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## RAMSAR INFORMATION SHEET

### FOR WETLANDS OF INTERNATIONAL IMPORTANCE

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**Site reference number** 7UK146  
**1 Compilation date** March 2000  
**2 Country** UK (England)  
**3 Name of wetland** Thames Estuary and Marshes  
**4 Site centre location:** Latitude: 51 29 08 N Longitude: 00 35 47 E  
**5 Altitude** -5.0-5.0m  
**6 Area (ha)** 5588.59

#### 7 Overview

A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates.

**8 Wetland type** Marine/coastal wetland

Code	Name	% Area
E	Sand / shingle shores (including dune systems)	0.8
G	Tidal flats	49.6
H	Salt marshes	1.3
O	Freshwater lakes: permanent	0.7
Q	Saline / brackish lakes: permanent	4.2
Ss	Saline / brackish marshes: seasonal / intermittent	3.2
4	Seasonally flooded agricultural land	38.6
Other	Dry grassland	1.6

**9 Ramsar Criteria** 2, 5, 6  
**10 Map of the site** √  
**11 Compiler** Joint Nature Conservation Committee  
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#### 12 Justification of criteria

##### Ramsar criterion 2

The site supports one nationally rare and fourteen nationally scarce plant species. One endangered, ten vulnerable and twelve rare invertebrate species

##### Ramsar criterion 5

Internationally important waterfowl assemblage (greater than 20,000 birds)

##### Ramsar criterion 6

Over winter the site regularly supports internationally important numbers of: Ringed Plover *Charadrius hiaticula*, Grey Plover *Pluvialis squatarola*, Dunlin *Calidris alpina alpina*, Knot *Calidris canutus*, Black-tailed Godwit *Limosa limosa islandica*, Redshank *Tringa totanus*

#### 13 General location

Administrative region: Essex, Kent

**Administrative Region:** Essex, Kent, Essex, Kent

#### 14 Physical Features

Soil & Geology	alluvium
Geomorphology and Landscape	estuary, floodplain, intertidal sediments (including sandflat/mudflat)
Nutrient status	eutrophic
pH	no information
Salinity	brackish / mixosaline, fresh
Soil	no information
Water permanence	usually permanent, usually seasonal / intermittent
Summary of main climatic features	Rainy, temperate climate with a mild winter and periodic frost. Mean minimum temperature approximately 11.6°C. Mean maximum temperature approximately 18.3°C. Mean annual precipitation approximately 382.4mm, with a winter maximum.

#### 15 Hydrological values

Shoreline stabilisation and dissipation of erosive forces, Sediment trapping, Flood water storage / desynchronisation of flood peaks, Maintenance of water quality (removal of nutrients)

#### 16 Ecological features

The intertidal flats are mostly fine, silty sediment, though in parts they are sandy. The saltmarsh shows a transition from pioneer communities containing *Zostera* to saltmarsh dominated by, for example, *Halimione portaculoides*. The grazing marsh grassland is mesotrophic and generally species poor. It does, however, contain scattered rarities, mostly annuals characteristic of bare ground. Where the grassland is seasonally inundated and the marshes are brackish the plant communities are intermediate between those of mesotrophic grassland and those of saltmarsh. The grazing marsh ditches contain a range of flora of brackish and fresh water. The aquatic flora is a mosaic of successional stages resulting from periodic clearance of drainage channels. The dominant emergent plants are *Phragmites communis* and *Bulboscoenus maritimus*. The saline lagoons have a diverse molluscan and crustacean fauna. Dominant plants in the lagoons include *Ulva* and *Chaetomorpha*.

#### 17 Noteworthy flora

##### Nationally important species occurring on the site:

##### Higher plants:

Nationally rare plant species Saltmarsh goosefoot *Chenopodium chenopodioides*. The following nationally scarce plant species occur on the site: Bulbous foxtail *Alopecurus bulbosus*, Slender hare's-ear *Bupleurum tenuissimum*, Divided sedge *Carex divisa*, Sea barley *Hordeum marinum*, Golden samphire *Inula crithmoides*, Annual beard grass *Polypogon monspeliensis*, Borrer's saltmarsh-grass *Puccinellia fasciculata*, Stiff saltmarsh-grass *P. rupestris*, Glasswort *Salicornia pusilla*, Water soldier *Stratiotes aloides*, Clustered clover *Trifolium glomeratum*, Sea clover *T. squamosum*, Narrow-leaved eelgrass *Zostera angustifolia* and Dwarf eelgrass *Z. noltii*.

#### 18 Noteworthy fauna

##### Birds

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

##### On passage the area regularly supports:

Ringed Plover, *Charadrius hiaticula*  
(Europe/Northern Africa (wintering))

1324 individuals, representing an average of 2.6% of the population (Five year peak mean for 1993/94 to 1997/98)

### Over winter the area regularly supports:

Black-tailed Godwit, <i>Limosa limosa islandica</i> (Iceland (breeding))	1699 individuals, representing an average of 2.6% of the population (Five year peak mean for 1993/94 to 1997/98)
Dunlin, <i>Calidris alpina alpina</i> (Northern Siberia/Europe/Western Africa)	29646 individuals, representing an average of 2.1% of the population (Five year peak mean for 1993/94 to 1997/98)
Grey Plover, <i>Pluvialis squatarola</i> (Eastern Atlantic (wintering))	2593 individuals, representing an average of 1.7% of the population (Five year peak mean for 1993/94 to 1997/98)
Knot, <i>Calidris canutus</i> (Northeastern Canada/Greenland/Iceland/Northwestern Europe)	4848 individuals, representing an average of 1.4% of the population (Five year peak mean for 1993/94 to 1997/98)
Redshank, <i>Tringa totanus</i> (Eastern Atlantic (wintering))	3251 individuals, representing an average of 2.2% of the population (Five year peak mean for 1993/94 to 1997/98)

