



## Environmental Quality in Hounslow

### Biodiversity

#### 1. Introduction

Biodiversity entails studying and protecting the diversity and the variety of wildlife species which exist in a specified area. In 1992, the UK signed up to the Convention of Biological Diversity at the Earth Summit in Rio de Janeiro and as a result agreed to develop a national strategy for the conservation of biodiversity and sustainable use of biological resources. This strategy, the UK Biodiversity Action Plan, was published in 1994 and was later followed up by the 2008 publication of the England Biodiversity Framework, *Securing Biodiversity*.<sup>1</sup>

The [Natural Environmental and Rural Communities Act](#) (2006) 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.” In London, biodiversity is seen as a key measure of the state of London’s environment and the quality of life of London’s inhabitants. The Mayor of London’s biodiversity strategy, [Connecting with London’s Nature](#), supports the production and implementation of London Boroughs’ Biodiversity Action Plans as an integrated element of their Community Strategies.

Biodiversity inspires and enriches lives. On a community level, people gain enjoyment and recreation from nature and open spaces, and it promotes wellbeing through motivating people to learn about their surroundings. Green space reduces urban pollution through absorbing solar radiation and pollutants, reducing noise and improving the urban landscape.

#### 2. The Local Picture

Current estimates suggest that Hounslow has:

- Over 581 hectares of public open space;
- Approximately 1,246 hectares of urban green space, roughly 30% of the Borough’s surface land area; and
- An estimated 954 hectares being managed (either wholly or partly) for the purpose of nature conservation.

#### 3. Strategic Leadership and Collaboration

The Hounslow Biodiversity Action Partnership, formed in 1998, is made up of conservation groups, businesses, non-governmental organisations and government bodies. The Partnership aims to:

- Oversee the production, implementation and monitoring of the Hounslow Biodiversity Action Plan (BAP);
- Promote the biodiversity resource within the Borough;
- Facilitate sharing of best practice, knowledge and skills;

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<sup>1</sup> England Biodiversity Group (2008) *Securing biodiversity: A new framework for delivering priority habitats and species in England*. Natural England, Sheffield.



- Support and provide inspiration for conservation projects, events and activities; and
- Work with regional and national stakeholders to deliver the Hounslow BAP as well as UKBAP Priorities.

The Hounslow Biodiversity Action Partnership produced the Hounslow Biodiversity Action Plan 2011–2016, to continue the protection, conservation and enhancement of habitats and species across the Borough, following the successful implementation of the previous Plan published in 2003.

#### 4. Priorities

The second edition of the [Hounslow BAP](#) outlines the key priorities for the Hounslow BAP Partnership. These are:

- Highlight and prioritise the issues and actions for protecting, conserving and enhancing wildlife and habitats, together with targets and actions to deliver them;
- Help to gauge and monitor the quality of Hounslow's surroundings through indicators provided by the health of habitats and variety of species supported;
- Promote biodiversity conservation as a key indicator of wellbeing and sustainable development and ensure that best practice information is shared; and
- Raise awareness and encourage community action on biodiversity.

#### 5. Summary of Need

The following table summarises the needs in Biodiversity in the London Borough of Hounslow.

SUMMARY OF NEED: CHECKLIST	
Is need increasing over time?	<b>Yes</b>
Is need greater than the London average?	<b>No</b>
Is there qualitative intelligence indicating that need is substantially unmet?	<b>Yes</b>
Is there an external inspection or report suggesting need is unmet?	<b>No</b>
Are quality indicators worsening over time?	<b>No</b>
Are quality indicators worse than the London average?	<b>No</b>
Is there an intervention of proven effectiveness to address the need which is not currently delivered in Hounslow (or not delivered enough)?	<b>Yes</b>



## Air Quality

### 1. Introduction

Air quality legislation and policy is driven by the European Union. The EU developed a series of air quality standards based on health-related research, which must be met by the UK Government. On a local level, the Greater London Authority must achieve these standards within London. Other policies that govern air quality are the Air Quality Strategy for England, Scotland, Wales and Northern Ireland (published by DEFRA) and in London, the Mayor's Air Quality Strategy. Local Authorities have a statutory duty to work towards the achievement of air quality objectives.

Fine particles in the air can be carried deep into the lungs, where they can cause inflammation and worsen existing conditions such as heart and lung diseases. In addition, they may carry surface-absorbed carcinogenic compounds into the lungs. Both short-term and long-term exposure to ambient levels of particulate matter (PM) are consistently associated with ill-health. Research has not yet been able to determine the threshold concentration below which there are no effects on the whole population's health.

Nitrogen dioxide can irritate the lungs and lower a person's resistance to respiratory infections (such as influenza). Continued or frequent exposure to concentrations of nitrogen dioxide that are much higher than those normally found in the ambient air may increase the incidence of acute respiratory illness in children. ([Table 1](#))

### 2. The Local Picture

In Hounslow, there are two air pollutants of concern, fine particles (PM) and nitrogen dioxide (NO<sub>2</sub>). The main source of air pollution in the Borough is road transport, i.e. combustion of fossil fuels. Other sources of air pollution include domestic heating and the proximity of the Borough to Heathrow Airport.

