

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

Joint Nature Conservation Committee

Monkstone House

City Road

Peterborough

Cambridgeshire PE1 1JY

UK

Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948

Email: RIS@JNCC.gov.uk

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 12 May 1995

3. Country:

UK (England)

4. Name of the Ramsar site:

Blackwater Estuary (Mid-Essex Coast Phase 4)

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area:

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* ☐;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) *Yes*
- iii) a **GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* ☐;

b) **Describe briefly the type of boundary delineation applied:**

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

51 45 13 N 00 51 59 E

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Colchester

The Blackwater Estuary is a large estuary between the Dengie peninsula and Mersea Island on the Essex coast. It stretches from immediately adjacent to Maldon and about 8 km south of Colchester.

Administrative region: Essex

10. Elevation (average and/or max. & min.) (metres): **11. Area** (hectares): 4395.15

Min.	-1
Max.	4
Mean	1

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The Blackwater Estuary is the largest estuary in Essex north of the Thames and, is one of the largest estuarine complexes in East Anglia. Its mudflats, fringed by saltmarsh on the upper shores, support internationally and nationally important numbers of overwintering waterfowl. Shingle and shell banks and offshore islands are also a feature of the tidal flats. The surrounding terrestrial habitats; the sea wall, ancient grazing marsh and its associated fleet and ditch systems, plus semi-improved grassland are also of high conservation interest. This rich mosaic of habitats supports an outstanding assemblage of nationally scarce plants and a nationally important assemblage of rare invertebrates. There are 16 British Red Data Book species and 94 notable and local species.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, 5, 6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 1

Qualifies by virtue of the extent and diversity of saltmarsh habitat present. This site, and the four others in the Mid-Essex Coast complex, includes a total of 3,237 ha that represent 70% of the saltmarsh habitat in Essex and 7% of the total area of saltmarsh in Britain.

Ramsar criterion 2

The invertebrate fauna is well represented and includes at least 16 British Red Data Book species. In descending order of rarity these are: Endangered: a water beetle *Paracymus aeneus*; Vulnerable: a damselfly *Lestes dryas*, the flies *Aedes flavescens*, *Erioptera bivittata*, *Hybomitra expollicata* and the spiders *Heliophanus auratus* and *Trichopterna cito*; Rare: the beetles *Baris scolopacea*, *Philonthus punctus*, *Graptodytes bilineatus* and *Malachius vulneratus*, the flies *Campsicemus magius* and *Myopites eximia*, the moths *Idaea ochrata* and *Malacosoma castrensis* and the spider *Euophrys*.

Ramsar criterion 3

This site supports a full and representative sequences of saltmarsh plant communities covering the range of variation in Britain.

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:

105061 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species with peak counts in winter:

Dark-bellied brent goose, <i>Branta bernicla bernicla</i> ,	8689 individuals, representing an average of 4% of the population (5 year peak mean 1998/9-2002/3)
Grey plover, <i>Pluvialis squatarola</i> , E Atlantic/W Africa -wintering	4215 individuals, representing an average of 1.7% of the population (5 year peak mean 1998/9-2002/3)
Dunlin, <i>Calidris alpina alpina</i> , W Siberia/W Europe	27655 individuals, representing an average of 2% of the population (5 year peak mean 1998/9-2002/3)
Black-tailed godwit, <i>Limosa limosa islandica</i> , Iceland/W Europe	2174 individuals, representing an average of 6.2% of the population (5 year peak mean 1998/9-2002/3)

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Species with peak counts in winter:

Common shelduck, <i>Tadorna tadorna</i> , NW Europe	3141 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)
European golden plover, <i>Pluvialis apricaria apricaria</i> , P. a. altifrons Iceland & Faroes/E Atlantic	16083 individuals, representing an average of 1.7% of the population (5 year peak mean 1998/9-2002/3)

Common redshank , *Tringa totanus totanus*, 4169 individuals, representing an average of 1.6% of the population (5 year peak mean 1998/9-2002/3)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

See Sections 21/22 for details of noteworthy species

Details of bird species occurring at levels of National importance are given in Section 22

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	neutral, shingle, mud, clay, nutrient-rich, sedimentary
Geomorphology and landscape	lowland, coastal, shingle bar, subtidal sediments (including sandbank/mudbank), intertidal sediments (including sandflat/mudflat), estuary, islands
Nutrient status	eutrophic
pH	circumneutral
Salinity	brackish / mixosaline, fresh, saline / euhaline
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Lowestoft, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/lowestoft.html) Max. daily temperature: 13.0° C Min. daily temperature: 7.0° C Days of air frost: 27.8 Rainfall: 576.3 mm Hrs. of sunshine: 1535.5

