Exo Environmental

Appendix 1: Environmental Designations

Brightlingsea Harbour Personal Watercraft (PWC) Pontoon

1 Blackwater, Crouch, Roach and Colne Estuaries Marine Conservation Zone (MCZ)

The designated boundaries of the Blackwater, Crouch, Roach and Colne Estuaries (MCZ) overlaps with the other sites but extends to all areas below meanh high water springs (MHWS) (*Figure A1.1*). The MCZ is designated for four features that are not necessarily included or recognised within other designations (following Natural England, 2013) (Table A1.1).

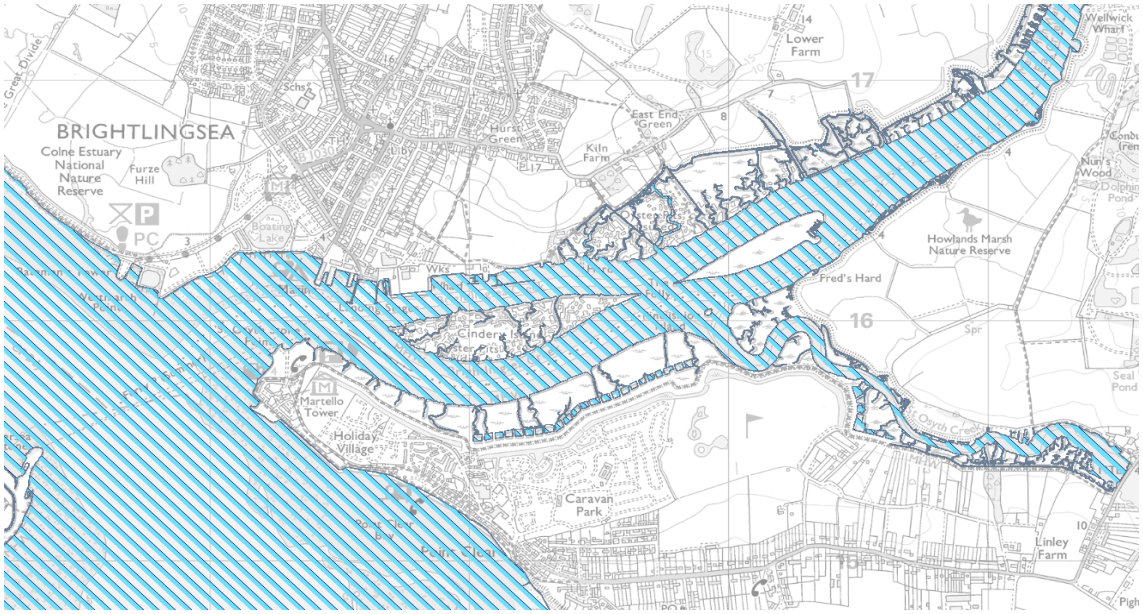

Figure A1.1. Overview of the Blackwater, Crouch, Roach and Colne Estuaries MCZ (Source: www.magic.defra.gov.uk/MagicMap. Accessed: 05/06/2018).

Table A1.1. Overview of the Blackwater, Crouch, Roach and Colne Estuaries MCZ qualifying features and their management.

Qualifying Feature	Feature Type	Management Approach
Intertidal Mixed Sediments	Broadscale Marine Habitat	Maintain in favourable condition
Native Oyster (*Ostrea edulis*)	Marine Habitat	Restore to favourable condition
Native Oyster (*Ostrea edulis*) beds	Species	Restore to favourable condition
Clacton Cliffs and Foreshore	Geological	Maintain in favourable condition

2 Colne Estuary (Mid Essex Phase 2) SPA

The SPA citation (JNCC, 2005) (Figure A1.2) applies exclusively to birds, with the qualifying species including some that are listed on both the Ramsar site and the SSSI citations also. Many of the species are listed as designated features only at particular times of year, the majority while overwintering. The range of bird species includes the overall wildfowl assemblage and named species of waders, wildfowl and raptor (hen harrier).

The distribution of the designated bird species is shown on 'low tide dot maps' provided by the British Trust for Ornithology (BTO, 2008), with birds like dunlin, turnstone and shelduck. The site and nearby areas are not believed to be included within the Wetland Bird Survey of the BTO (WeBS data).

