19 Natural Environment

19.1 Introduction

19.1.1 The natural environment is one of the district's greatest resources. Environmental quality is however under threat from many directions. The District Council is therefore committed to conserving and enhancing those important landscape and townscape elements which form a key part of the district's character and the quality of life of its residents.

19.2 Nature Conservation

19.2.1 Nature conservation is an integral part of the planning system and as such needs to be taken into consideration in any development. Ensuring that future generations can enjoy the district's rich geological and biological inheritance as well as the wider experience that a healthy, functioning natural environment can provide means that we must continue to improve the protection and management of what we have today.

19.2.2 To assist with this, the most important areas in the district are identified on the Policies Map. These include sites of international, national and local importance. The sites are correct at the time of publication of the District Plan but may be subject to change through future reviews. The Council will continue to work with the Hertfordshire Environmental Records Centre as the primary resource for ecological data in the County. Applicants will be expected to seek the advice of the Herts and Middlesex Wildlife Trust, the Hertfordshire Environmental Records Centre, Hertfordshire Ecology at the County Council, Countryside Management Service, Natural England, and other relevant local nature partnerships where appropriate, where proposals affect or have the potential to affect the natural environment and nature conservation assets.

Links to useful guides, documents and websites produced by these and other relevant organisations can be found in the Bibliography in Appendix F.

Table 19.1 Designated Environmental Assets

Type of designation	Purpose of designation
International Special Areas of Conservation (SAC)	Classification under the European Union's Habitats Directive of areas of value for species, plants and habitats. Together with SPAs, SACs form part of the Natura 2000 system.
International Special Protection Areas (SPA)	Classification under the Birds Directive to protect internationally valuable populations of eligible bird species.
International Ramsar Sites	Designation under the Ramsar Convention for wetlands of international importance.
National Sites of Special Scientific Interest (SSSI)	Sites designated by Natural England under the Wildlife and Countryside Act 1981. Protection of the most significant sites for the conservation of wildlife (species & habitats) and/or geology.
National National Nature Reserves (NNR)	Areas managed for either (or both) the preservation of flora, fauna, geological and physiological features of special interest or to provide opportunities to study fauna, flora and their physical conditions.
At Least Local Local Nature Reserves (LNR)	Places of special local wildlife, geological or educational interest or significance identified by local authorities. Where these sites are also designated as SSSIs they will be of national importance.
Local	Designated land of local and regional importance defined as discrete areas of land considered to be of

Local Wildlife Sites (WS)	significance for their wildlife features. They are the most important places for wildlife outside legally protected land such as SSSI and can be as ecologically valuable as SSSI.

19.2.3 Sites of international importance currently designated within the district include:

- Wormley-Hoddesdonpark Woods – Special Area of Conservation (SAC)
- Rye Meads and Amwell Quarry – components of the Lee Valley Special Protection Area (SPA)
- Rye Meads and Amwell Quarry – components of the Lee Valley Ramsar Site

19.2.4 All international sites in the district are also designated as SSSI's. SSSI's are a representative sample of England's finest wildlife and geological sites. Natural England, under the Wildlife and Countryside Act 1981 (as amended), is responsible for designating and assessing these sites working closely with landowners and site managers to ensure that targets to maintain and improve their condition are met. The 2012 Government Strategy 'Biodiversity 2020' set out commitments to bring 50% of the total area of SSSI's into 'favourable condition' by 2020. There are 16 SSSI's in the district.

19.2.5 The only National Nature Reserve (NNR) in Hertfordshire is located in the south of the district at Broxbourne-Hoddesdonpark Woods. The Nature Reserve contains several woodlands of SSSI status, which are home to many rare and scarce woodland wildlife.

19.2.6 Advice should be sought from Natural England for any proposals that may potentially affect an international or national site.

