

## Islington borough: Environmental summary

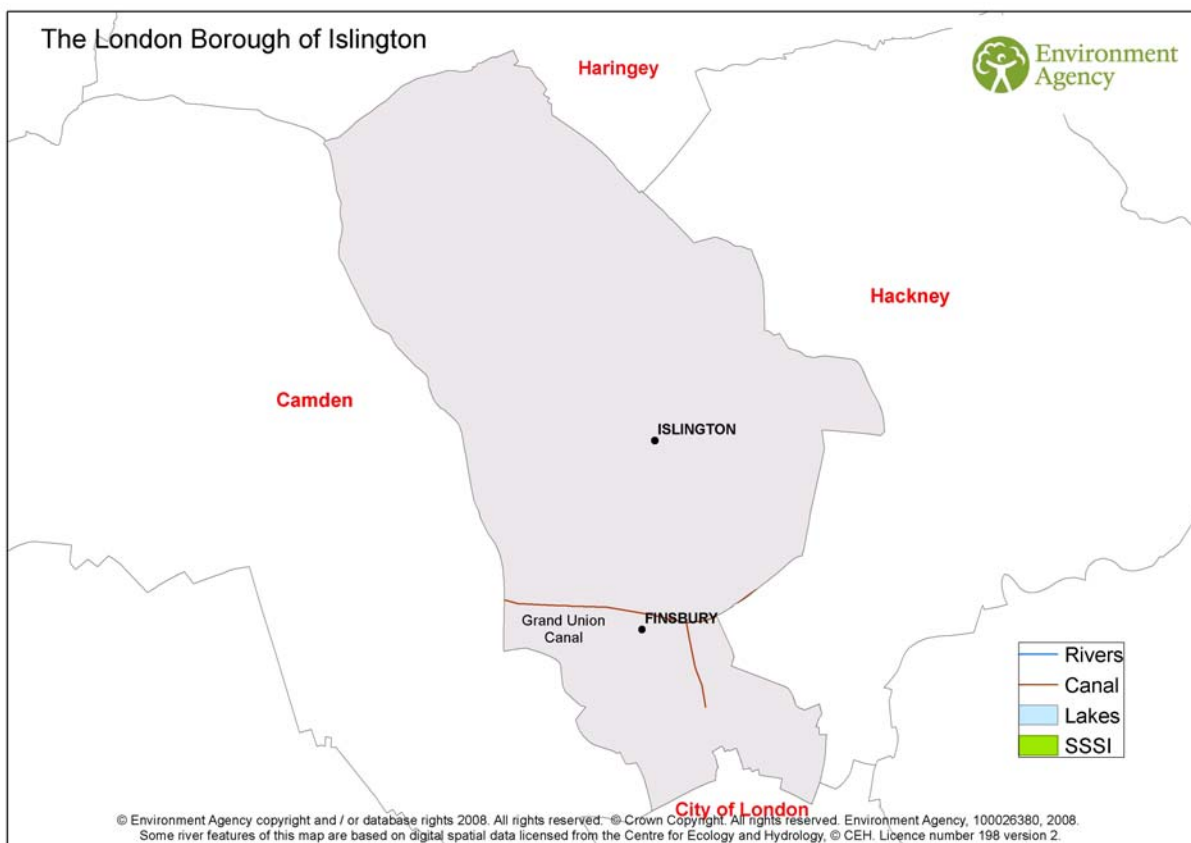
This report provides a snapshot of the environment in the London Borough of Islington. It outlines trends and changes in the environment, and highlights some of the work being carried out in the local areas to improve the environment, and people's experience of it. The report has been compiled as an extension of the [London State of the Environment report](#) to provide a local focus on the borough and the health of its environment.

To navigate to other chapters in the fact sheet, click on the following links: [Key environmental facts](#), [Sustainability](#), [Climate change](#), [Flood risk](#), [Waste](#), [Water Framework Directive](#), [Water quality](#), [Water resources](#), [Land](#), [Wildlife](#) and [Appendix](#).

## Introduction to the London Borough of Islington

The London Borough of Islington is in Inner London. The neighbouring boroughs are Camden, Haringey, Hackney and City of London. Predominantly a highly urbanised area, Islington covers around 1486 hectares.