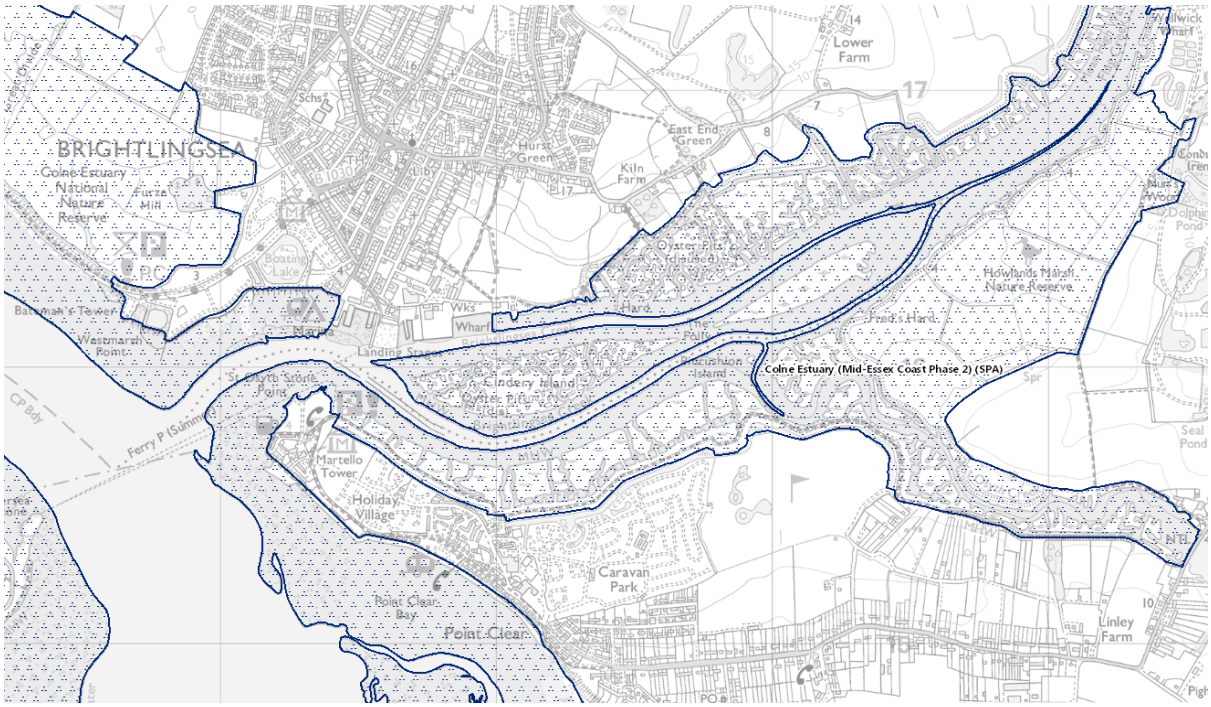

Figure A1.2. Overview of the Colne Estuary (Mid Essex Phase 2) SPA (Source: www.magic.defra.gov.uk/MagicMap. Accessed: 05/06/2018).

2.1 Breeding Season

A nationally important visitor to the SPA during the summer breeding season is the little tern, with 38 pairs reported representing at least 1.6% of the breeding population in Great Britain (5 year mean 1992-1996).

2.2 Overwintering

On average 75 avocet individuals overwinter here which represents at least 5.9% of the wintering population in Great Britain (5 year peak mean 1991/2-1995/6).

2,530 golden plover individuals represent at least 1% of the wintering population of Great Britain (5 year peak mean 1991/2-1995/6).

Hen harrier is represented by on average 4 individuals; at least 0.5% of the wintering population in Great Britain (5 year mean 1994/5-1998/9).

The SPA site also qualifies under Article 4.2 of the Directive (79/409/EEC) by supporting populations of European importance of these migratory species:

- Dark-bellied brent goose; 4,907 individuals representing at least 1.6% of the wintering Western Siberia/Western Europe population (5 year peak mean 1991/2-1995/6).
- 2,077 redshank individuals represent at least 1.4% of the wintering Eastern Atlantic population (5 year peak mean 1991/2-1995/6).

2.3 Assemblage Qualification

The SPA is also listed as a wetland of international importance, qualifying under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl.

The actual number is greatly in excess of this; 38,548 individual waterfowl (5 year peak mean 1991/2-1995/6) including: black-tailed godwit, dunlin, lapwing, grey plover, ringed plover, shelduck, cormorant, great crested grebe, redshank, dark-bellied brent goose, golden plover and avocet.

3 Essex Estuaries SAC

The Essex Estuaries SAC (Figure A1.3) is designated for seven Annex I habitats (Table A1.2), but not for any animal or named plant species. Some of the habitats are of restricted distribution within the designated area, such as 'Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*)', while others are more widespread, such as 'estuaries'.