19.2.7 Local Wildlife Sites in the district are identified by the Hertfordshire Local Wildlife Sites Partnership which is a partnership approach to the identification, selection, assessment and protection of Local Wildlife Sites in the County, led and coordinated by the Herts and Middlesex Wildlife Trust. Local Wildlife Sites (WS) are considered to be of significance

for wildlife in at least a district context. There are currently 544 Wildlife Sites in the district covering 3,442 hectares. There are also 14 Herts and Middlesex Wildlife Trust Reserves in the district, seven of which are SSSIs and one, Waterford Heath, is a Local Nature Reserve (LNR) (under the National Parks and Access to the Countryside Act, 1949, as amended).

19.2.8 Distinctions will be made between the hierarchy of international, national and locally designated sites so that protection is commensurate with their status and appropriate weight will be given to their importance and the contribution they make to wider ecological networks. It is however, important that opportunities are taken to enhance biodiversity wherever possible, especially in urban areas, as even non-designated environments contribute significantly to the success of the wider ecological network.

19.2.9 The NPPF requires local planning authorities to apply a mitigation hierarchy. In the context of the natural environment this means that policies should seek to create net gains in biodiversity, to avoid adverse impacts by considering alternative options, to use mitigation measures where avoidance is not possible and as a last resort to use compensatory measures.

19.2.10 In order to objectively assess net ecological impacts and therefore achieve net gains in biodiversity, as required by NPPF, it is vital that a fair, robust mechanism for measuring these impacts is applied. To ensure they are consistently quantified, the application of the DEFRA and NE endorsed Biodiversity Impact Assessment Calculator (Warwickshire County Council v18 2014 or as updated) will be required for all development with negative impacts on biodiversity. Proposals will be expected to show a net gain in ecological units following development.

19.2.11 It is important that a consistent, acceptable standard of supporting ecological information is supplied with planning applications. In order to ensure this, it will be expected that ecological information is presented in accordance with the British Standard on Planning and Biodiversity – BS42020 2013 Biodiversity – Code of practice for planning and development.

The Natural England Impact Risk Zone Tool, which is designed to help local planning authorities and developers to assess whether a proposed development is likely to affect SSSIs can be found at www.naturalengland.org.uk

Policy NE1 International, National and Locally Designated Nature Conservation Sites

I. Development proposals, land use or activity (either individually or in combination with other developments) which are likely to have a detrimental impact which adversely affects the integrity of a site, will not be permitted unless it can be demonstrated that there are reasons which clearly outweigh the need to safeguard the nature conservation value of the site, and any broader impacts on the international, national, or local network of nature conservation assets. Evidence will be required in the form of up-to-date ecological surveys undertaken by a competent ecologist prior to the submission of an application. Where insufficient data is provided, permission will be refused.

II. Where a site of International or National designation for nature conservation importance is adversely affected by the proposals, permission will be refused unless the District Council is satisfied that:

(a) There are imperative reasons of overriding public interest, which could be of a social or economic nature, sufficient to override the harm to the site;

(b) There are imperative reasons of overriding public interest relating to human health, public safety or benefits of primary importance to the environment.

III. Proposals should avoid impacts on sites of nature conservation value and wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where adverse impacts are unavoidable, measures to mitigate the impact should be considered. Where adequate mitigation measures are not possible, compensatory measures may be appropriate. Such compensatory schemes should seek to achieve a net gain for nature and the Council will consider the use of conditions and/or planning obligations to secure appropriate mitigation/compensation. Compensatory measures can be situated on or off the development site.

IV. Ecological impacts will be quantified by utilising the Biodiversity Impact Assessment Calculator (BIAC). Development must demonstrate a net gain in ecological units. Ecological information must be supplied in accordance with BS 42020 2013.

NE2 Sites of Nature Conservation Interest (Non-Designated)

I. All proposals should achieve a net gain in biodiversity, as measured by using the BIAC, and avoid harm to, or the loss of features that contribute to the local and wider ecological network.

II. Proposals will be expected to apply the mitigation hierarchy of avoidance, mitigation and compensation, and integrate ecologically beneficial planting and landscaping into the overall design.

