ecological consultant. They will be able to identify important species both on the site and in the surrounding environs. The results of the survey will need to be submitted in a report which should include any proposed mitigation measures.

**Guidance on Appropriate Survey Timing (Table 10)**

Survey Type	Month											
	J	F	M	A	M	J	J	A	S	O	N	D
<i>Scoping walkover</i>												
<i>Phase 1 habitat</i>												
<i>Botanical</i>												
<i>Badgers</i>												
<i>Wintering birds</i>												
<i>Breeding Birds</i>												
<i>Reptiles</i>												
<i>Amphibians</i>												
<i>Invertebrates</i>												
<i>Water voles</i>												
<i>Otters</i>												
<i>Bats</i>												

-  Optimal time of the year for surveying
-  Sub-optimal time of the year for surveying

Unsuitable time of year for surveying

It is the responsibility of the developer and the ecological consultant to ensure that a reasonable amount of survey effort has been expended in proportion to the scale of development. There are many sources of information on survey techniques and timings, these are detailed below.

#### Further information

- Institute of Ecology and Environmental Management (IEEM) [www.ieem.net](http://www.ieem.net)
- Natural England [www.naturalengland.org.uk](http://www.naturalengland.org.uk)
- London Swifts [www.londons-swifts.org.uk](http://www.londons-swifts.org.uk)
- Bat Conservation Trust - Bat Helpline on 0845 1300 228 [www.bats.org.uk](http://www.bats.org.uk)
- The London Bat Group [www.londonbats.org.uk](http://www.londonbats.org.uk)
- Black redstarts [www.blackredstarts.org.uk](http://www.blackredstarts.org.uk)

### Stage 2: Design

Note:

following the advice will help developments satisfy various policies contained within the London Plan and meet wider sustainability objectives.

## Stage 2: Design Stage – Protection, Mitigation, Compensation, and Enhancement

### PROTECTING

#### Protecting the biodiversity present on the site

Plan how to avoid harm in the first instance, look for potential genuine biodiversity gains. In designing any development, the first step to building in biodiversity is to protect existing key habitats, species features. The approach should be to use survey information to design biodiversity into new developments as far as possible.

Site layout and design should seek to retain existing habitats and ecological features, giving priority to London Biodiversity Action Plan habitats and species where they are present. If this cannot be achieved seeking an alternative site could be a better option. This section is based on the key principles of PPS 9 and draft NPPF guidance on Natural Environment.

Consideration also needs to be given to natural features outside the application site which may be affected by the scheme. This is especially necessary where adjacent sites may be designated for their biodiversity value, and where linear habitat such as



a water course or hedgerow which may act as a wildlife corridor, will be affected by the development.

## **MITIGATION**

### **Mitigating harm caused by the development**

Every effort should be made to avoid harm to existing habitats, species and geological features through design measures. Where this is not possible, reasonable alternative sites should be considered. If there are no alternative sites it may still be possible to minimise potentially damaging impacts through mitigation measures. In such cases adequate mitigation steps should be **proposed by the developer** and will then normally be the subject of planning conditions or obligations on design, methods or timing of development.

**Mitigation measures are used to minimise damaging impacts, they can include, amongst others:**

- Timing the development of sites to avoid the breeding seasons of species present
- Creating buffer zones between sensitive areas and development areas to reduce disturbance to habitats
- Ensuring that new infrastructure such as bridges are built to enable movement of wildlife to continue
- Translocation of species from destroyed habitat, to be used only as a last resort and should follow IUCN guidelines.
- A financial contribution to management of nearby existing wildlife sites, through a commuted sum, can be required where the development could lead to increased pressure on those sites (e.g. noise, light pollution and disturbance through increased amenity use).

## **COMPENSATING**

### **Compensating for habitat loss**

Where damage is unavoidable, alternative sites are not available and damage will still occur in spite of mitigation, loss to biodiversity can in some cases be compensated for by creating new habitat in replacement either on or off-site. Some examples of how this can be done are given in Table 11.

Where this is appropriate, the steps required will be proposed by the developer and will then be the subject of planning conditions or planning obligations (see Stage 4: Monitoring, Management and Enforcement, below). For example: to ensure re-creation of habitat in a specific place within a specified time. An arrangement can

be made for the developer to provide money for habitat creation and maintenance, either on or off-site.

