

5 The natural environment

5.1 Introduction

Portsmouth, Langstone and Chichester Harbours are natural tidal basins. Although all three have their own narrow entrances that connect them with the sea, their close proximity and interconnecting channels mean that they should be viewed and managed in a coordinated and integrated way.

The harbours are shallow and the very large intertidal mudflats are attractive to wading birds. In addition to mudflats, the following types of natural habitat are found within and around the coastal margin:

- Open water
- Lagoons
- *Zostera*, eel grass beds
- *Spartina*, cord grass, dominated beds
- Upper (mature) saltmarsh communities
- *Phragmites* reed bed
- Wet grassland/grazing marsh
- Sand dunes and shingle banks
- Woodland.

Because of these special natural attributes the harbours have been assigned various conservation designations. Table 6 lists and defines the designations and states whether they have international, European, national or local recognition.

Shoreline management must take account of the environmental value and the significance of any proposed management operations on the environment must be understood. The area of potential impact is not restricted to the boundary of the operation - work in coastal areas may have a very limited impact, or may affect the environment at a considerable distance from the shoreline (e.g transport of material by road).

The present day environment is the result of many factors and processes, some relict and some on-going. Evolution of the environment occurs over a variety of timescales and existing situations must be seen as transient rather than fixed. Appreciation of the transient nature of the environment is important to the SMP for two reasons:

- ★ change may be beneficial as well as detrimental, and should not necessarily be restricted
- ★ assessment of environmental impact must be based on existing trends for change as well as on present day conditions.

The following sections discuss environmental issues within the harbours. Much of the information is derived from the Pagham Harbour to River Hamble study (HR Wallingford, 1995a&b), supplemented by recent citations supplied by English Nature, site visits and consultation with interested groups.

5.2 Designated nature conservation areas

The conservation designations contained in each of the harbours are given in the following text. The natural features which warranted the awarded conservation status have also been summarised. Detailed information can be obtained from the citations supplied by English Nature.

Figures 17 and 18 display the boundaries of each of the designations.

Table 6 Definition of site designations

Designation	Acronym	Definition	Level of Importance
Ramsar Site	none	Wetland site recognised for its international importance for nature conservation especially as Waterfowl Habitat. Designated under 'The Ramsar Convention on Wetlands of International Importance'.	International
Special Protection Area	SPA	Internationally important area for birds. Designated under 'Council directive 79/409/EEC on the conservation of wild birds'.	European
Special Area of Conservation	SAC	Site designated under 'Council Directive 92/43/EEC', more commonly called the 'Habitats Directive'. The sites are selected to conserve natural habitats and wild flora and fauna of European importance. The aim is to sustain European biodiversity. Potential sites are currently being considered. The final list must be agreed by the Government with the EC, by June 1998 and by June 2004 all these sites must be designated.	European
Site of Special Scientific Interest	SSSI	An area of recognised scientific value in terms of its flora, fauna, geology or physiographical features.	National
Geological Conservation Review Site	GCRS	An SSSI site of geological interest which has been identified by the Geological Conservation Review.	National
National Nature Reserve	NNR	Area of natural interest designated under the 1981 Wildlife and Countryside Act.	National
Local Nature Reserve	LNR	Area of natural interest. Designated under the Countryside Act.	County.
Countryside Heritage Site	CHS	County designation (Hampshire only) with no attached statutory protection. Includes archaeological and natural interests.	County
Site of Importance for Nature Conservation	SINC	CHS's are currently undergoing a change of name to SINC. The name change is being conducted on a District to District basis. As yet, most of the sites in the SMP study area retain their original name. Equivalent to SNCI.	County
Site of Nature Conservation Interest	SNCI	County designation, usually designated because of wildlife value. No attached statutory protection. Equivalent to SINC.	County



Figure 18 (section a) Designated conservation areas – Chichester Harbour
Ref: V3-Fig 18

Figure 18 (section b)



Portsmouth Harbour

Portsmouth Harbour is designated as an SSSI, an SPA and Ramsar site. It contains a range of habitats including cord grass marsh, mudflats, eel grass beds, sea couch dominated grasslands, scrub, brackish lagoons and some surrounding terrestrial habitats. The eel grass beds are among the most extensive in Britain and support a rich associated benthos and epiphytic flora and fauna. Indeed, the biological richness of the area is reflected in the numbers of wetland birds it supports.

Portsmouth Harbour qualifies for SPA/Ramsar status under the Birds Directive by supporting internationally and nationally important wintering populations of waterfowl including the following species of waterfowl: Dark-bellied Brent Geese, Red-breasted Merganser.

Two brackish lagoons - Little Anglesey Lake and Cockle Pond - adjoining Haslar Lake in the south west of the Harbour are included in the SSSI. Both support populations of the starlet sea anemone and the lagoon sand shrimp which are specially protected by Section 9(5) and Schedule 5 of the Wildlife and Countryside Act 1981. Little Anglesey Lake supports the most diverse lagoonal species in south-east England.