The main districts in Islington are Angel, Archway, Clerkenwell, Finsbury Park, Highbury, Holloway, Islington, Kings Cross, Newington Green, Pentonville and Tufnell Park. The borough has a population of over 187,800 people and is one of the smallest boroughs in London.



## Islington Key Environmental Facts

- The amount of municipal waste produced has increased but there has been a clear diversion of waste from landfill, with notable increases in the amount of waste recycled and incinerated.
- Energy consumption in Islington is amongst the lowest in London, ranking 22<sup>nd</sup>, and with domestic consumption making up 43% of the total consumption.

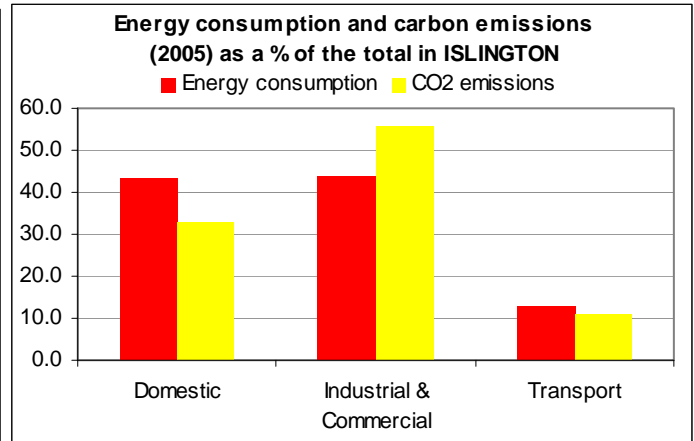
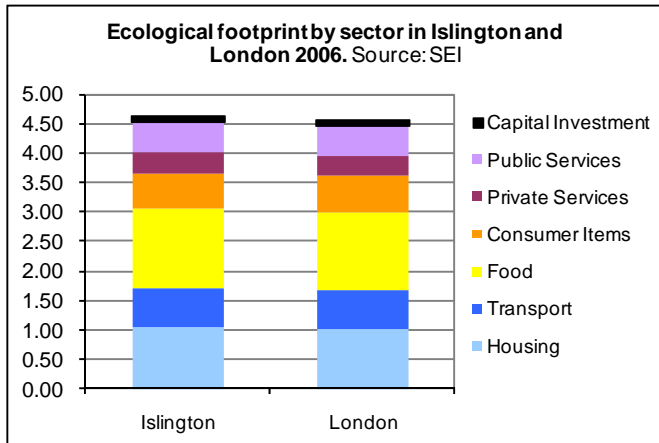
- Islington has 8 parks or open spaces that have been awarded the Green Flag, for high environmental quality and access to the whole community.

## The Environment in Islington

### Sustainability

The ecological footprint is an indicator of 'how much land and sea is needed to provide the energy, food and materials we use in our everyday lives, and how much land is required to absorb our waste'. It is measured in global hectares per capita.

The ecological footprint in Islington is 4.62<sup>1</sup> global hectares per capita (2006). This footprint is higher than the overall London footprint of 4.54, and the UK footprint of 4.64<sup>1</sup>. The primary contributors to this footprint are food and housing, accounting for 29% and 23% respectively. This trend is consistent with the London figures.



### Climate change

The carbon footprint in Islington is 11.59<sup>1</sup> tonnes/CO<sub>2</sub> per capita, (2006) which would cost £307 if valued using the shadow price of carbon (2009). This represents the cost to society of the damage caused by a tonne of carbon emitted into the atmosphere. The sector with the highest contribution to this footprint is housing, and more specifically the electricity, gas and other fuels used in the home. This carbon footprint is higher than the London average of 11.38 tonnes CO<sub>2</sub> per capita and lower than the UK average of 12.12 CO<sub>2</sub> per capita.

Using the London Emissions and Greenhouse Gas Inventory (LEGGI):

Energy consumption:

- Energy consumption was 3,853 gigawatt hours per year (Gwh/yr) in 2005<sup>2</sup>. This has decreased from 3,878 2004.
- In 2005, the domestic, and industrial/commercial sectors both had the highest energy consumption, with 43% and 44% of the total respectively<sup>2</sup>.
- The total energy consumption in Islington equates to 2.49% of the total energy consumption in London<sup>2</sup>. Energy consumption in this borough ranks 22<sup>nd</sup> out of all the London boroughs.

