WIRRAL

Wirral Council

Parks and Countryside Service

Wirral Beaches

Management Plan

Produced 2011

Introduction

The plan is intended to provide the detail required for the management and maintenance of Wirral beaches within the required scope, it is not intended as a full coastal management document.

The purpose of this plan is to identify beach maintenance activity and refers to the grooming of the beaches and the removal of litter, flotsam, and debris, wind blown sand and invasive plant species.

Typology and primary purpose - Wirral Open Spaces Assessment November 2010 (based on PPG17 guidance)

Typology:

Natural and Semi Natural Green spaces (Beaches and foreshore)

Primary purpose:

A less intensively managed site, including woodlands and where appropriate beaches providing accessible opportunities for informal recreation and the appreciation of nature and wildlife including wildlife conservation, biodiversity and environmental education.

Aims

Standard aim: The designated beach will be maintained in accordance with its primary purpose. As an important natural amenity

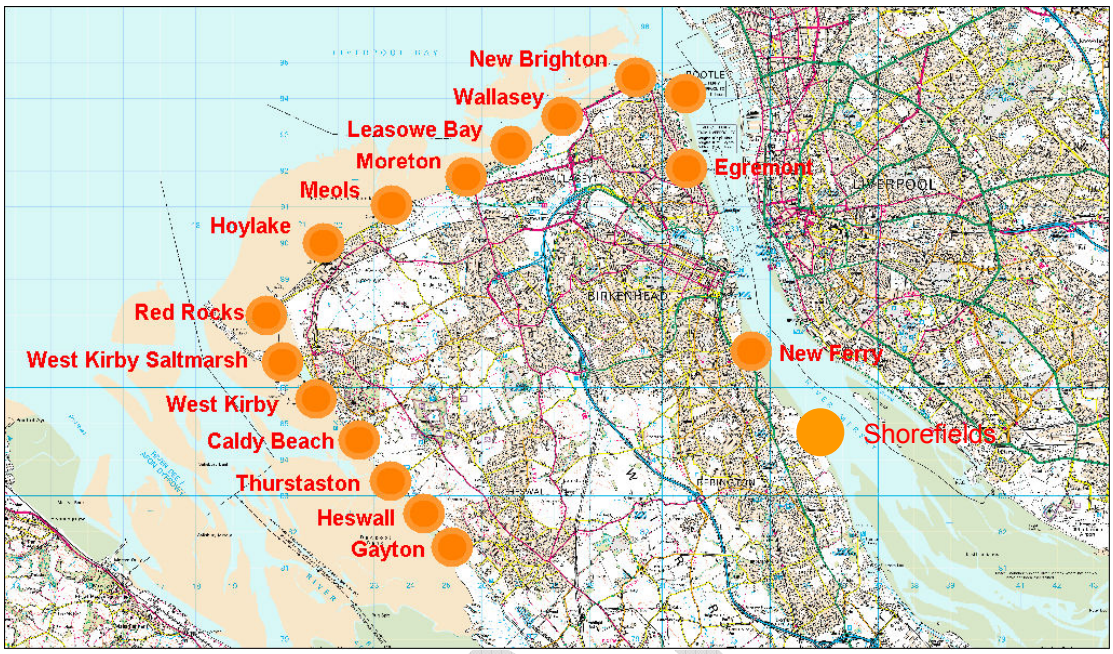
Management and maintenance practices will recognise and enhance the value of beaches and the contribution that they make to economic, environmental and cultural well-being both for Wirral residents and visitors to the borough.

History

Wirral's beaches and foreshore have a rich and vibrant history to numerous to mention within the context of this plan. The area has abundant natural history with high level international designations, historic buildings, structures and coastal features.