19.3 Species and Habitats

19.3.1 The planning system has a central role to play through resisting development proposals that may irreversibly damage important species or habitats, by enhancing biodiversity through incorporating mitigation and enhancements and by securing long-term favourable management of biodiversity rich sites.

19.3.2 Biodiversity describes the number and variety of species of plants and animals within a habitat and also the diversity of habitats within an ecosystem. Biodiversity has economic importance, adds to our quality of life and contributes to local distinctiveness as well as securing Ecosystem Services such as pollination, hydrology and pest control for example.

19.3.3 Whilst protecting priority species and habitats (as listed under Section 41 of the Natural Environment and Rural Communities Act 2006) is important, if biodiversity is to be genuinely enhanced, the conservation of all wildlife and habitats needs to be at the centre of development and planning decision making. It must be recognised that Biodiversity does not only exist on priority habitat sites. Lower quality habitats contribute significantly to the biodiversity of an area. Indeed the vast majority of biodiversity in this country is dependent on non-priority habitat. Through use of the BIAC, the ecological value of these habitats can be quantified and properly reflected in the

planning process. Their value in planning terms will be less than that of priority habitat and commensurate with the contribution they make to the wider ecosystem, as informed by the calculator.

A list of Species and Habitats of Principle Importance, as published in Section 41 of the Natural Environment and Rural Communities Act 2006, can be viewed in the form of a spread-sheet at: www.naturalengland.org.uk

Government legislation exists which places legal obligations on Local Planning Authorities and landowners with regards to the protection and enhancement of European Sites, protected species and Sites of Special Scientific Interest. More information can be viewed on the Government's document website at: www.gov.uk

The Herts and Middlesex Wildlife Trust website also contains a useful list of relevant environmental law at: www.hertswildlifetrust.org.uk

19.3.4 While there are no longer national habitat or species targets, the Hertfordshire Biodiversity Action Plan (2006) identifies those habitats and species which are a priority for conservation and is a valuable source of information on the county's natural assets.

19.3.5 The Hertfordshire Local Nature Partnership (LNP), working in conjunction with Herts and Middlesex Wildlife Trust, Hertfordshire County Council and Natural England have recently published an up-to-date report on Hertfordshire's habitats which identifies areas where new habitats should be created to support the wider ecological network. The LNP has also produced a suite of guiding principles to assist with planning for the natural environment. The Council will expect proposals to be prepared in line with these documents.

The Local Nature Partnership guidance can be viewed at: www.hertswildlifetrust.org.uk/local-nature-partnership

The Hertfordshire Biodiversity Action Plan (2006) can be viewed and downloaded from the Hertfordshire Environmental Forum at: www.hef.org.uk/nature/biodiversity_vision/

19.3.6 Development should be planned to avoid habitat loss and fragmentation, and opportunities should be sought to improve ecological connectivity, including through the creation, restoration and enhancement of linking habitats and 'stepping stones' through the landscape. Any development should minimise impacts on biodiversity and provide net gains for nature where possible. This involves safeguarding and enhancing biodiversity already present, providing new areas of habitat appropriate to the ecology of the area and integrating biodiversity within new development. Simple features such as integrated bat and bird boxes within the fabric of new buildings can be very effective in ensuring a continued supply of roosting opportunities for urban wildlife. Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the site will be protected and enhanced.

19.3.7 Where there is a 'reasonable likelihood' of the presence of European or Nationally Protected Species, surveys must be completed and avoidance/mitigation/compensation measures agreed before permission can be granted. Surveys cannot be conditioned except in exceptional circumstances because if decisions are made without this information, all material considerations cannot have been addressed in reaching a position.

19.3.8 Where there is evidence of European Protected Species (EPS) such as bats, great crested newts, dormice or otters, the Council will apply the following three derogation tests as required by the European Habitats and Birds Directives:

- The activity must be for imperative reasons of overriding public interest or for public health and safety;
- There must be no satisfactory alternative; and
- Favourable conservation status of the species must be maintained.