Carbon emissions:

- The industrial and commercial sector has the highest carbon emissions in Islington, accounting for 56% of the total. Electricity is the highest contributor.
- The transport sector has the lowest carbon emissions accounting for 11% of the total in the borough.
- The carbon emissions associated with Islington account for 2.66% of the total London emissions in 2005, ranking 19<sup>th</sup>.

Islington borough has signed up to the Local Area Agreement indicator 186 – per capita reduction in CO<sub>2</sub> emissions in the local authority area - and indicator 188 – planning to adapt to climate change – as one of their top 35 indicators. The latter will monitor progress on the assessment and management of climate risk and opportunities, and ensure actions are incorporated into LA planning. Progress with these targets will be monitored.

### Flood risk

#### Flood zones

The London borough of Islington has no land within the flood zones and no properties are at risk of tidal or fluvial (river) flooding. In low-lying areas there is potentially a high risk of surface water flooding, particularly in areas where the urban drainage system has a relatively low capacity.

**Fluvial (river) and tidal flood events**

Flooding from tidal or fluvial (river) sources has not occurred in Islington.

**Flood warning**

In Islington there are no people registered (mid 2009) to Flood Warnings Direct (FWD). This is because there are no properties at risk of tidal or fluvial (river) flooding. The Environment Agency offers the FWD flood warning service, which gives advance warning of flooding via phone, text, email, pager or fax. We would encourage all households at risk of flooding to register. Warnings are also broadcast on local radio, particularly LBC who have agreed to broadcast flood warnings in London.

**Future flood risk management**

National Indicator (NI)189 is defined as: the percentage of agreed actions to implement long-term flood and coastal erosion risk management plans that are being undertaken satisfactorily. This refers specifically to the Thames Catchment Flood Management Plan (CFMP) which focuses on flooding from rivers and the Thames Estuary 2100 (TE2100) Plan which is concerned with flooding from the sea. Both of these plans make recommendations for how flood risk will be managed in the future and through NI189 we will be working together with Local Authorities to implement them. In Islington, these recommendations will relate to the management of surface water flooding.

**Waste**

Waste in the borough of Islington is collected by Islington Borough Council and disposed of by the North London Waste Authority (NLWA). Islington Cleansing Services Ltd – Accord are contracted by the council as collection authority, to undertake a weekly collection of residual waste in black sacks or bins, along with green wastes, kitchen wastes and recyclables, which are marketed through the new recycling bulking and transfer station operated by London Waste Ltd, in partnership with Islington Council and the North London Waste Authority.

Islington, together with the London Boroughs of Barnet, Camden, Enfield, Hackney, and Haringey make up the North London Waste Authority (as disposal authority) and have combined to produce the North London Waste Plan, which is designed to provide a waste planning strategy for the future.

There is one reuse and recycling centre at Hornsey Street, Islington, and 130 bring banks for dry recyclates. There are two regulated facilities (ex-waste management license), and 23 exempt waste operations.

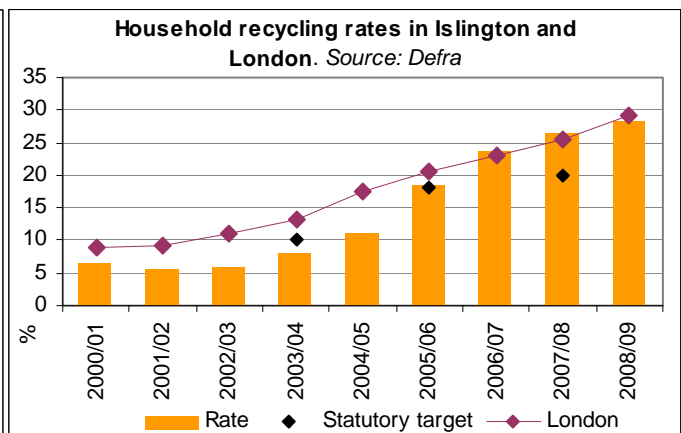
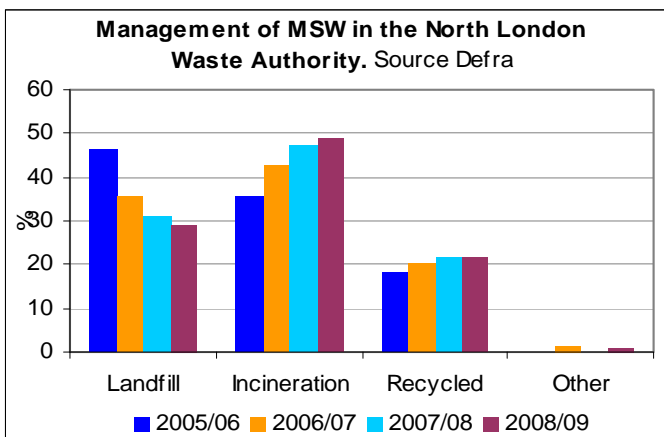
For more information on waste in Islington, visit [Capital Waste Facts](#).