Site information

Beach Locations Plan: (see also site plans below)



Official site name: (s)

- Caldy Beach
- Egremont Shore
- Gayton Saltmarsh
- Heswall Foreshore
- Hoylake Beach
- Leasowe Bay
- Meols Beach
- Moreton Beach
- New Brighton Beach x2
- New Ferry Foreshore
- Red Rocks
- Shorefields
- Thurstaston Beach
- Wallasey Beach
- West Kirby Beach
- West Kirby Saltmarsh

Site address: N/A

Grid reference: N/A

Ward (s): The beaches this plan refers to are in the New Brighton, Wallasey, Leasowe & Moreton East, Moreton West and Saughall Massie, Hoylake & Meols, New Ferry and West Kirby and Thurstaston wards.

Site overview:

Beaches are one of Wirral's most important assets and are a dynamic feature of the coast. They range from resort beaches at New Brighton and West Kirby to quieter beaches such as Leasowe Bay, Wallasey Beach and Egremont. They create opportunities for tourism and economic investment.

Wirral has four Environment Agency designated bathing beaches at West Kirby, Meols, Moreton and Wallasey. The remainder are classed as amenity beaches.

Wirral operates a Beach Lifeguard Service to provide as far as is practicable, the safety of persons resorting to the foreshores whilst in the pursuit of their leisure and recreational activities.

The unit operates on a seasonal basis from Easter until the end of September with weather, tidal conditions, special events and the number of foreshore users being prime considerations for hours of duty.

Various bathing locations are manned by fully trained and qualified lifeguards. First Aid is also a duty undertaken by qualified first aiders whilst the unit is operational during the summer months.

Size:

Council ownership extends to the mean low water spring tide mark. For maintenance purposes most activity takes place up to 100 metres from the land formation.

Access:

Access to and usage of our beaches is a valued and cherished public resources.

Access to our beaches is adequate with more than 130 access points to the beach and water. Many of the accesses have been improved over time.

Numerous on-street and municipal parking opportunities are available.

- There are numerous access points to Wirral's beaches including slipways, steps and ramps.
- Accessibility by public transport is reasonable in urban areas and less-so in others
- Parking opportunities exist along most of the coastline
- The Wirral Coastal Cycleway follows most of the coastline

- The Wirral Circular Trail takes in most of the coastline

Tenure and concession agreements:

- The majority of Wirral's foreshore is owned by the Authority
- At the time of writing this plan an interim arrangements exists to supply and service (9) 1100 litre "euro carts" at key busy locations to help facilitate clean beaches.
- The Environment Agency samples water quality 20 times a year (from May to September) at Wallasey Beach (Wallasey Village), Moreton Sea Wall (Pasture Road), Dove Point (Meols) and West Kirby Main Beach Marine Lake Wall.
- Sand yachting, Para - karting (kite buggying) and land boarding takes place on the beach under agreement between the Metropolitan Borough of Wirral and Wirral Sand Yachting Club. This agreement is subject to approval by English Nature.
- Commercial, Leisure Sea and shell fishing takes place around Wirral's coast and foreshore with agreement from statuary agencies. (Management of the Dee Estuary fishery is undertaken by the Welsh Environment Agency with the North Shore being undertaken by The North West Sea Fisheries Committee)
- As the land owner the council has a key role in managing access and control of the fishery and any operations that may have a negative impact on the beach, its natural habitats and users
- **Boat Launching and Foreshore Permits:-**

  The authority has a permit system in place for the launch and recovery of boats; powered craft are only permitted at New Brighton. Some slipways are restricted for emergency use only.

  A foreshore permit is required to take a vehicle onto the foreshore or to launch a boat around Wirral's coast.

  Permits are available through the approved agents of the council for which a charge is made.

Water sports activities are restricted by zoning at West Kirby Beach. This may be extended to other designated bathing beaches in future.

- **Revised Bathing Water Directive**

In 2015 the current directive will be repealed and the revised Bathing Water Directive (2006/7/EC) will come into force.

Background

The revised Bathing Water Directive (76/1160/EEC) is an updated version of the current Bathing Water Directive (76/1160/EEC).

The revised Directive aims to set more stringent water quality standards and also puts a stronger emphasis on beach management and public information.

