

## RAMSAR INFORMATION SHEET

### FOR WETLANDS OF INTERNATIONAL IMPORTANCE

Site reference number 4UK147

1 **Compilation date** September 2000

2 **Country** UK (England)

3 **Name of wetland** Lee Valley

4 **Site centre location:** Latitude: 51 34 51 N Longitude: 00 02 58 E

5 **Altitude** 5-35m

6 **Area (ha)** 447.87

#### 7 Overview

The Lee Valley comprises a series of embanked water supply reservoirs, sewage treatment lagoons and former gravel pits along approximately 24 km of the valley. These waterbodies support internationally important numbers of wintering gadwall and shoveler and nationally important numbers of several other bird species.

The site also contains a range of wetland and valley bottom habitats, both man-made and semi-natural, which support a diverse range of wetland fauna and flora.

8 **Wetland type** Inland wetland, Man-made wetland

Code	Name	% Area
U	Peatlands (including peat bogs swamps, fens)	4
6	Reservoirs / barrages / dams	30
7	Gravel / brick / clay pits	30
8	Sewage farms	7
Other	Other	29

9 **Ramsar Criteria** 2, 6

10 **Map of the site** ✓

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#### 12 Justification of criteria

##### Ramsar Criterion 2

The site supports the nationally scarce plant species whorled watermilfoil *Myriophyllum verticillatum* and the rare or vulnerable invertebrate *Micronecta minutissima* (a waterboatman).

##### Ramsar criterion 6

Over winter the site regularly supports internationally important populations of: Gadwall *Anas strepera*, Shoveler *Anas clypeata*

#### 13 General location

The Lee Valley site comprises four SSSIs spaced along the valley from just downstream of Ware in Hertfordshire to Finsbury Park in London; a total distance of about 24 km. The whole site is contained within the Lee Valley Regional Park.

**Administrative Region:** Greater London, Essex, Hertfordshire

#### 14 Physical Features

Soil & Geology	alluvium, clay, gravel, mud, neutral,
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	nutrient-rich
Geomorphology and Landscape	floodplain, lowland, valley
Nutrient status	highly eutrophic
pH	circumneutral, strongly alkaline
Salinity	fresh
Soil	no information
Water permanence	usually permanent
Summary of main climatic features	Rainy, temperate climate with a mild winter and periodic frost. Mean minimum temperature approximately 7.8°C. Mean maximum temperature approximately 14.7°C. Mean annual precipitation approximately 548.7mm, with a winter maximum.

### 15 Hydrological values

Maintenance of water quality (removal of nutrients), Water supply , sewage treatment

### 16 Ecological features

Open water, plus associated wetland habitats including reedbeds, fen grassland and woodland supporting a number of wetland plant and animal species including internationally important numbers of wintering wildfowl.

### 17 Noteworthy flora

Nationally important species occurring on the site

#### Higher Plant

*Myriophyllum verticillatum*

### 18 Noteworthy fauna

#### Birds

Species occurring at levels of international importance (as identified at designation):

#### Over winter the area regularly supports:

Gadwall, *Anas strepera* 456 individuals, representing an average of 1.5% of the population (Five year peak mean for 1993/94 to 1997/98)  
(Northwestern Europe)

Shoveler, *Anas clypeata* 406 individuals, representing an average of 1% of the population (Five year peak mean for 1993/94 to 1997/98)  
(Northwestern/Central Europe)

Nationally important species occurring on the site

#### Birds

*Botaurus stellaris*, *Phalacrocorax carbo*, *Podiceps cristatus*, *Aythya fuligula*, *Aythya ferina*, *Ardea cinerea*

#### Invertebrate

*Micronecta minutissima*

### 19 Social and Cultural Values

Aesthetic

Conservation education

Current scientific research

Non-consumptive recreation

Sport fishing

Tourism

## 20 Land tenure/ownership

Ownership category	On-Site	Off-Site
Non-governmental organisation	+	+
Local authority, municipality etc.	+	+
Private	+	+
Water company	+	+

## 21 Current land use

Activity	On-Site	Off-Site	Scale
Nature conservation	+	+	Large-Scale
Tourism	+	+	Large-Scale
Research	+	+	Small-Scale
Fishing: recreational/sport	+	+	Large-Scale
Freshwater aquaculture		+	Small-Scale
Grazing (unspecified)		+	Small-Scale
Industry		+	Large-Scale
Sewage treatment/disposal	+	+	Large-Scale
Flood control		+	Small-Scale
Mineral exploration		+	Large-Scale
Transport route		+	Small-Scale
Domestic water supply	+	+	Large-Scale
Urban development		+	Large-Scale
Non-urbanised settlements		+	Small-Scale