**Municipal waste (MSW)**

The total municipal waste (MSW) arisings for the NLWA in 2008/09 are 912,463 tonnes, a reduction of 32,125 tonnes since 2007/08 (944,588 tonnes)<sup>3</sup>. The NLWA was within the top 10 authorities for improvements in the percentage of MSW sent to landfill in 2006/07, with an improvement of 10%<sup>3</sup>.

There has been an overall improvement in the amount of waste sent to landfill from the NLWA, from 46% in 2005/06 to 29% in 2008/09. Over the same period the amount of MSW disposed of through incineration has increased from 35%, to 49%<sup>3</sup>.

Incineration is now the primary disposal method for MSW in the North London Waste Authority. The amount of MSW recycled or composted has improved from 18% in 2005/06 to 22% in 2008/09<sup>3</sup>. This diversion of waste from landfill needs to continue, alongside an increase in the amount recycled/composed.



The NLWA is currently meeting its 2009/10 target of 358,996 tonnes, for the landfill directive. Under the Landfill Allowance Trading Scheme (LATS), each waste disposal authority is given an allocation for the amount of biodegradable municipal waste (BMW) that they can landfill each year, in order to reduce the amount land-filled to meet the requirements of the landfill directive. The amount of BMW going to landfill in the NLWA has declined from 298,373 tonnes (or 95.3% of the allocation) in 2005/06, to 178,880 tonnes in 2008/09.

Islington has not signed up to any waste based Local Area Agreement indicators, in their top 35 indicators.

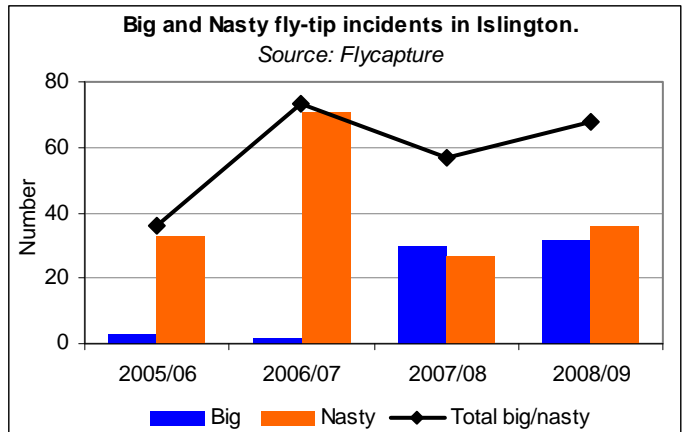
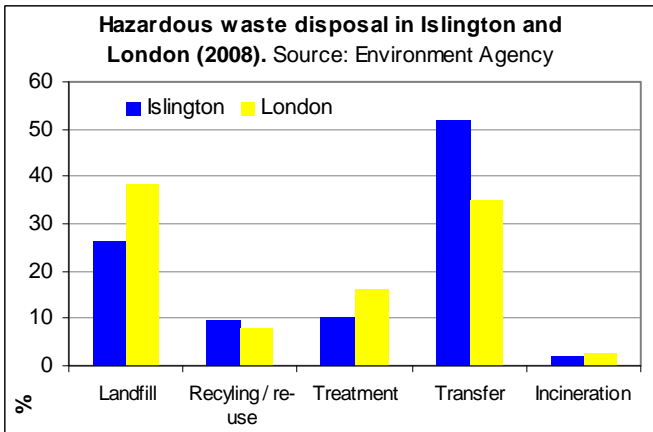
**Recycling and composting**

- Islington ranks 15<sup>th</sup> for household waste recycling, within London with a recycling/composting rate of 28.26% in 2008/9.
- The household recycling/composting rate in Islington has increased dramatically since 2000/01, with a notable increase in the rate of composting over the last few years.
- The current rate is slightly lower than the total London rate of 29.2% and higher than the NLWA rate of 26.76%.
- Islington did not meet its statutory household recycling and composting target in 2003/04 but has met the 2005/06 and 2007/08 target s<sup>3</sup>. The 2007/08 target was met by over 6%.
- These high recycling and composting rates need to continue to increase.