A small area of terrestrial habitat extending along the southern side of Horsea Island is also included in the SSSI. Chalk spoil dumped at this site early in the 20th century now supports a rich chalk grassland flora which includes about thirty species which either have narrow habitat tolerances or are rare in Britain. Horsea Island is itself designated as a CHS. In addition to possessing the chalk grassland flora it is also of historical interest in being a man made extension of a natural island in Portsmouth Harbour. The site may also possess archaeological interest with the possibility of a midden occurring at the north west end.

Langstone Harbour

Langstone Harbour is designated as a SSSI and is part of the Langstone and Chichester Harbours, SPA and Ramsar site. It contains one of the largest areas of mixed saltmarsh on the south coast, as well as extensive areas of cord grass marsh in an advanced state of degeneration. The eel grass beds are among the largest in Britain. The Harbour is of international significance as a rich intertidal system which supports large populations of migrant and overwintering wildfowl and wading birds. Indeed, the harbour ranks among the twenty most important intertidal areas in Britain as a summer and autumn assembly ground for waders during the moult and as a post moult wintering ground. Depending on fluctuating population levels Langstone Harbour has regularly supported between 5-10% of the world population of wintering Dark Bellied Brent Geese, over 3% of the European and North African wintering population of Dunlin and 1-2% of the European and North African migration flyway population of Grey Plover and Black-tailed Godwit. Part of Langstone Harbour is owned and managed by the Royal Society for the Protection of Birds and includes the site of one of Britain's largest Little Tern colonies and supports a large populations of the nationally rare little-robin.

Also located within the SSSI is the Farlington Marshes LNR which is situated in the north-west sector of the Harbour. This area of reclaimed saltmarsh, protected by a seawall contains brackish marsh, fresh marsh, a large lagoon with associated reed beds, grassland and scrub. These provide vital high water roosting grounds for the Harbour as a whole and a major feeding ground for geese. The reserve also has breeding populations of foxes, badgers and hares. Following widespread annexation for agricultural improvement few such sites remain on the south and east coasts of England where this type of habitat was once common. Shut Lake, within Farlington Marshes forms part of the Solent and Isle of Wight Lagoons candidate SAC.

The Wade Way CHS is a rare and ancient causeway linking Hayling Island and the mainland at Langstone. It was recorded in the 18th century and was in use long before then.

Langstone Harbour SSSI is part of the proposed Solent Maritime SAC.

SSSI, NNR, and LNR

Chichester Harbour

Chichester Harbour is designated as an SSSI and is part of the Langstone and Chichester Harbours SPA and Ramsar site. It contains a wide range of habitats which have important plant communities as well as extensive areas of mud and sandflats. The site is of particular importance for wintering wildfowl, wading birds and breeding birds, both within the Harbour and in the surrounding permanent pasture fields and woodlands. It is deemed an internationally important site for Ringed Plover, Grey Plover, Black-tailed Godwit, Dunlin, Sanderling, Curlew, Greenshank, Shelduck, Teal and Dark Bellied Brent Goose.

The harbour contains large areas of degenerate cord grass and small areas of upper saltmarsh.

Warblington Meadow is an unimproved grazing marsh which adjoins the Harbour. It is designated as an SSSI in its own right for its gradation from freshwater base rich marsh to old reclaimed saltmarsh and for its rich associated flora. Thorney Island SNCI lies within the Harbour. It is important for migrant birds and as a roost for waders. The grassland and scrub habitats it provides support many breeding birds and butterflies.

Fishbourne Meadows SNCI comprises several meadows lying close to the Harbour. They appear to be semi-improved and are of botanical interest. Salters Copse SNCI adjacent to Chichester Yacht Basin is an ancient, botanically rich semi-natural woodland on the coastal plain. The Chichester Yacht Basin Meadow and Pool SNCI comprises a shallow freshwater pool, stream and adjoining pasture. It provides an important site for birds, especially wintering and passage waders and wildfowl. Birdham Pool SNCI lies close by; it is a brackish coastal lagoon which supports a population of the protected lagoon sand shrimp. Other specific areas of interest within the boundaries of the Chichester Harbour site include Nutbourne Marshes LNR, Pilsley Island RSPB Reserve, Sandy Point Country Heritage Site (CHS) (shortly to be designated a LNR as the best example of vegetated sand and shingle in Hampshire), Gutner Point LNR, The Wade Way CHS and National Trust (NT) landholdings at East Head where there is also a sizeable sand dune and shingle system of geomorphological importance. Another geomorphologically important site lies to the east of Langstone where a low cliff at high water mark exhibits a complex of Brickearth and Combe Rock deposits.

Chichester Harbour SSSI is part of the proposed Solent Maritime SAC.

5.3 Future designations

EC Habitats Directive (92/43/EEC) attempts to conserve European habitat types and/or rare and threatened species by assigning special protection to Special Areas of Conservation designated by Member States. At present SACs are in the nomination stage. Chichester and Langstone Harbours are included in the proposed Solent Maritime SAC. This region has been proposed as a possible SAC because of the following habitat types: 'cordgrass swards, upper saltmarsh, estuaries. Chichester Harbour also contains a rare polychaete which is found on the steep eastern side of the entrance to Chichester Harbour.