The revised Bathing Water Directive entered into force on 24 March 2006. The overall objective of the revised Directive remains the protection of public health whilst bathing, but it also offers an opportunity to improve management practices at bathing waters and to standardise the information provided to bathers across Europe.

Summary of main uses

Main activities

- Natural habitat
- Family activities
- Active and passive recreation
- Events
- Walking
- Dog walking
- Access to nature
- Access to the sea
- Boat launching
- Sand Yachting
- Paragliding
- Parakarting
- Wildfowling

Community and user organisations:

- Dee Estuary Conservation Group
- Dee Estuary Voluntary Wardens
- Friends of North Wirral Coastal Park
- Friends of Hilbre
- Wirral Country Park Friends Group
- Heswall Soroptomists
- Wallasey Soroptomists

- West Kirby Lions
- Blue Planet (Blue Watch)
- Cheshire and Wirral Ornithological Society (CAWOS)

Stakeholders

- WMBC Coastal Protection (flood defence)
- Cheshire Wildlife
- Natural England
- Environment Agency
- Keep Britain Tidy
- Marine Conservation Society
- Blue Planet Aquarium
- Liverpool University
- Mersey Docks and Harbour Company
- North West Sea Fishery Committee
- Wirral Coastal Partnership
- Cheshire Rigs
- Proudman (National Oceanographic Institute)
- Sailing Clubs
- RSPB
- Countryside Council for Wales
- Liverpool Museums
- Royal Liverpool Golf Club

Natural and built heritage

Designations:

Designated bathing beaches:

- West Kirby
- Meols
- Moreton
- Wallasey

Sites of Special Scientific Interest

Most of Wirral's beaches are classified as SSSI these beaches are located at

- Dee Cliffs
- Dee Estuary
- Mersey Estuary
- Mersey Narrows
- North Wirral Foreshore
- Red Rocks

Coastal Dune formations exist at Leasowe Bay, Meols, Red Rocks and West Kirby

Monitoring and review

This management plan should be reviewed and resubmitted annually to the Service Manager at Wirral Council.

Objectives

A) Maintain the physical elements of the site indicated in the site Information section and the site elements Map quantities Table in appendix and in accordance with the relevant requirements specified in the Service Requirement;

b) Conduct site condition surveys and develop the Site Improvement Plan on an annual basis (appendix g);

c) Maintain the SBI/SSSI in a way that is consistent with conserving the features of interest outlined in the site citation and any other statutory requirements.