**Hazardous waste**

The volume of hazardous waste arising in Islington was 4,807 tonnes in 2008 – an increase from the 2,551 tonnes arising in 2007. This accounted for 2% of the hazardous waste produced in the North London Waste Authority. The primary method of waste fate was waste transfer, with 52% disposed of in this way – an increase of 11% since 2007 (41%). Just under 10% was recycled or reused.

Out of the 4,807 tonnes arising in Islington, 24% was disposed of within London. The remaining hazardous waste was diverted to other regions for disposal. The main recipients were the South East (32%) and Wales (23%).



**Fly-tipping**

The number of big and nasty fly-tipping incidents recorded in Islington borough has fluctuated since 2005/06, but shown an increase in the last year. Big incidents are those of tipper lorry load size or larger, and 'nasty' incidents are those involving oil, fuel or chemical drums. In 2005/06 and 2006/07 the number of nasty incidents was much higher than the number of big incidents. However, the split is more even in 2007/08 and 2008/09, with almost the same number of each.

**Water Framework Directive**

Under the Water Framework Directive (WFD), the only designated watercourse in Islington is the Grand Union Canal – this is classified as having moderate ecological status. The river water body for the Lee (Tottenham Locks to the Tideway) falls within the boundaries of Islington borough. This has been assessed as having moderate ecological status. *Shown in appendix 1.*

Under the WFD, these need to achieve good ecological potential by 2027. A programme of measures to improve the status is being developed. The Water Framework Directive (WFD) will introduce a series of measures to address urban diffuse pollution in some parts of London, in order to achieve the 'good' ecological status required for the Directive.

**Water quality**

**Chemical water quality**

There are no watercourses in Islington that are currently designated under the chemical General Quality Assessment (GQA) scheme. There has been a reduction in the GQA network over the last few years. The Grand Union Canal was previously designated and showed an improvement in water quality from a historic grade C (fairly good) to a grade B (good) in 2003, which remained until 2006.

Islington is served by Beckton sewage treatment works. This works is situated in Beckton (Newham) and discharges into the tidal River Thames at a rate of 1,420,000 cubic metres per day. Beckton has been identified by Thames Water as having future growth/capacity issues. Beckton currently serves a population equivalent of 3,280,000, which will be subject to increase once the proposed housing growth scheme is implemented. Beckton has been identified for improvements to ensure that it meets with new Tideway standards.

## **Water pollution incidents**

The number of water pollution incidents recorded in Islington between 2004 and 2008 was low. There were no major or significant (category 1 or 2) incidents, and only 13 minor (category 3) incidents recorded during this time. Of these category 3 incidents more than half were the result of fire-fighting runoff. Furthermore, since a peak of seven incidents in 2005, the number of incidents reported each year has fallen, and only one incident was recorded in 2008.

## **Water resources**

- Thames Water supplies water to the London Borough of Islington and falls within the London Water Resource Zone (WRZ).
- The 5 year average (2004 to 2009) per capita consumption (PCC) in the London WRZ is 158.4 litres per person per day. The 5 year mean for England and Wales is 148 litres per person per day and for the GLA it is 160.9 litres per person per day<sup>4</sup>.
- The Government has set a target for households to achieve 130 litres per person per day so work needs to be done on making changes to consumption patterns to protect water resources in order to meet this target.
- The majority of London's public water supplies come from the rivers Thames and Lee (with about 80% of London's supply taken from the freshwater River Thames upstream of Teddington Weir). The remaining supplies are obtained from groundwater sources situated beneath the London Borough's from the confined chalk aquifer.
- The Borough is underlain by London Clay and provided this remains intact, it protects the Chalk aquifer below from contamination at the surface. There are areas of river gravel overlying the clay which require protection.