Where possible, air quality monitoring is undertaken at sites that represent public exposure. Automated air quality monitors in Hounslow measured annual mean concentrations of large particles in the air (PM<sub>10</sub>), between 2005 and 2010. ([Figure 1](#)) During this period, the concentration of PM<sub>10</sub> was not shown to exceed recommended levels. However, the same monitoring process undertaken in other areas of the Borough showed that recommended levels of the pollutant were exceeded in 2006, 2007 and 2008 in Brentford and during 2007 in Chiswick. Further investigation into PM<sub>10</sub> concentrations is planned for the Gunnersbury Avenue area of the Borough.

Mapped results from automated monitors of nitrogen dioxide concentrations in Hounslow ([Figure 2](#)) show that four out of the six sites monitoring NO<sub>2</sub> were consistently above the air quality objective. Additionally, the short-term objective was exceeded in 2007 at the Chiswick site.

### 3. Strategic Leadership and Collaboration

The Borough of Hounslow has an [Air Quality Action Plan](#), published in 2005, the implementation of which is aimed at understanding and reducing pollution concentrations. This principal role of the plan is to address pollution sources under the control of the



Borough, such that the local population – including vulnerable groups – is protected from the harmful health effects of poor air quality.

#### 4. Priorities

The priorities for air quality in 2011/12 in Hounslow are to:

- Review the Air Quality Action Plan (AQAP) in context of the Mayor's London plan, in particular, working towards achieving compliance with the EU limit values for air quality objectives; and
- Work closely with internal and external stakeholders including TfL and Highways Agency and Developers to implement sustainable development plans, in order to provide an environment that promotes good health and healthy lifestyles for those living in Hounslow.

#### 5. Summary of Need

The following table summarises the needs in Air Quality in the London Borough of Hounslow.

<b>SUMMARY OF NEED: CHECKLIST</b>	
Is need increasing over time?	<b>Yes</b>
Is need greater than the London average?	<b>Yes</b>
Is there qualitative intelligence indicating that need is substantially unmet?	<b>Yes</b>
Is there an external inspection or report suggesting need is unmet?	<b>Yes</b>
Are quality indicators worsening over time?	<b>No</b>
Are quality indicators worse than the London average?	<b>Yes</b>
Is there an intervention of proven effectiveness to address the need which is not currently delivered in Hounslow (or not delivered enough)?	<b>No</b>



## Transport Noise

### 1. Introduction

Excessive noise has serious consequences for human health and interferes with daily activities, including at school, work and home and during leisure time. It can disturb sleep, cause cardiovascular and psychophysiological problems, reduce performance and affect social functioning and behaviour.

It is estimated that one in five Europeans is regularly exposed to sound levels at night that could significantly damage their health. Nuisance at night (particularly during the usual hours of sleep) can lead to an increase in medical visits and expenditure on sleeping medication, which affects household budgets and national health expenditure alike.

Ambient noise legislation and policy in the UK is driven by the European Commission's [Environmental Noise Directive](#) (END). The END aims to "define a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to the exposure to environmental noise". At present, the Directive does not set binding limit values, nor does it prescribe the measures to be included in the action plans to carry out this directive, thus leaving those issues at the discretion of those responsible for its implementation. In the UK, the Department for Environment, Food and Rural Affairs is the responsible authority for implementing the END.

In 2010, the UK Government issued its Noise Policy Statement for England (NPSE). Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development, the Government aims to:

- Avoid significant adverse impacts on health and quality of life;
- Mitigate and minimise adverse impacts on health and quality of life; and
- Where possible, contribute to the improvement of health and quality of life.

### 2. The Local Picture

The principle source of excess noise in Hounslow is through the arrival, departure and ground operation of aircraft at Heathrow Airport. BAA Heathrow releases factsheets to the public on various types of aircraft noise that may affect them, and releases a [Noise Action Plan](#) every five years, following public and Government consultation.

### 3. Priorities

The key priorities for addressing transport noise in 2011/12 are to:

- Monitor road transport related air pollutant emissions in air quality hot spots, in conjunction with other Boroughs in the West London Alliance consortium group;
- Monitor noise exposure level for Cranford residents, as the Cranford Agreement on noise pollution is due to end in 2012; and



- Monitor and assess increases in noise level, particularly where children might be affected, and evaluate how mitigation may be provided as far as possibly practicable.

#### 4. Summary of Need

The following table summarises the needs in Transport Noise in the London Borough of Hounslow.

<b>SUMMARY OF NEED: CHECKLIST</b>	
Is need increasing over time?	<b>Yes</b>
Is need greater than the London average?	<b>Yes</b>
Is there qualitative intelligence indicating that need is substantially unmet?	<b>N/A</b>
Is there an external inspection or report suggesting need is unmet?	<b>N/A</b>
Are quality indicators worsening over time?	<b>N/A</b>
Are quality indicators worse than the London average?	<b>Yes</b>
Is there an intervention of proven effectiveness to address the need which is not currently delivered in Hounslow (or not delivered enough)?	<b>Yes</b>