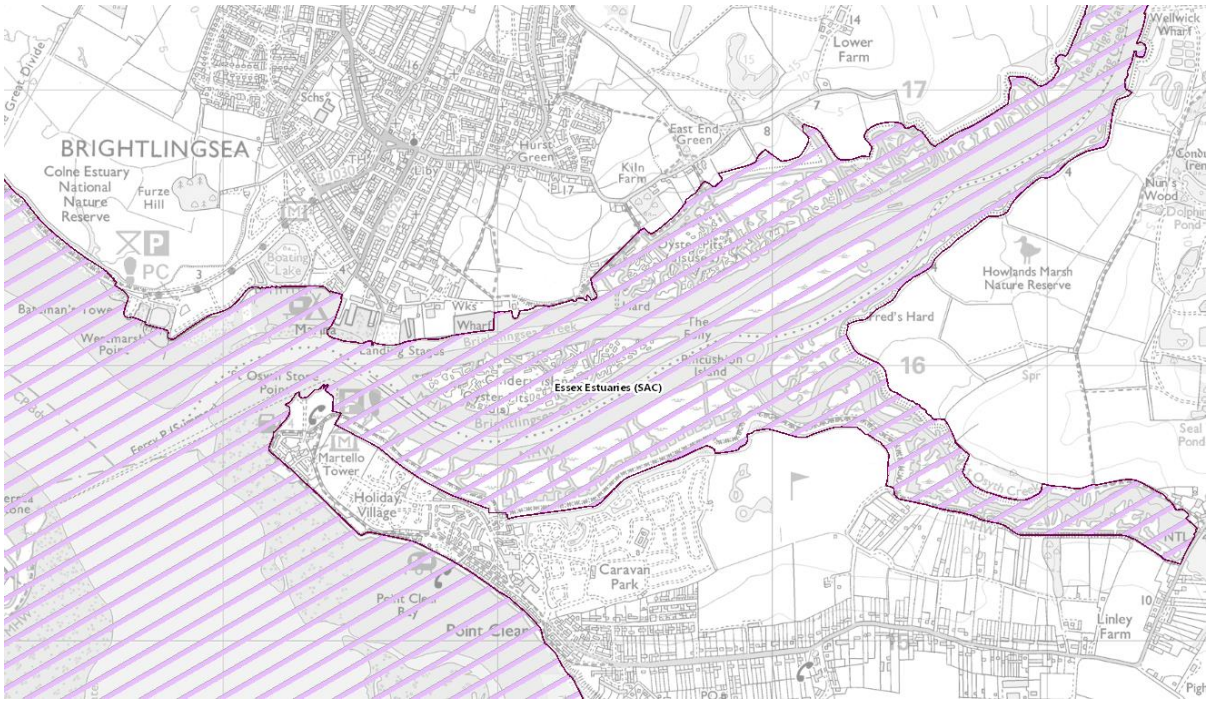

Figure A1.3. Overview of the Essex Estuaries SAC (Source: www.magic.defra.gov.uk/MagicMap. Accessed: 05/06/2018).

Table A1.2. Overview of the Essex Estuaries SAC qualifying features and their management.