## 22 Adverse factors affecting the ecological character of the site

Activity	On-Site	Off-Site	Scale
Vegetation succession	+	+	Large-Scale
Water diversion for irrigation/domestic/industrial use		+	Small-Scale
Eutrophication	+	+	Small-Scale
Persistent drought		+	Small-Scale
Introduction/invasion of exotic plant species	+	+	Small-Scale
Recreational/tourism disturbance (unspecified)	+	+	Large-Scale
General disturbance from human activities		+	Small-Scale
Unspecified development: urban use		+	Large-Scale

## 23 Conservation measures taken

Conservation measure	On-site	Off-site
SSSI	+	+
SPA	+	
Land owned by a NGO for nature conservation	+	+
Site management statement/plan implemented	+	+

## **24 Conservation measures proposed but not yet implemented**

see below

### **Site vulnerability and management statement**

The site may be affected by the eutrophic condition of the water. This should be addressed by improvements to sewage treatment works funded by AMP3 under the Urban Waste Water Treatment Directive.

There is also a potential problem from over-abstraction of surface water for public supply; particularly during periods of drought. This will be addressed through the Environment Agency review of consents.

The threat from potential development pressures in this urbanised and urban-fringe area is largely covered by the relevant provisions of the Conservation Regulations (1994).

Virtually all of the site is subject to management plans in which nature conservation is a high or sole priority. Issues such as arresting (or locally reversing) vegetational succession are being addressed via these plans.

Exotic plants including Himalayan balsam *Polygonum polystachym* and Japanese knotweed *Reynoutria japonica* pose a threat to native plant communities and dependent animal species. Possible solutions are being examined for future action.

Recreational disturbance is minimised by a system of zoning of water bodies within the Lee Valley Regional Park.

## **25 Current scientific research/survey/monitoring and facilities**

- Wetland Bird Survey counts
- Various University of Hertfordshire projects
- Ongoing SSSI unit monitoring
- Rye Meads recently used for experimental study of fish predation by cormorants
- Monitoring of recently created reedbed at Rye Meads

## **26 Current conservation education**

Various activities organised by Lee Valley Regional Park Authority. Schools visits to Rye Meads RSPB reserve. Projects by University of Hertfordshire students. The Heritage Lottery Fund is currently considering a partnership bid for funds for a new visitor centre at Rye Meads.

## **27 Current recreation and tourism**

The whole site is within the Lee Valley Regional Park, with a large area forming the River Lee Country Park. The whole site supports high levels of visitor pressure; principally for purposes of angling, walking, cycling and birdwatching; with boating on the adjacent canal. These activities are mostly well regulated and at current levels are not considered to threaten the interest (although they may reduce the potential for enhancing the interest).

## **28 Functional jurisdiction**

Department of the Environment, Transport and the Regions

## **29 Management authority**

English Nature

Essex, Hertfordshire and London Team

Harbour House

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### **30 Bibliography**

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# Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat

**Name:** Lee Valley

**Unitary Authority/County:** Essex, Hertfordshire, London Borough of Haringey and London Borough of Waltham Forest.

**Consultation proposal:** Amwell Quarry Site of Special Scientific Interest (SSSI), Rye Meads SSSI, Turnford & Cheshunt Pits SSSI and Walthamstow Reservoirs SSSI have been recommended as a Ramsar site because of their international importance.

The Lee Valley Ramsar site comprises a series of embanked water supply reservoirs, sewage treatment lagoons and former gravel pits that display a range of man-made and semi-natural wetland and valley bottom habitats.

**Boundary of Ramsar site:** The Ramsar site boundary is coincident with the above SSSI boundaries. See Ramsar site map for further detail.

**Size of Ramsar site:** The Ramsar site covers an area of 447.87 ha.

**International importance of Ramsar site:** The Ramsar site is a Wetland of International Importance because:

- a) the site qualifies under **criterion 2** because it supports vulnerable, endangered, or critically endangered species or threatened ecological communities:
  - i) The nationally scarce plant species whorled water-milfoil *Myriophyllum verticillatum*.
  - ii) The rare or vulnerable invertebrate species *Micronecta minutissima* (a water boatman).
- b) the site qualifies under **criterion 6** because it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird:

Waterbird species	5 year peak mean 1993/94 -1997/98	% of population
Shoveler <i>Anas clypeata</i>	406 individuals - wintering	1.0% NW/Central Europe
Gadwall <i>Anas strepera</i>	456 individuals - wintering	1.5% NW Europe

Bird figures from: WeBS database

## Non-qualifying species of interest

In addition, the site supports nationally important numbers of cormorant *Phalacrocorax carbo*, great crested grebe *Podiceps cristatus*, tufted duck *Aythya fuligula*, pochard *Aythya ferina*, grey heron *Ardea cinerea* and bittern *Botaurus stellaris*.

## Status of Ramsar site

Lee Valley was designated as a Ramsar site on 22 September 2000.