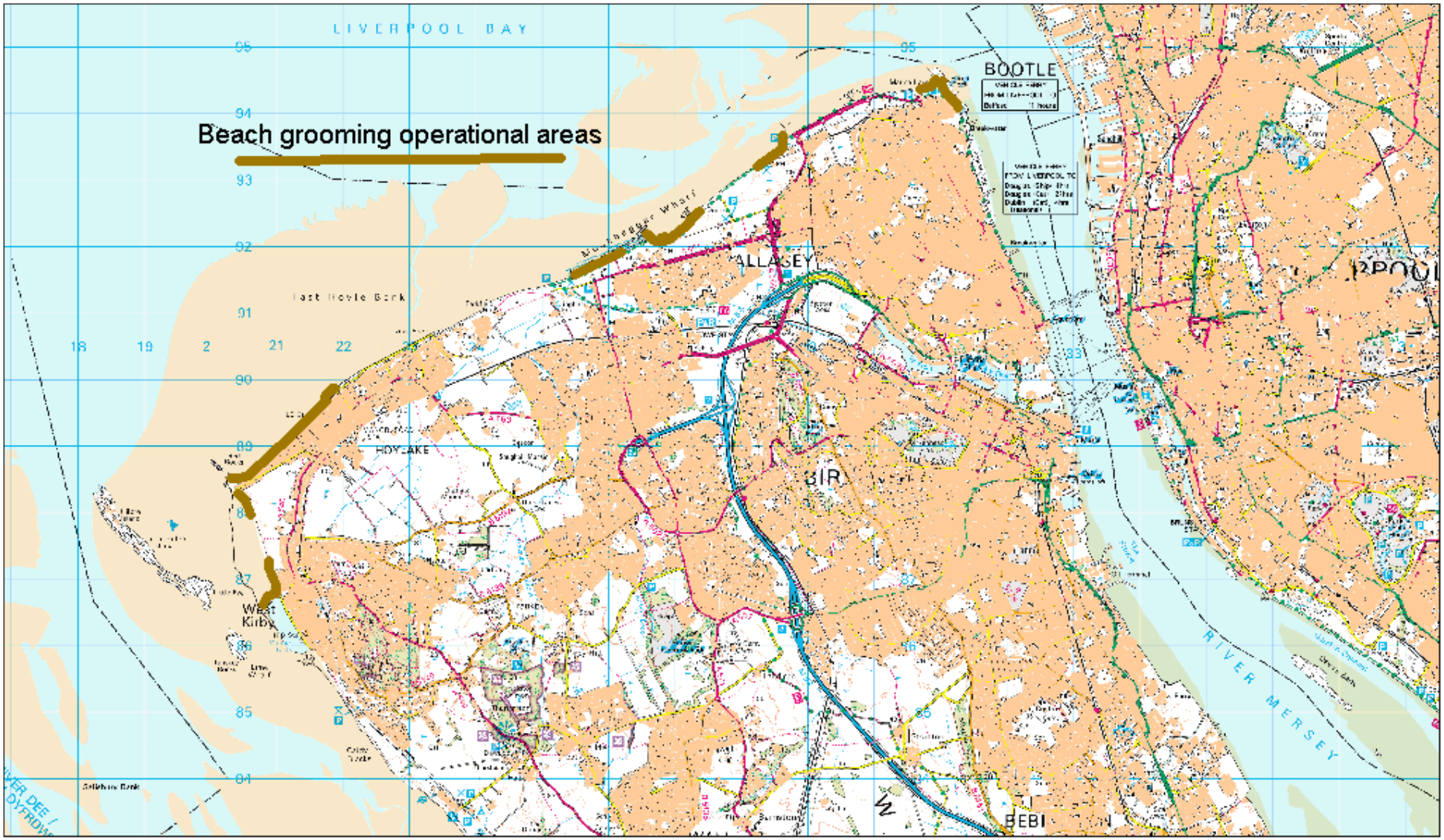
d) Ensure sites retain any designations and awards status;

e) Carry out other operations that are consistent with achieving the site's primary purpose.

Appendices

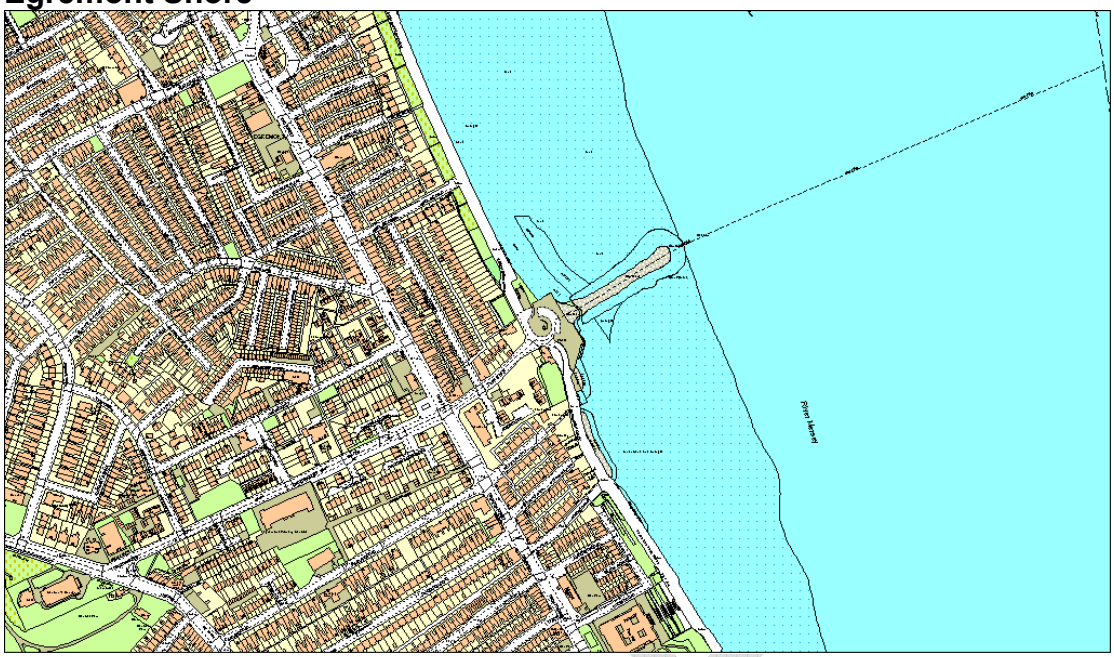
1. **Beach grooming / raking areas**
2. **Site Plans**
3. **Site History**
4. **Current Facilities and Features**
5. **SSSI Citations**
6. **Site quantities – operations**
7. **Beach Improvements Plan**