Annex I Habitat	Description
1130 Estuaries	This is a large estuarine site in south-east England, and is a typical, undeveloped, coastal plain estuarine system with associated open coast mudflats and sandbanks. The site comprises the major estuaries of the Colne, Blackwater, Crouch and Roach rivers and is important as an extensive area of contiguous estuarine habitat. Essex Estuaries contains a very wide range of characteristic marine and estuarine sediment communities and some diverse and unusual marine communities in the lower reaches, including rich sponge communities on mixed, tide-swept substrates. Sublittoral areas have a very rich invertebrate fauna, including the reef-building worm *Sabellaria spinulosa*, the brittlestar *Ophiothrix fragilis*, crustaceans and ascidians. The site also has large areas of saltmarsh and other important coastal habitats.
1140 Mudflats and sandflats not covered by seawater at low tide	Essex Estuaries represents the range of variation of this habitat type found in south-east England and includes the extensive intertidal mudflats and sandflats of the Colne, Blackwater, Roach and Crouch estuaries, Dengie Flats and Maplin Sands. The area includes a wide range of sediment flat communities, from estuarine muds, sands and muddy sands to fully saline, sandy mudflats with extensive growths of eelgrass *Zostera* spp. on the open coast. The open coast areas of Maplin Sands and Dengie Flats have very extensive mudflats and an unusually undisturbed nature. Maplin Sands is particularly important for its large, nationally-important beds of dwarf eelgrass *Zostera noltei* and associated animal communities.
1310 *Salicornia* and other annuals colonizing mud and sand	Glasswort *Salicornia* spp. saltmarsh in the Essex estuaries on the east coast of England forms an integral part of the transition from the extensive and varied intertidal mud- and sandflats through to upper saltmeadows. Although the saltmarshes in this area are generally eroding, secondary pioneer communities appear as a precursor to erosion on the seaward edge of degraded mid-marsh communities. The area of pioneer marsh includes gradation into extensive cord-grass *Spartina* spp. swards.
1320 *Spartina* swards (*Spartinion maritimae*)	The most extensive remaining stand of the native small cord-grass *Spartina maritima* in the UK and possibly in Europe is found in the Essex Estuaries. The stand is located at Foulness Point and covers approximately 0.17 ha. Other smaller stands are found elsewhere in the estuary complex, notably in the Colne estuary, where it forms a major component of the upper marsh areas.
1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)	Although the saltmarshes in this area are generally eroding, extensive salt meadows remain and Essex Estuaries represents the Atlantic salt meadows habitat in south-east England, with floristic features typical of this part of the UK. Golden samphire *Inula crithmoides* is a characteristic species of these marshes, occurring both on the lower marsh and on the drift-line. It represents a community of south-east England also found to the south in mainland Europe.
1420 Mediterranean and thermo-Atlantic halophilous scrubs *(Sarcocornetea fruticosi*)	In this complex of estuarine marshes on the east coast of England the occurrence of Mediterranean and thermo-Atlantic halophilous scrubs is currently artificially restricted by sea-walls. It now occurs principally as a strandline community or at the foot of sea-walls. Recent managed retreat schemes offer the prospect of future expansion of the habitat type. The local variant of this vegetation, which features sea-lavenders *Limonium* spp. and sea-heath *Frankenia laevis*, occurs at one location; Colne Point.

Annex I Habitat	Description
1110 Sandbanks which are slightly covered by sea water all the time	This habitat is present but not a primary reason for designation.

3.1 Colne Estuary SSSI

As described within the citation the Colne Estuary SSSI is described as a comparatively short and branching estuary, with five tidal arms which flow into the main river channel (Figure A1.4). The estuary is of international importance for wintering brent geese and black-tailed godwit and of national importance for breeding little terns and five other species of wintering waders and wildfowl. The variety of habitats include mudflat, saltmarsh, grazing marsh, sand and shingle spits, disused gravel pits and reed beds, supporting outstanding assemblages of invertebrates and plants. Two areas of foreshore at East Mersea are of geological importance. Colne Point and St. Osyth Marsh are of geomorphological interest. Native oysters (or oyster beds) are not mentioned in the citation.