19.3.9 Where damage to a species or habitat is unavoidable, development should be designed to conserve as much of the original habitat as possible and retain and protect wildlife

corridors. It should seek to avoid damage to, or adverse effects upon, existing biodiversity (species and habitats) through appropriate site design.

19.3.10 There may be potential opportunities to provide new benefits for wildlife, for example by habitat creation or enhancement, whether or not significant harm to species or habitats is anticipated. Examples of how enhancements could be achieved include:

- Planting native trees and species rich shrubs and hedgerows of local provenance
- Creation of orchards, wildflower grasslands and nature reserves
- Connecting existing habitats and enhancing migratory routes with additional planting (including green roofs and walls and hedgerows)
- Creation of ponds
- Provision of integrated roosting opportunities for bats and birds
- River or stream restoration
- Sustainable Urban Drainage Systems

19.3.11 Planning obligations and conditions may be used to secure agreed measures such as mitigation or compensation. Mitigation measures could involve some of the following:

- Timing the development of sites to avoid the breeding seasons or hibernation periods for species present
- Creating buffer zones between sensitive areas and development areas to reduce disturbance to habitats
- Ensuring that development is designed to enable the movement of wildlife to continue

19.3.12 Compensation which in most cases should be a last resort, involves creating new replacement habitats either on-site or off-site in the form of biodiversity offsetting. However, compensation for a lost habitat will not make an unacceptable development acceptable. Biodiversity offsetting is not designed to be applied to priority habitats.

19.3.13 The waterside environment is particularly rich providing habitat in its own right as well as critical connectivity through the landscape. The value of a waterway is significantly enhanced if it is buffered by complimentary habitat. In accordance with Environment Agency directives, development will be expected to conserve and enhance the aquatic environment and where possible restore the negative impact of previous development – e.g. canalisation or culverting of rivers or streams.

Policy NE3 Species and Habitats

I. Development should always seek to enhance biodiversity and to create opportunities for wildlife. Proposals must demonstrate how the development improves the biodiversity value of the site and surrounding environment. Evidence will be required in the form of up-to-date ecological surveys undertaken by a competent ecologist prior to the submission of an application. The Biodiversity value of a site pre and post development will be determined by applying the BIAC. Submitted information must be consistent with BS 42020 2013. Where insufficient data is provided, permission will be refused.

II. Proposals should detail how physical features will be maintained in the long term.

III. Development which would result in the loss or significant damage to trees, hedgerows or ancient woodland sites will not be permitted. The Council will seek their reinforcement by additional planting of native species where appropriate. Protective buffers of complementary habitat will be expected to adjoin these features, sufficient to protect against root damage and improvement of their long term condition. A minimum buffer zone of 10m (or greater if required) is considered appropriate.

IV. Proposals will be expected to protect and enhance locally important biodiversity sites and other notable ecological features of conservation value.

V. Proposals should avoid impacting on Species and Habitats of Principle Importance as published under section 41 of the Natural Environment and Rural Communities Act 2006 (or as subsequently amended).

VI. Where exceptional circumstances exist that outweighs any harm or damage to a species or habitat appropriate mitigation and compensation

measures must be employed. The District Council will impose conditions / planning obligations which seek to:

(a) Facilitate the survival of existing populations as well as encouraging the establishment of new populations;

(b) Reduce disturbance to a minimum;

(c) Provide adequate alternative habitats to sustain at least the current levels of populations.

VII. Development adjoining rivers or streams must provide a minimum of a 10m buffer of complimentary habitat between the built environment and the watercourse. Details must be supplied of ongoing ecologically beneficial management of buffer habitats. Where possible opportunities should be taken to restore degraded aquatic environments to a more semi natural condition.

VIII. Integrated bird and bat boxes will be expected in all development bordering public green space and beneficial habitat.

19.4 Green Infrastructure

19.4.1 The NPPF describes Green Infrastructure as *"a network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities"* (Annex 2: Glossary, NPPF, CLG, 2012).