General description of the Physical Features:

The Blackwater Estuary is the largest estuary in Essex and is one of the largest estuarine complexes in East Anglia. Its mudflats are fringed by saltmarsh on the upper shores, with shingle, shell banks and offshore islands a feature of the tidal flats. The surrounding terrestrial habitats: the sea-wall, ancient grazing marsh and its associated fleet and ditch systems, plus semi-improved grassland, are of high conservation interest.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

The Blackwater Estuary is the largest estuary in Essex and is one of the largest estuarine complexes in East Anglia. Its mudflats are fringed by saltmarsh on the upper shores, with shingle, shell banks and offshore islands a feature of the tidal flats. The surrounding terrestrial habitats: the sea-wall, ancient grazing marsh and its associated fleet and ditch systems, plus semi-improved grassland, are of high conservation interest.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Shoreline stabilisation and dissipation of erosive forces, Sediment trapping

19. Wetland types:

Marine/coastal wetland

Code	Name	% Area
G	Tidal flats	48
H	Salt marshes	37.5
4	Seasonally flooded agricultural land	5.1
Tp	Freshwater marshes / pools: permanent	4.1
J	Coastal brackish / saline lagoons	2.6
M	Rivers / streams / creeks: permanent	0.9
K	Coastal fresh lagoons	0.9
E	Sand / shingle shores (including dune systems)	0.9

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

At low tide a vast expanse of intertidal mud is exposed from shore to shore. This enriched mud is a feeding ground for variety of molluscs, crustaceans and worms, and encourages the growth of the green algae *Enteromorpha*, and eelgrass *Zostera* spp. at the seaward edges of the saltings. Wildfowl and waders amass to exploit this rich food supply in numbers over twice the maximum required to confer international status to the site.

On arrival in October, brent geese feed in the estuary on *Enteromorpha* and *Zostera*. All three species, *Zostera marina*, *Z. angustifolia*, *Z. noltei*, once formed large beds in the estuary but are now scarce. This decline in eelgrasses combined with a recovery in brent geese numbers in the 1970s, prompted a change in feeding habits and the geese now spend more time landward of the sea wall grazing on arable crops and improved grassland. Areas of improved, reseeded grassland are managed for brent geese at Old Hall, Goldhanger, Steeple, and Osea and Northey Islands. The inclusion of these established grassland feeding areas within the SSSI will continue to help ease the pressure on arable land.

The Blackwater Estuary contains the largest area of saltmarsh in Essex (1,102.85 ha), representing the fifth-largest area in Great Britain; though, like other saltmarshes on this coastline, much of it is eroding at a rate of between 0.3-1 m each year. The saltings serve as important high tide wader roosts and support a specialised flora grazed by wigeon and brent geese. Large expanses of saltings exist at Tollesbury and Old Hall and along the northern shore of the Salcott Channel. At high tide, they accommodate large roosting populations of dunlin, grey plover and curlew. The inlet marshes of Gor

Saltings, Cooper's and Steeple Creeks, and the saltings associated with Northey and Osea Islands, also act as high tide refuges for dense populations of waders.

Ray Island, in the Strood Channel, is one of the few sites in Essex where the transition from saltmarsh to grassland has not been truncated by the imposition of a sea wall. However, elsewhere, the saltings fronting the sea wall also show distinct zones of vegetation. The lower marsh is comprised of the primary colonisers of mud - glassworts *Salicornia* spp., including the nationally scarce *S. perennis* and *S. pusilla* and the invasive common cord-grass *Spartina anglica*. The scarce native small cord-grass *Spartina maritima* can still be found in places, despite the incursions of the more vigorous hybrid form. Further up the marsh, where tidal immersions are less frequent, sea purslane *Atriplex portulacoides* and common saltmarsh-grass *Puccinellia maritima* predominate, with sea aster *Aster tripolium* and common sea lavender *Limonium vulgare*. The nationally scarce lax-flowered sea lavender *Limonium humile* is sometimes interspersed among the more common species, but the main site for this is at Old Hall. Scarce saltmarsh grasses usually associated with the higher zone of the marsh, such as stiff saltmarsh-grass *Puccinellia rupestris* and Borrer's saltmarsh grass *Puccinellia fasciculata*, are encountered growing behind the sea wall in wheel-ruts along the folding. Two Mediterranean plants at the northerly limit of their distributions, golden-samphire *Inula crithmoides* and shrubby sea blite *Suaeda vera*, in the absence of high marsh, having adapted to growing at the base and outer face of the sea wall. Shrubby sea-blite is also able to colonise unstable shingle along the drift line and large populations are present at West Mersea and Osea Island.