### Assemblages of international importance:

#### Over winter the area regularly supports:

75019 waterfowl (Five year peak mean for 1993/94 to 1997/98)

### Species currently occurring at levels of national importance:

#### Over winter the area regularly supports:

Avocet, <i>Recurvirostra avosetta</i> (Western Europe/Western Mediterranean (breeding))	283 individuals, representing an average of 28.3% of the GB population (Five year peak mean for 1993/94 to 1997/98)
Hen Harrier, <i>Circus cyaneus</i>	7 individuals, representing an average of 1.0% of the GB population (Five year peak mean for 1993/94 to 1997/98)

### Nationally important species occurring on the site:

#### Invertebrates:

The endangered species *Bagous longitarsis* occurs on the site.

The following vulnerable species occur on the site: a groundbug *Henestaris halophilus*, a weevil *Bagous cylindrus*, a ground beetle *Polystichus connexus*, a crane fly *Erioptera bivittata*, a horse fly *Hybomitra expollicata*, a hoverfly *Lejops vittata*, a dancefly *Poecilobothrus ducalis*, a snail killing fly *Pteromicra leucopeza*, a solitary wasp *Philanthus triangulum* and a damselfly *Lestes dryas*.

The following rare species occur on the site: a water beetle *Cercyon bifenstratus*, a water beetle *Hydrochus elongatus*, a water beetle *H. ignicollis*, a water beetle *Ochthebius exaratus*, a water beetle *Hydrophilus piceus*, a beetle *Malachius vulneratus*, a rove beetle *Philonthus punctus*, a fungus beetle *Telmatophilus brevicollis*, a fly *Campsicnemus magius*, a horsefly *Haematopota bigoti*, a soldier fly *Stratiomys longicornis* and a spider *Baryphyma duffeyi*.

## 19 Social and Cultural Values

Aesthetic

Archaeological/historical site

Conservation education  
 Current scientific research  
 Fisheries production  
 Livestock grazing  
 Non-consumptive recreation  
 Sport fishing  
 Sport hunting  
 Tourism  
 Transportation/navigation

## 20 Land tenure/ownership

Ownership category	On-Site	Off-Site
Non-governmental organisation	+	
Local authority, municipality etc.		+
National/Crown estate	+	
Private	+	

## 21 Current land use

Activity	On-Site	Off-Site	Scale
Nature conservation	+		Large-Scale
Tourism	+		Small-Scale
Recreation	+		Large-Scale
Research	+		Small-Scale
Fishing: commercial	+		Small-Scale
Fishing: recreational/sport	+		Small-Scale
Gathering of shellfish	+		Large-Scale
Bait collection	+		Large-Scale
Permanent arable agriculture		+	Large-Scale
Livestock watering hole/pond	+		Large-Scale
Grazing (unspecified)	+		Large-Scale
Hay meadows	+		Small-Scale
Hunting: recreational/sport	+		Large-Scale
Industrial water supply	+		Large-Scale
Industry		+	Large-Scale
Sewage treatment/disposal	+		Large-Scale
Harbour/port	+		Large-Scale
Flood control	+		Large-Scale
Transport route	+		Large-Scale
Urban development		+	Large-Scale
Military activities	+		Small-Scale

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

Activity	On-Site	Off-Site	Scale
Dredging	+		Large-Scale
Erosion	+		Large-Scale
General disturbance from human activities	+		Large-Scale
Transport infrastructure development	+		Large-Scale
Unspecified development: industry	+		Large-Scale

### 23 Conservation measures taken

Conservation measure	On-site	Off-site
SSSI	+	
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

There is evidence of coastal squeeze and erosion of intertidal habitat within the site. English Nature is in discussion with the port authority on the role of port dredging in intertidal habitat loss. The intertidal area is also vulnerable to disturbance from water borne recreation. This is being addressed by information dissemination as part of an estuary management plan.

The terrestrial part of the site depends on appropriate grazing and management of water. The availability of livestock may be affected by changes in agricultural markets. Evidence suggests that the water supply to grazing marsh has decreased. A water level management plan may address this. There has been great development pressure in recent years. Current implications of development include both direct landtake from the site and indirect disturbance and hydrological effects. These effects will be addressed through the Habitats Regulations 1994.

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

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl and Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Botanical survey of vegetation of embankments and ditches.

### 26 Current conservation education

There is one existing public nature reserve with public access and two further reserves have been proposed, both also with public access. One of the new sites will be promoted locally through existing community initiatives and via the internet. Video cameras will provide live images of scenes from the site via the internet. The Estuary Management Plan aims to increase awareness of conservation.

### 27 Current recreation and tourism

Yachting, angling, wildfowling, jet skiing, waterskiing and birdwatching. Bird watching occurs throughout the year and wildfowling is restricted to the period September to February. The remaining activities occur year-round but are more prevalent in the summer months. Disturbance from these activities is a current issue but is addressed through negotiation relating to activities consented within the SSSI and information dissemination.

### 28 Functional jurisdiction

Department of the Environment, Transport and the Regions

### 29 Management authority

English Nature

Kent Team

The Countryside Management Centre

Coldharbour Farm

Wye

Ashford

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- Reference should also be made to Country Agencies Management Plans for sites that are within National Nature Reserves.