Appendix 1 Beach Grooming Areas

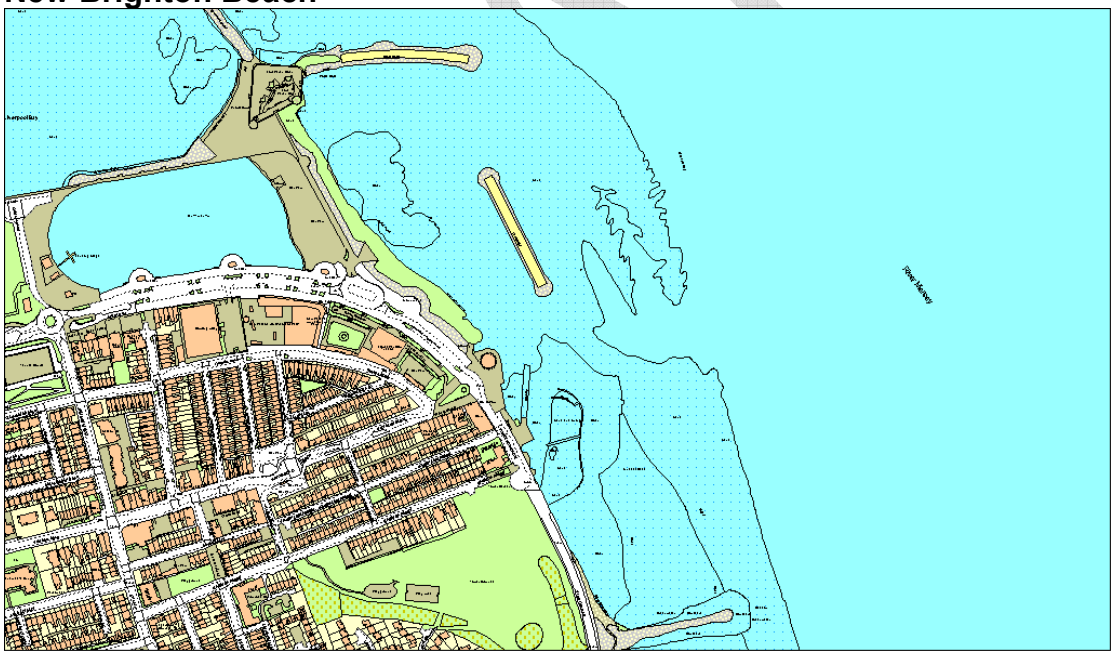


Appendix 2 Site Plans