Figures 17 and 18 show the proposed SAC coverage within the harbours. Shut Lake, within Farlington Marshes LNR, is part of the candidate Solent and Isle of Wight Lagoons SAC.

5.4 Responsibilities and restrictions due to conservation designations

Official conservation designations assigned to the harbours have implications for SMP. SSSIs, SPAs and SACs have statutory protection. An overview of the legislation relating to these sites and the relevant restrictions are given below.



Designation as an SSSI is accompanied by a standard list of 'potentially damaging operations', which usually include operations such as the 'erection of sea defences' and the 'undertaking of engineering works'. Owners or occupiers must not carry out potentially damaging operations (or permit them to be carried out) on an SSSI without giving written notice of the proposed operation to English Nature. Works may only legally proceed if written consent is obtained, or the operations comply with a management agreement previously drawn up with the nature conservation agency, or four months have elapsed since written notice was given. Otherwise, a criminal offence is committed if a 'potentially damaging operation' is carried out without reasonable excuse. The Wildlife and Countryside Act states that there is a reasonable excuse if the operation is an emergency one (provided that the nature conservation agency is notified as soon as practicable) or is one for which planning permission has been granted.

If English Nature seriously objects to the proposals and the objections cannot be resolved by negotiation within the four month period, English Nature may apply to the Secretary of State for the Environment for a Nature Conservation Order. Nature conservation orders are comparatively rare, and their main effect is to extend the period of delay to a maximum of 12 months, so that the nature conservation agency has more time to negotiate a management agreement or to consider compulsory purchase.

Planning authorities must consult English Nature about applications both within an SSSI or operations outside the SSSI which may have a significant impact.

European Sites (SPA/SAC)

Legislation to implement EC Habitats Directive 1992 has been introduced in the United Kingdom by the Conservation (Natural Habitats, &c) Regulations 1994, SI 1994/2716. This regulation covers both SPAs and SACs, which are collectively termed 'European Sites'. Planning authorities have to follow a set procedure when considering proposals for development on European Sites. Developments include coast protection works and new flood protection works. This procedure is summarised in the flow chart in PPG9.

The regulation stipulates that any proposed scheme likely to have a significant effect on a European Site should be appropriately assessed to determine its impact on the conservation objectives. The competent authority may agree to the plan if the integrity of the site is not jeopardized. If the assessment indicates negative impacts but the competent authorities decide that scheme should go ahead due to overriding public interest, compensatory measures must be taken to ensure that the overall value of Natura 2000 (the European habitat network of SPAs and SACs) is protected. The European Commission should be informed of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat and/or priority species listed in the Annexes to the Directive, the only considerations which may be raised are those relating to human health or public safety, or to beneficial consequences of primary importance for the environment.

Permitted development rights under the Town and Country Planning (General Permitted Development) Order 1995, such as the Environment Agency for flood protection works, may not be exercised if they are likely to have a significant effect on a European Site unless they have been approved by the local Planning Authority. The Planning Authority has the power to grant permission for the works but it must consult English Nature for its opinion and consider their view when making the final decision.

At present SACs are in the nomination stage. Part of the open coastline, along the south of Hayling Island and within the Solent form part of a nominated site called Solent Maritime. The Government advises in Planning Policy Guidance PPG9, *Nature Conservation*, that proposed SAC's should be protected as a matter of policy in the same way as designated sites.

Environmental assessment to support planning application

Under EC directive 85/337/EEC coastal and flood defence works must be subject to an environmental assessment if they are likely to have a significant effect on the environment. If the works require planning permission or are within a European Site (SAC or SPA) the Local Planning Authority decides whether an environmental assessment is necessary.

5.5 Implications for shoreline management

1. The total coastline of Chichester and Langstone Harbours, and much of Portsmouth Harbour is designated as nationally and internationally important for nature conservation. Moreover, Chichester Harbour is also designated for its landscape value. New or significantly enlarged coastal defence structures are unlikely to be acceptable unless there is an overriding public interest that can be shown to justify the potential impact on habitats or species.
2. Compensatory measures such as replacement habitat creation elsewhere, should be conducted if coastal defence works are likely to cause significant damage to habitat or species in the sections of coastline specified as a European Site in accordance with the provisions of the Habitats Regulations 1994. The European Commission should be informed of the compensatory measures to be adopted.
3. Where new defences or improvements to existing defences are required it is important that full consideration is given to nature and geological conservation in the concept, planning, design, implementation and maintenance stages. There should be a general policy not to disrupt natural coastal processes except where life or important man-made assets are at risk.
4. Coastal defence strategies should be compatible with the relevant management plans for the designated conservation areas.
5. English Nature should be consulted at the outset of any proposal for shoreline management operations to determine whether the operations are likely to cause environmental damage and to determine whether alternative approaches may be more acceptable.