## **Water abstractions**

There are 6 active abstraction licences in Islington which are predominantly from groundwater sources. The majority of these licences (50%) are for Water Supply. Other abstractions within the Industrial, Commercial and Public Services sector (17%), Private Water Undertaking (17%) and Electricity production (16%). Due to stresses on water availability it is unlikely that licences for large water abstractions (>1-2Ml/d) will be granted unless the applicant can demonstrate that the resources are available. However the Central and South of the borough of Islington is covered by the Central and South London Policy which states that new consumptive licences are restricted to <0.2Ml/day annual average, subject to the local assessment being favourable. This is subject to review.

There are no watercourses within the Borough of Islington. There is the Grand Union Canal which is managed by British Waterways. The London Catchment Abstraction Management Strategy (CAMS) covers this area.

## **Land**

### **Land-use and development**

The land use in Islington is dense urban land. There is no greenbelt or SSSI land in Islington. The Mayor's London Plan sets out targets for 11,600 new homes in Islington between 2007/08 and 2016/17.

### **Land pollution incidents**

The number of land pollution incidents recorded in Islington is very low. No category 1 or 2 incidents, which cause major or significant damage to the environment, were recorded between 2004 and 2008. The number of category 3 incidents fell from a high of six in 2004 to none in 2007, before rising to one in 2008. There were three main causes for the incidents: unauthorised activity, containment and control failures, and fire.

Category 4 land pollution incidents, which do not impact on the environment, have not been included.

### **Land contamination**

We protect the environment and by so doing assist in bringing sites back into beneficial use through our land contamination work. Since 2000 there have been a few redevelopments in the area, e.g. Eden Street and the Packington Estate where we have been or are still heavily involved.

Between 2000 and 2008, 17 sites have been investigated as a result of planning applications or voluntary submissions; 3 sites required no further remedial action, 12 had unrecorded remedial status and 2 sites were remediated (covering 0.18 hectares). *Locations of investigated sites are shown in appendix 2.*

### **Green Flag Award**

There are 8 parks or green spaces in Islington borough that have been awarded the Green Flag<sup>5</sup> in 2009. This recognises high environmental quality and management, and access to all members of the community. The green spaces awarded the Green Flag are Edward Square, Fortune Street Park, Gillespie Park Local Nature Reserve, Newington Green, Paradise Park, Royal Northern Gardens, Spa Fields and Whittington Park.

## **Wildlife**

### **SSSI Condition**

There are no Sites of Special Scientific Interest (SSSI) in Islington borough<sup>6</sup>.

### Conservation sites

Each borough has a number of Sites of Importance for Nature Conservation (SINC). There are 3 types of SINC: Sites of Metropolitan Importance, Sites of Borough Importance and Sites of Local Importance. The Sites of Metropolitan Importance are designated by the Mayor of London, and the GLA - they are the most important wildlife sites in London. There are 3 of these sites in Islington<sup>7</sup>. They are London's Canals, Gillespie Park and Parkland Walk.

Sites of Borough Importance are habitats designated as important wildlife sites by the borough's themselves. The lowest grading wildlife sites are the Sites of Local Importance - these are smaller sites such as parks and gardens that help the community have access to wildlife near their homes. In Islington, there are 24 Sites of Borough Importance and 22 Sites of Local Importance<sup>7</sup>.

### Biological river quality

There are no rivers in Islington borough.

### River and habitat restoration

There are no river restoration schemes in the Borough of Islington. Details of other projects in greater London can be found in the [London River's Action Plan](#)

### Invasive species

A small number of invasive species have been recorded in Islington. The sighting of such species is scattered throughout the borough. The species recorded are Japanese Knotweed and New Zealand Pygmyweed. These species can lead to a decline in native species due to habitat destruction and competition for food and light.

The Wildlife and Countryside Act (1981) is a measure for preventing the establishment of non-native wildlife which may be detrimental to native species. The Act states that it is an offence to plant or cause to grow in the wild any plant which is stated in part II of schedule 9. This includes Japanese Knotweed and Giant Hogweed. [Giant Hogweed](#) is a toxic plant and potentially hazardous to human health. It is the riparian owner's responsibility to remove invasive weeds. The Environment Agency only has a duty to remove invasive species that are affecting river flows and increasing flood risk.