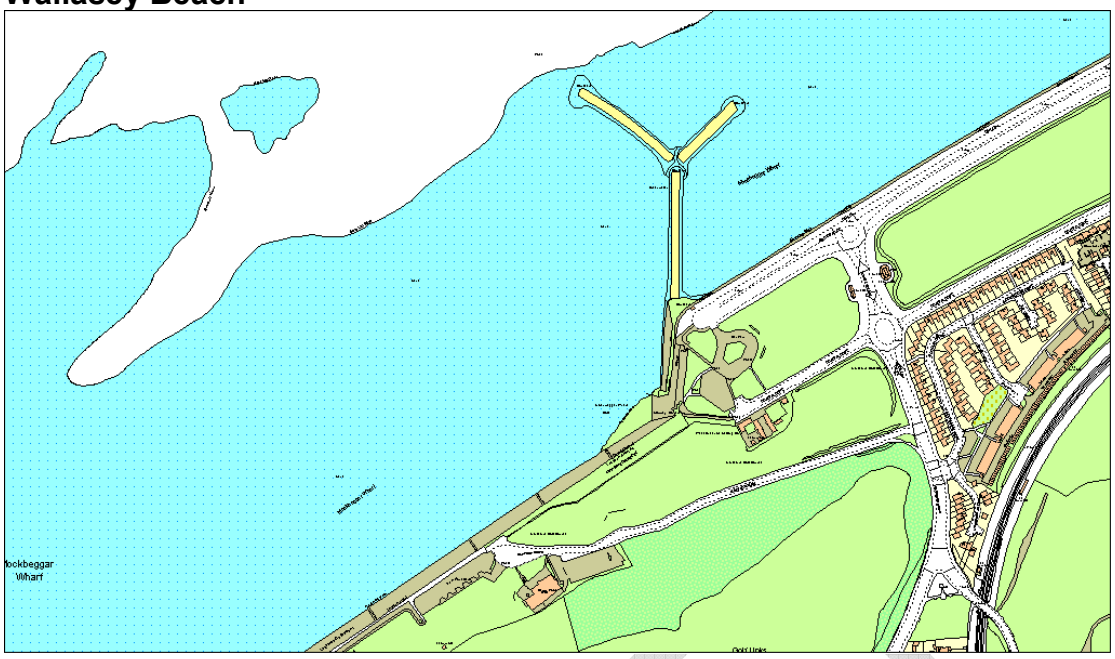
Egremont Shore



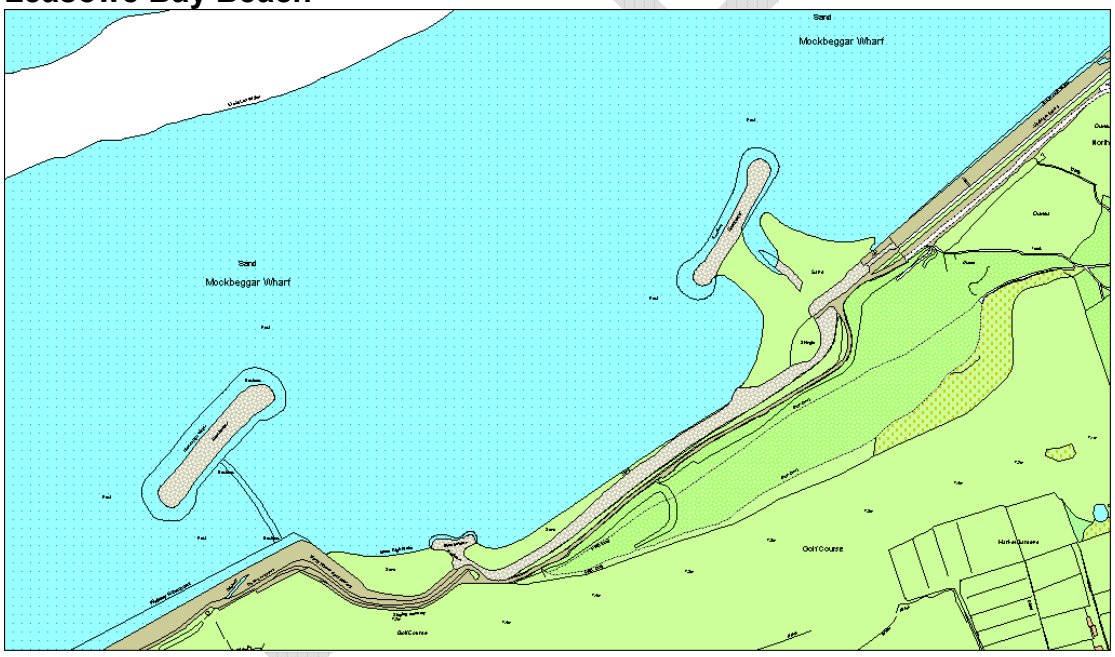