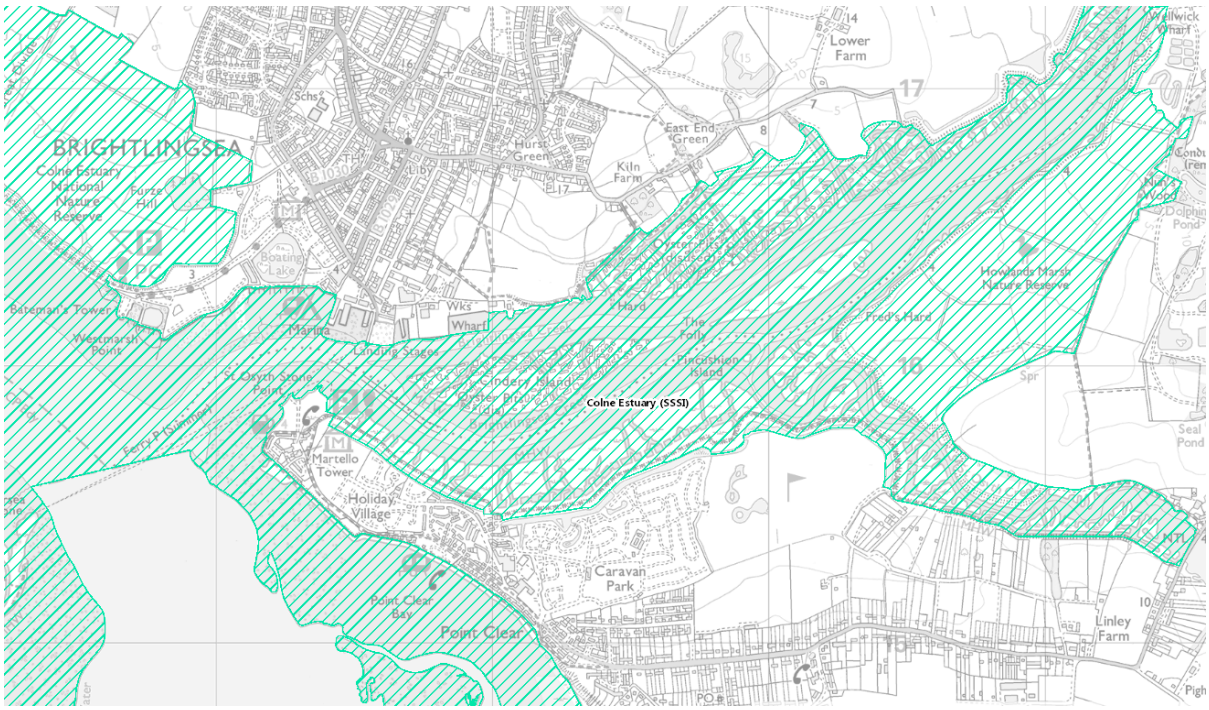

Figure A1.4. Overview of the Colne Estuary SSSI (Source: www.magic.defra.gov.uk/MagicMap. Accessed: 05/06/2018).

3.2 Colne Estuary (Mid Essex Phase 2) Ramsar Site

The Ramsar citation (JNCC 2008) extends over much of the Colne Estuary (Figure A1.5) and comprises seven principal aquatic or associated terrestrial habitats. Designated under this citation are a number of wetland and wading bird species, including the little egret. It is also listed for its overwintering wildfowl assemblages.

Additional criteria for designation are: the extent and diversity of saltmarsh; the quality of the saltmarsh with developmental stages evident; 12 species of nationally scarce plants; rare, vulnerable or endangered invertebrate species, at least 38 of which are British Red Data Book listed.

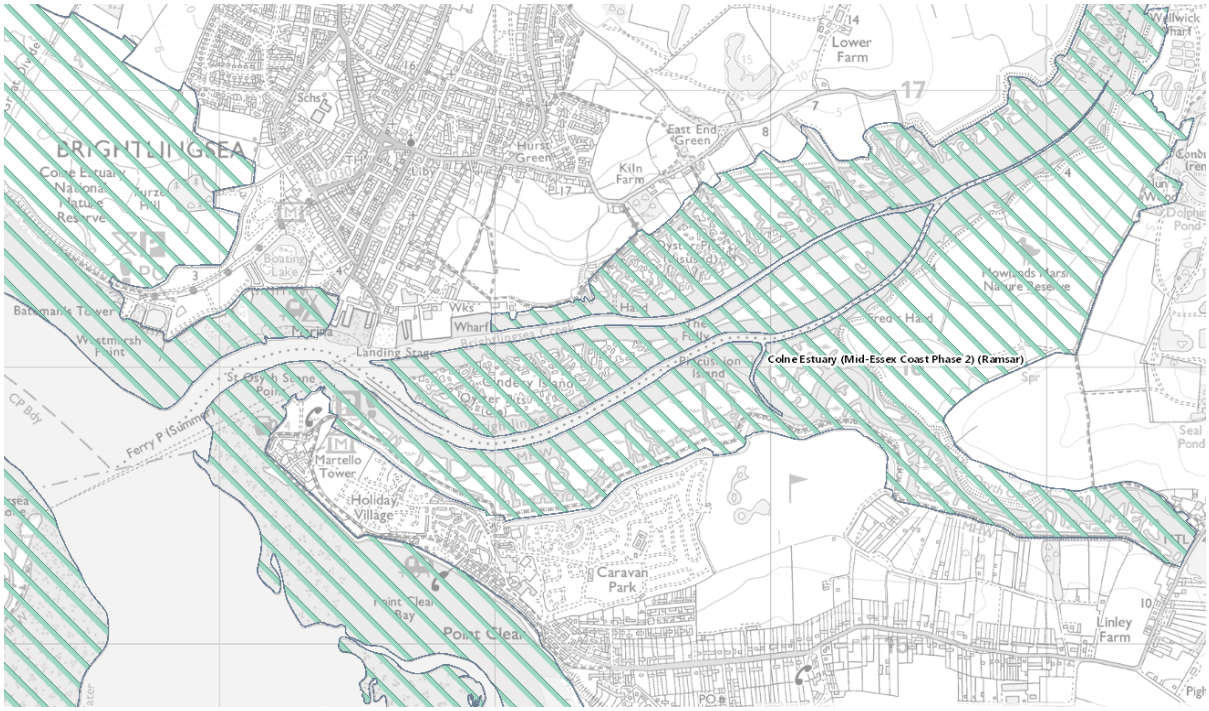

Figure A1.5. Overview of the Colne Estuary (Mid Essex Phase 2) Ramsar Site (Source: www.magic.defra.gov.uk/MagicMap. Accessed: 05/06/2018).