19.4.2 The Council's Green Infrastructure Plan (part of a county-wide suite of Green Infrastructure Plans) provides an overview of existing green infrastructure assets within the district, considers opportunities for the enhancement and creation of new assets, outlines a series of potential projects and provides advice on delivering green infrastructure proposals. More information on the ecological networks in the district can also be found in the Local Nature Partnership's Ecological Network Report.

The Council's Green Infrastructure Plan can be viewed and downloaded from the Council's Website at: www.eastherts.gov.uk/gip

19.4.3 East Herts has a rich green infrastructure resource centred on the principal river valleys of the Lee, Mimram, Beane, Quin, Rib, Ash and Stort in addition to a varied mosaic of landscape and habitat types, such as grassland, ancient and plantation woodland and farmland of importance to wildlife. However, through time and changing pressures on the use of land, these habitats have become fragmented and disconnected. While these sites still contribute towards the district's green infrastructure, improvements are necessary in order to strengthen their quality, connectedness and resilience to changing climates and the impact of human activity, and to provide opportunities for other green infrastructure functions.

19.4.4 Street trees, gardens, waterways, public parks and open spaces all contribute to urban green infrastructure. Quite often such urban green infrastructure is the only 'natural environment' we connect with on a day-to-day basis. Yet these features contribute significantly in cleaning and cooling the air, preventing flooding, providing 'stepping stones' for wildlife and for recreational activity and enjoyment. It is therefore important that changes to the district's urban environments contribute to the wider green infrastructure network.

19.4.5 It is important to remember that habitats and landscapes in East Herts are part of a wider network of green infrastructure that pays no heed to local authority boundaries. For example, the woodland to the south of the District forms part of the swathe of woodland and other habitats that stretch around London, which is commonly known as the GreenArc. Development should therefore be planned to avoid habitat loss and fragmentation, and opportunities should be sought to improve ecological connectivity, including through the creation, restoration and enhancement of linking habitats and 'stepping stones' through the landscape.

19.4.6 The Council welcomes the use of green infrastructure as an alternative solution to 'grey' infrastructure (such as water management and waste). Such schemes can provide opportunities for flood attenuation and public open spaces and can often be cheaper to construct and maintain.

19.4.7 Applicants will be expected to seek the advice of the Herts and Middlesex Wildlife Trust, the Hertfordshire Environmental

Records Centre, Hertfordshire Ecology at the County Council, Countryside Management Service, Natural England, and other relevant local nature partnerships where appropriate, where proposals affect or have the potential to enhance green infrastructure and nature conservation assets.

Policy NE4 Green Infrastructure

I. A diverse network of accessible, multi-functional green infrastructure across the district will be protected and enhanced for its biodiversity, recreational, accessibility, health and landscape value and for the contribution it makes towards combating climate change.

II. Development proposals should:

(a) Avoid the loss, fragmentation or functionality of the green infrastructure network, including within the built environment, such as access to urban waterways;

(b) Maximise opportunities for improvement to the green infrastructure network in accordance with the Council's Green Infrastructure Plan, its Parks and Open Spaces Strategy, the Hertfordshire Biodiversity Action Plan, Living Landscape Schemes, locally identified Nature Improvement Areas and any future relevant plans and programmes as appropriate;

(c) Maximise opportunities for urban greening such as through appropriate landscaping schemes and the planting of street trees;

(d) Consider the integration of green infrastructure into proposals as an alternative or to complement 'grey' infrastructure.

(e) Demonstrate how lighting will not adversely impact on green infrastructure that functions as nocturnal wildlife movement and foraging corridors.

III. Contributions towards local green infrastructure projects will be sought where appropriate. If providing green infrastructure as part of a development, applicants should detail how it will be maintained in the long term.

IV. Proposals which affect the district's river environments, including built development and recreation and leisure proposals, should take into

account and contribute towards achieving, the aims of any statutory or non-statutory plans, such as the Lee Valley Regional Park Authority Park Development Framework, the Bishop's Stortford Waterspace Strategy, relevant River Catchment Management Plans and the Water Framework Directive, and any future relevant plans and programmes.