Established habitats attain biodiversity value over a very long period of time as its ecology diversifies and changes. Artificially recreated habitat will therefore usually be greatly inferior to established habitat. For example: newly planted woodland is of lesser value than existing ancient woodland. For this reason compensation is the least favoured option. There are only very limited circumstances where this loss is justified. If significant harm cannot be prevented, adequately mitigated against, or compensated for, planning permission could be refused on nature conservation grounds.

**ENHANCING**

**Enhancing the biodiversity of the site**

Developments should aim to enhance biodiversity interests, regardless of the current status of the site, in line with PPS 9, The Mayor of London Plan (July 2011) and The Royal Borough of Kingston Local Development Framework Core Strategy. This will ensure that it contributes to the wider aims of enhancing urban and rural areas, and delivery of the London BAP. Enhancement should be appropriate to the scale of the development. Options include design measures for individual buildings through to larger development sites. Major developments can have the greatest impact, but also offer the greatest opportunities for biodiversity.

Developers should look to design in opportunities to improve habitats for biodiversity conservation, and to increase the overall quality of the development by enhancing existing habitats or creating new areas appropriate to the wider landscape context. This should be **in addition to any necessary mitigation or compensation**. The London Biodiversity Action Plan includes targets for re-creation of BAP habitats.

**Table 11: Creating, restoring and enhancing habitats**

What is present?	What can be created? -Some examples	Types of development
<i>Habitats</i>		
<b>Pond, river other water features</b>	<ul style="list-style-type: none"> <li>● Enhance water feature or create new one.</li> <li>● Create habitat suitable for water voles/ water fowl/wading birds/amphibians</li> </ul>	Riverside development, commercial/industrial/residential
<b>Existing buildings of all ages</b>	<ul style="list-style-type: none"> <li>● Incorporate bat bricks, boxes</li> <li>● Incorporate bird boxes nesting and roosting opportunities.</li> <li>● Nesting/over wintering sites for ladybirds/solitary wasps</li> </ul>	Building conversions
<b>Grassland</b>	<ul style="list-style-type: none"> <li>● Create an area of wildflower meadow, glades or grassland strip</li> </ul>	Minor and major residential development,

	<ul style="list-style-type: none"> <li>● Create new areas adjacent to the site</li> </ul>	commercial/industrial development
<b>Woodland and hedgerow</b>	<ul style="list-style-type: none"> <li>● Retain as many trees/shrubs dead wood and leaf litter as possible,</li> <li>● plant new native trees/shrubs/underplanting erect bat and bird boxes</li> </ul>	Minor and major residential development, commercial/industrial development
<b>Trees</b>	<ul style="list-style-type: none"> <li>● Maintain as many trees as feasible. Pollard or coppice.</li> <li>● Plant new trees , native species of local regional genetic origin and allow natural expansion/colonisation</li> <li>● Buffer from development</li> </ul>	Minor and major residential development, commercial/industrial development
<b>Nothing</b>	Any of above	Any of above. This may include off site mitigation.
<b>What is present?</b>	<b>What can be created? -Some examples</b>	<b>Types of development</b>
<b>Species</b>		
<b>Bats</b>	<ul style="list-style-type: none"> <li>● Incorporate bat bricks/lofts/boxes within conversion.</li> <li>● Retain existing ancient/mature trees and trees with cracks, splits, deadwood and lifted bark</li> <li>● Suitable planting and habitat links</li> <li>● Creation of feeding habitat- ponds, grassland, hedges, scrub</li> </ul>	Building conversion, residential/commercial/ industrial development
<b>Water voles</b>	<ul style="list-style-type: none"> <li>● Undisturbed bank-side vegetation</li> </ul>	Riverside development
<b>Small mammals</b>	<ul style="list-style-type: none"> <li>● Retain and create undisturbed habitats - rough grassland</li> <li>● Establish native planting &amp; habitat links</li> </ul>	Minor and major residential development, commercial/industrial development
<b>Amphibians</b>	<ul style="list-style-type: none"> <li>● Retain and create accessible ponds with some shading</li> <li>● Retain and create mosaic of scrub, hedges and grassland around ponds</li> </ul>	Minor and major residential development, commercial/industrial development