### Fish

The Regent's Canal is the only significant watercourse in the London Borough of Islington. Although we do not have fish survey information for the canal, being managed by British Waterways, we know that fish populations consist predominantly of mixed coarse fish species, generally thought to be in a healthy condition. The most common species are bream, roach, perch, tench and carp.

Also within the Borough is a short section of the New River. This is an artificial watercourse, having been created as an aqueduct in the early seventeenth century. It is known to contain a healthy fish population dominated by roach, perch, carp and pike. There is no recognised fishing on this part of the New River.

Angling is a very popular, healthy outdoor activity that generates considerable income for local communities. The canal is a valuable location for local people to enjoy fishing in London.

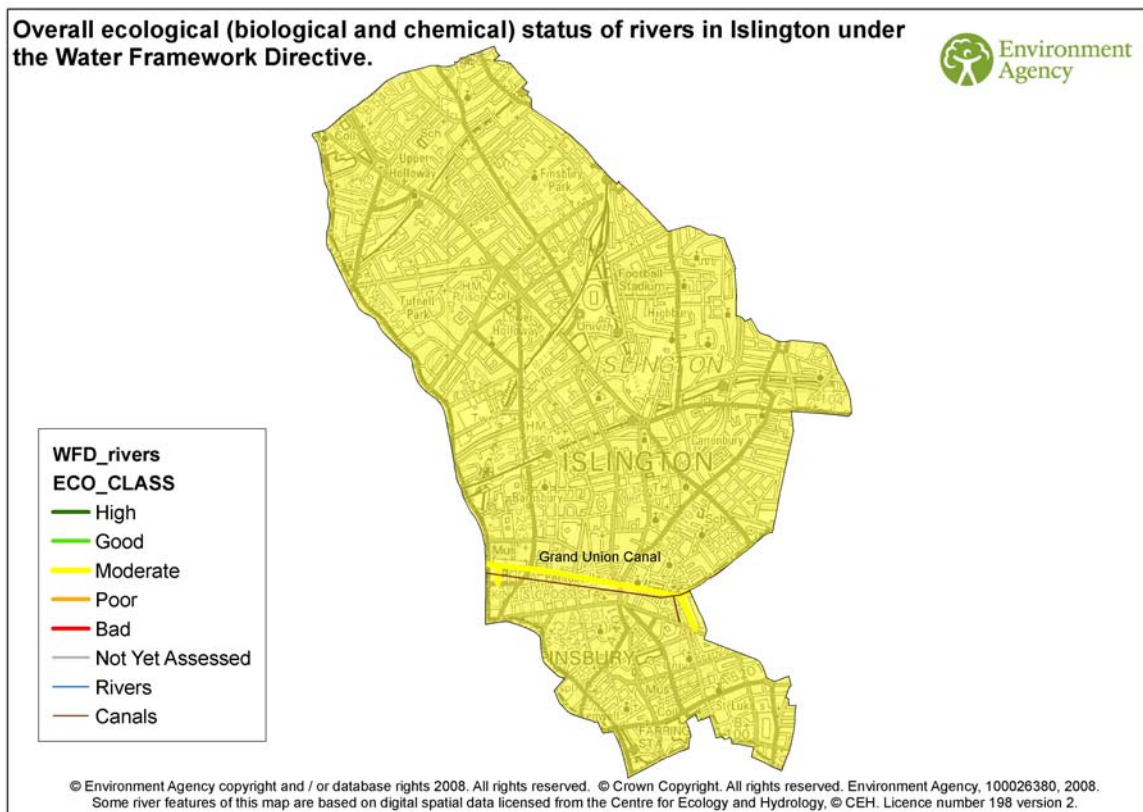
**For more information on biodiversity and open spaces, visit the [GIGL website](#).**

## References

1. [REAP data release](#): Published by SEI - BRIO Model v2 May 2009
2. [LEGGI \(London emissions and greenhouse gas inventory\) 2004-2005](#)
3. [Defra waste statistics](#)
4. *Thames Water draft water resources management plan*
5. *Communities and Local Government (CLG)*
6. *Natural England*
7. [London Wildweb](#) (Mayor of London)

## Appendix

Appendix 1 – Map of the ecological status of watercourses in Islington, under the Water Framework Directive



Appendix 2 - Contaminated sites – all investigated sites in Islington borough