New Brighton Beach



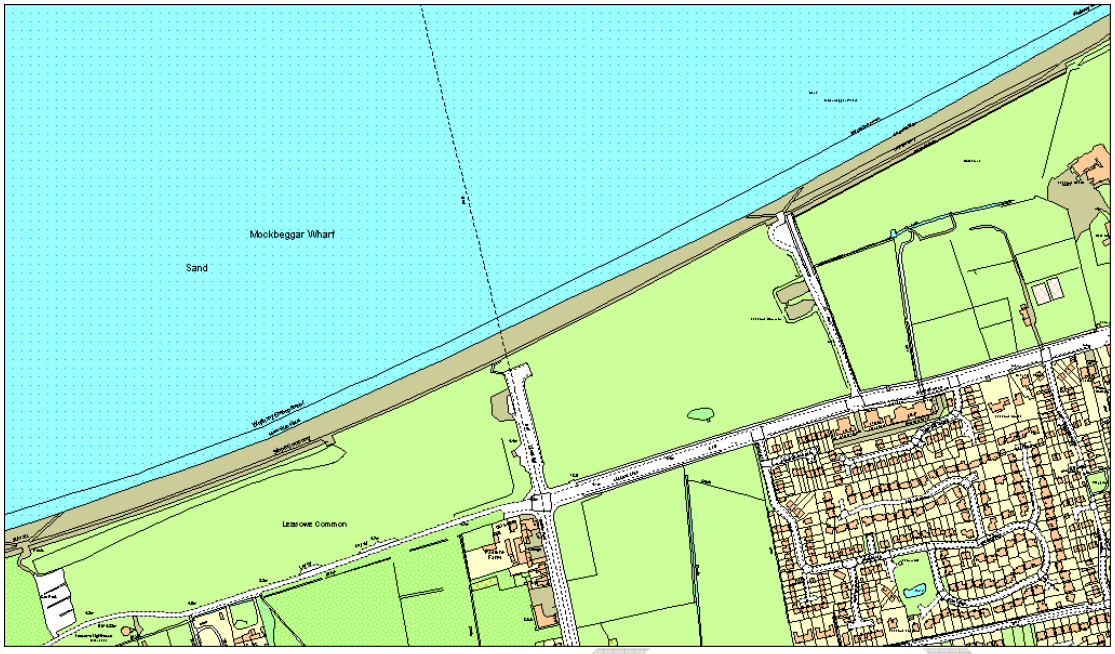
Wallasey Beach