The higher wave energies at creek mouths and the upper reaches of the estuary promote the deposition of shingle and sand.

Where this has occurred on the foreshore at West Mersea the county rarity, sea spurge *Euphorbia paralias*, has been discovered along with sea mayweed *Tripleurospermum maritimum*, which has a limited distribution in Essex. The sandy parts of the beach have a typical plant community of sand couch *Elytrigia juncea*, marram *Ammophila arenaria* and the very local sea-holly *Eryngium maritimum*, while frosted orache *Atriplex laciniata* occurs on the drift line. This section of coastline shows a transition from saltmarsh to freshwater marsh backed by a sandy cliff face.

The clay sea wall surrounding the estuary, as well as harbouring many of the species which would otherwise have colonised the sheltered, high-level marsh, also contains plants more typically associated with grazing marsh. This type of community develops where the topography and management of the grassland mimic conditions of the grazing marshes beyond - well-drained, grazed slopes and/or areas of disturbed ground. The nationally scarce slender hare's-ear *Bupleurum tenuissimum* is frequent along the footpath edge, and the uncommon strawberry clover *Trifolium fragiferum* is present in the close-cropped sward. The brackish-water borrow dykes also contain a similar species complement to the ditches of the land-claimed estuarine marsh.

The extensive unmown stretches of the sea wall are dominated largely by sea couch *Elytrigia atherica*, common couch *E. repens*, with herbs such as wild carrot and the regionally notable grass vetchling and the nationally uncommon dittander *Lepidium latifolium*. The tall grasslands of the Essex coast are the British stronghold of the nationally uncommon Roesel's bush-cricket *Metrioptera roeselli*, whilst two other characteristic species, the short-winged conehead *Conocephalus dorsalis*, another bush-cricket, and the Essex skipper butterfly *Thymelicus lineola* are also abundant.

Landward of the sea wall, extensive areas of grazing marsh have survived at Old Hall and Tollesbury, while, elsewhere, only fragments remain among the arable land and patches of improved, levelled pasture. Grazing of these ancient marshes since their enclosure in the Middle Ages, have created a characteristic undulating landscape, with the channels of the old saltmarsh creeks still evident. The ant hills of the yellow meadow ant *Lasius flavus* give credence to the antiquity of the landscape, their dry mounds of spoil providing a micro-habitat for common whitlowgrass *Erophila verna* and the nationally scarce upright chickweed *Moenchia erecta*. The grassy sward is dominated by creeping bent *Agrostis stolonifera*, perennial rye-grass *Lolium perenne* and, red fescue *Festuca rubra*, with abundant meadow barley *Hordeum secalinum* and meadow foxtail *Alopecurus pratensis*. Crested dog's-tail *Cynosurus cristatus* and yellow oat-grass *Trisetum flavescens*, grasses indicative of relict grassland, have a frequent distribution while marsh foxtail *Alopecurus geniculatus* is locally abundant in the wetter low-ways. Traditional plants of estuarine grazing marsh occur within the turf including hairy buttercup *Ranunculus sardous* and the nationally scarce divided sedge *Carex divisa* and a variety of leguminous species: spiny rest-harrow *Ononis spinosa*, narrow-leaved bird's-foot-trefoil *Lotus tenuis* and common bird's-foot-trefoil *Lotus corniculatus*, plus the nationally scarce sea clover *Trifolium squamosum* and bird's-foot clover *T. ornithopodioides*. Two further nationally scarce species, mouse-tail *Myosurus minimus* and red goosefoot *Chenopodium botryoides* occur on disturbed ground, the former frequently colonising sheep tracks and gateways.