<b>Reptiles</b>	<ul style="list-style-type: none"> <li>● Retain and create undisturbed areas of habitat and basking areas of bare ground/short grass on south facing slopes</li> <li>● Create small south facing slopes for basking</li> <li>● construct log piles and hibernacula</li> <li>● Create wetland areas for grass snakes</li> </ul>	Minor and major residential development, commercial/industrial development
<b>Kingfishers</b>	<ul style="list-style-type: none"> <li>● Retain and plant trees by river/stream</li> <li>● Retain and create undisturbed areas of habitat by the bank-side</li> </ul>	Riverside development
<b>Other birds</b>	<ul style="list-style-type: none"> <li>● Provide swift, swallow and house martin boxes attached to buildings</li> <li>● Provide other bird boxes on trees etc</li> <li>● Establish native planting particularly berry and seed producing trees and shrubs</li> <li>● Create green/rubble roofs on new buildings</li> </ul>	Minor and major residential development, commercial/industrial development Building conversions
<b>Stag beetles</b>	<ul style="list-style-type: none"> <li>● Leave standing/fallen deadwood.</li> <li>● Create log piles</li> </ul>	Minor and major residential development, commercial/industrial development
<b>Invertebrates</b>	<ul style="list-style-type: none"> <li>● Create mosaic of scrub, hedges, grassland</li> <li>● Create ponds with shallow sides</li> <li>● Retain and create deadwood habitats</li> <li>● Allow areas of natural generation/grassland/bramble</li> <li>● Plant nectar-rich plants and larval foodplants.</li> <li>● Retain riparian vegetation for dragonflies.</li> </ul>	Minor and major residential development, commercial/industrial development
<b>Wildflowers</b>	<ul style="list-style-type: none"> <li>● Plant native species of local regional genetic origin and allow natural expansion/colonisation</li> <li>● Create green/rubble roofs on new buildings</li> </ul>	Minor and major residential development, commercial/industrial development

**Stage 3: Construction – All activities relating to site clearance and building phases**

## **CONSTRUCTION**

The construction process is often a neglected issue in relation to nature conservation and it is one that can cause irreplaceable harm in a very short space of time.

Regardless of how effectively the biodiversity values of the site have been identified and considered through the project planning and design stages, there remains a risk that environmental impacts will occur during the construction phase unless specific measures are taken to prevent or minimise this. Also, it is not acceptable to promise an enhanced local environment once the development has been completed if this involves avoidable impacts during construction.

### **Pollution legislation**

Many of the activities that take place on a demolition or construction site have the potential to cause pollution of air or water and re-mobilisation of soil contaminants, including invasive species such as Japanese knotweed. Such activities are subject to their own legislation, regardless of the benefit of planning permission. These include the following:

- Water Resources Act 1991
- Environmental Protection Act 1990
- Wildlife and Countryside Act 1981(as amended)

The Environment Agency has a range of information leaflets concerning pollution prevention, many of which are relevant to construction activities - e.g. Pollution Prevention Guidance Note 5: Works in, near or liable to affect watercourses. Further information can be found via: [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk).

### **Construction Method Statement**

Depending upon the scale and complexity of the proposed development, a Construction Method Statement may be required, detailing methods of working to prevent or minimise impacts arising from site clearance, demolition and construction. This must contain adequate information to provide reassurance that impacts can be controlled. It should include at least the following:

- Details of site location and all plant and machinery to be used on site
- Details of all materials to be used on site
- Likely or intended access routes into and around the site – these aren't necessarily required on planning applications, but can result in impacts if not considered
- Temporary works designs – e.g. for structural repair
- Details of site offices, compounds and other temporary structures
- Details of service provisions both temporary and permanent
- Materials storage provisions and re-fuelling arrangements
- Exclusion areas to protect trees and other habitat and landscape features
- Details of how invasive species such as Japanese knotweed, if present, will be controlled and managed

- Details of the procedure for dealing with the unexpected discovery of a protected species once work has commenced, e.g. stop work and seek advice

### **Environmental Clerk of Works (ECW)**

For large developments the use of an ECW is often useful to ensure that attention to environmental matters becomes an ongoing process. As well as ensuring that any and all protective measures remain intact at all times. They could also provide training to other site staff, for example, emergency spill procedures or flooding. In some cases supporting specialists may be required, such as arboriculture expertise.