The ditch systems of the Blackwater's coastal marshes have a diverse range of plant species that mark the transition from saline to freshwater. A saline influence is indicated by stands of the saltmarsh rush *Juncus gerardii*, and the tasselweeds, beaked tasselweed *Ruppia maritima* and the nationally scarce spiral tasselweed *Ruppia cirrhosa*. Where the water is less saline, sea club-rush *Bolboschoenus maritimus* becomes the dominant emergent species, along with several aquatics including two nationally scarce species, brackish water-crowfoot *Ranunculus baudotii* and soft hornwort *Ceratophyllum submersum*, which occur among the more frequent fennel pondweed *Potamogeton pectinatus* and spiked water-millfoil *Myriophyllum spicatum*. The transition to freshwater is demarcated by stands of common reed *Phragmites australis* and reedmace *Typha* spp. Farther inland, species characteristic of the swamp-fed community are encountered, such as reed sweet-grass *Glyceria maxima* and branched bur-reed *Sparganium erectum*.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Nationally important species occurring on the site.

Higher Plants.

Bupleurum tenuissimum (nationally scarce), *Carex divisa* (nationally scarce), *Chenopodium chenopodioides* (RDB Lower risk (not threatened)), *Limonium humile* (nationally scarce), *Hordeum marinum* (nationally scarce), *Zostera noltei* (nationally scarce), *Zostera marina* (nationally scarce), *Zostera angustifolia* (nationally scarce), *Sarcocornia perennis* (nationally scarce), *Salicornia pusilla* (nationally scarce), *Puccinellia rupestris* (nationally scarce), *Puccinellia fasciculata* (nationally scarce), *Inula crithmoides* (nationally scarce), *Trifolium squamosum* (nationally scarce) and *Ruppia cirrhosa* (nationally scarce).

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds**Species currently occurring at levels of national importance:****Species regularly supported during the breeding season:**

Mediterranean gull , *Larus melanocephalus*, Europe 4 apparently occupied nests, representing an average of 3.7% of the GB population (Seabird 2000 Census)

Common tern , *Sterna hirundo hirundo*, N & E Europe 121 apparently occupied nests, representing an average of 1.1% of the GB population (Seabird 2000 Census)

Little tern , *Sterna albifrons albifrons*, W Europe 99 apparently occupied nests, representing an average of 5% of the GB population (Seabird 2000 Census)

Species with peak counts in spring/autumn:

Ringed plover , *Charadrius hiaticula*, Europe/Northwest Africa 714 individuals, representing an average of 2.2% of the GB population (5 year peak mean 1998/9-2002/3)

Whimbrel , *Numenius phaeopus*, Europe/Western Africa 272 individuals, representing an average of 9% of the GB population (5 year peak mean 1998/9-2002/3 - spring peak)

Eurasian curlew , *Numenius arquata arquata*, N. a. arquata Europe (breeding) 1959 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)

Spotted redshank , *Tringa erythropus*, Europe/W Africa 36 individuals, representing an average of 26.4% of the GB population (5 year peak mean 1998/9-2002/3)

Common greenshank , *Tringa nebularia*, Europe/W Africa 149 individuals, representing an average of 24.9% of the GB population (5 year peak mean 1998/9-2002/3)

Ruddy turnstone , *Arenaria interpres interpres*, NE Canada, Greenland/W Europe & NW Africa 664 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3 - spring peak)

Species with peak counts in winter:

Slavonian grebe , *Podiceps auritus*, Northwest Europe 11 individuals, representing an average of 1.5% of the GB population (5 year peak mean 1998/9-2002/3)

Great cormorant , *Phalacrocorax carbo carbo*, NW Europe 286 individuals, representing an average of 1.2% of the GB population (5 year peak mean 1998/9-2002/3)

Little egret , *Egretta garzetta*, West Mediterranean 33 individuals, representing an average of 2% of the GB population (5 year peak mean 1998/9-2002/3)

Eurasian wigeon , *Anas penelope*, NW Europe 5614 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)

Eurasian teal , *Anas crecca*, NW Europe 2932 individuals, representing an average of 1.5% of the GB population (5 year peak mean 1998/9-2002/3)

Northern pintail , <i>Anas acuta</i> , NW Europe	396 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1998/9-2002/3)
Common goldeneye , <i>Bucephala clangula clangula</i> , NW & C Europe	260 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3)
Red-breasted merganser , <i>Mergus serrator</i> , NW & C Europe	129 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)
Hen harrier, <i>Circus cyaneus</i> , Europe	<19 individuals, representing an average of 2.5% of the GB population (5 year mean 1987/8-1991/2)
Water rail , <i>Rallus aquaticus</i> , Europe	9 individuals, representing an average of 2% of the GB population (5 year peak mean 1998/9-2002/3)
Pied avocet , <i>Recurvirostra avosetta</i> , Europe/Northwest Africa	424 individuals, representing an average of 12.4% of the GB population (5 year peak mean 1998/9-2002/3)
Northern lapwing , <i>Vanellus vanellus</i> , Europe - breeding	16944 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)
Red knot , <i>Calidris canutus islandica</i> , W & Southern Africa (wintering)	3864 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)
Sanderling , <i>Calidris alba</i> , Eastern Atlantic	229 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)
Ruff , <i>Philomachus pugnax</i> , Europe/W Africa	42 individuals, representing an average of 6% of the GB population (5 year peak mean 1998/9-2002/3)

Species Information

Nationally important species occurring on the site.

Invertebrates.

Paracymus aeneus (RDB1), *Lestes dryas* (RDB2), *Aedes flavescens* (RDB2), *Erioptera bivittata* (RDB2), *Hybomitra expollicata* (RDB1), *Heliophanus auratus* (RDB2), *Trichopterna cito* (RDB2), *Baris scolopacea* (RDB3), *Philonthus punctus* (RDB3), *Graptodytes bilineatus* (RDB3), *Malachius vulneratus* (RDB3), *Campsicemus magius* (RDB3), *Myopites eximia* (RDB3), *Idaea ochrata* (RDB3), *Malacosoma castrensis* (RDB3) and *Euophrys* sp. (*Euophrys browningi* is rare and endemic to Great Britain. A UKBAP species) .

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

- Aesthetic
- Archaeological/historical site
- Environmental education/ interpretation
- Fisheries production
- Livestock grazing
- Non-consumptive recreation
- Scientific research
- Sport fishing

Sport hunting
 Tourism
 Traditional cultural
 Transportation/navigation

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	+
Local authority, municipality etc.	+	+
National/Crown Estate	+	+
Private	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Current scientific research	+	+
Fishing: commercial	+	+
Fishing: recreational/sport	+	+
Marine/saltwater aquaculture	+	+
Gathering of shellfish	+	+
Bait collection	+	+
Permanent arable agriculture	+	+
Grazing (unspecified)	+	+
Hunting: recreational/sport	+	
Industry		+
Sewage treatment/disposal	+	
Harbour/port	+	+
Flood control	+	
Transport route	+	
Urban development		+

Non-urbanised settlements	+	+
Military activities		+

26. Factors (past, present or potential) adversely affecting the site’s ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Erosion	2		+		+
Pollution – agricultural fertilisers	2	Arable agriculture surrounds the coastal wetland and run-off from fields enters the site.		+	

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?
 Erosion - The Essex Coast and Estuaries Coastal Habitat Management Plan (CHaMP) (Anon. 2002) covers the site and it is expected to inform the shoreline management plan as well as local plan policies.

A Shoreline Management Plan has been prepared (but not yet implemented) for the Essex Coast which seems to provide a blueprint for managing the coastline sustainably.

Pollution – agricultural fertilisers - The Water Framework Directive, which will soon come into force, should manage water quality throughout the system.

Is the site subject to adverse ecological change? YES

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	+
National Nature Reserve (NNR)	+	+
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	+
Management agreement	+	

Site management statement/plan implemented	+	
Special Area of Conservation (SAC)	+	
Management plan in preparation	+	

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Contemporary.

Environment.

EN/Defra experimental managed retreat site adjacent to site.

Ongoing hydrodynamic surveys.

Fauna.

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 & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Site Unit Recording.

Environment Agency low tide counts (five yearly).

Marine Nature Conservation Review: identification of intertidal biotopes (Hill *et al.* 1996)

Completed.

Saltmarsh survey 1988.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

As a result of the English Nature estuaries initiative there is a Blackwater Estuary Management Plan. The Blackwater Estuary Implementation Officer provides educational activities along with the Essex Wildlife Trust, RSPB and English Nature conservation officers.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.

Caravan parks - March to November.

Dog walking - all year - no facilities.

Bird watching - all year - this can be done via local wildlife trust and the RSPB reserves.

Sailing - predominantly summer - there are marinas and moorings for boats.

Jet-skiing - summer only - there is a licensed area and access to open water provided at West Mersea.

Water-skiing - predominantly summer - there is a zoned area.

Power-boating - predominantly summer - access ramps, moorings and marinas.

Walking - all year - no facilities.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.
 Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,
 European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol,
 BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House,
 Northminster Road, Peterborough, PE1 1UA, UK

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Site-relevant references

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Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • email: ramsar@ramsar.org