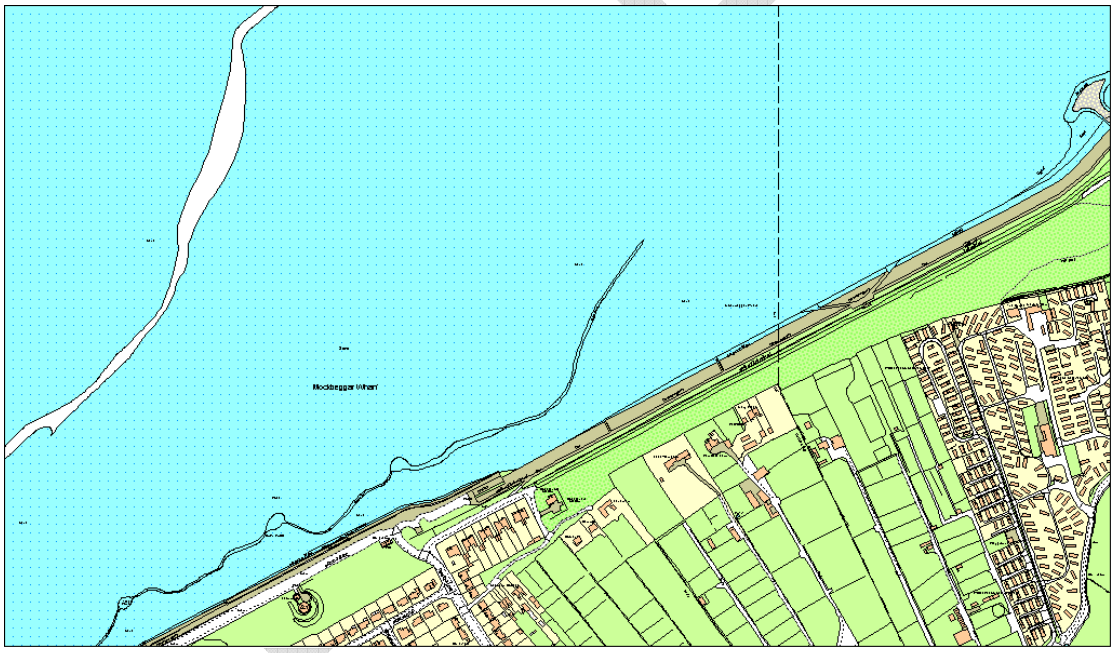
Leasowe Bay Beach



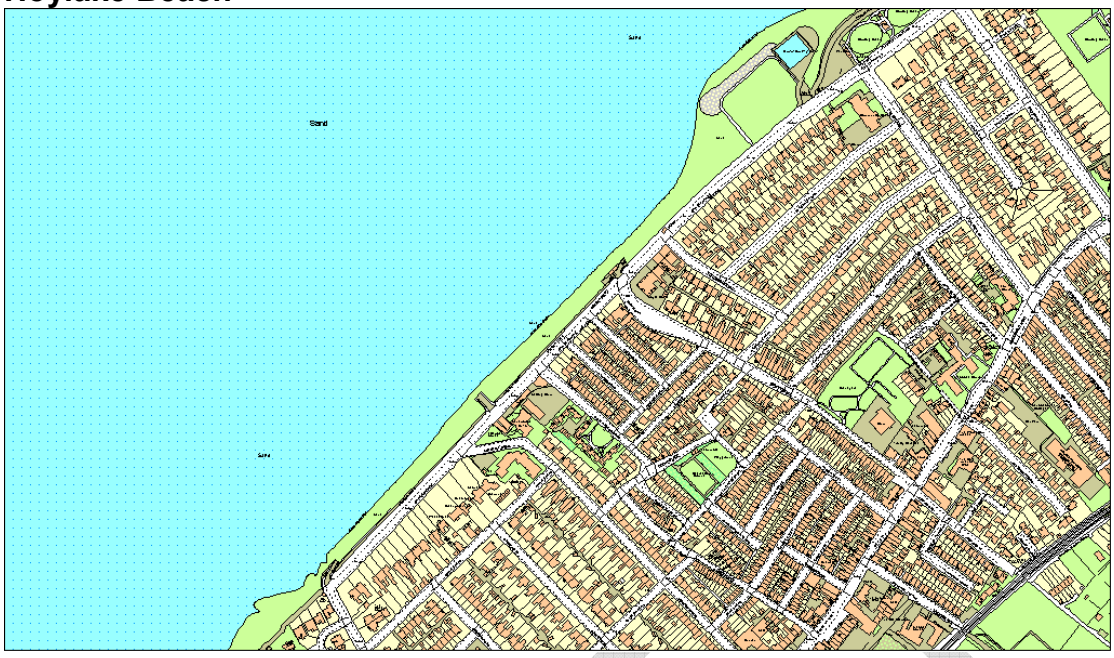
Moreton Beach



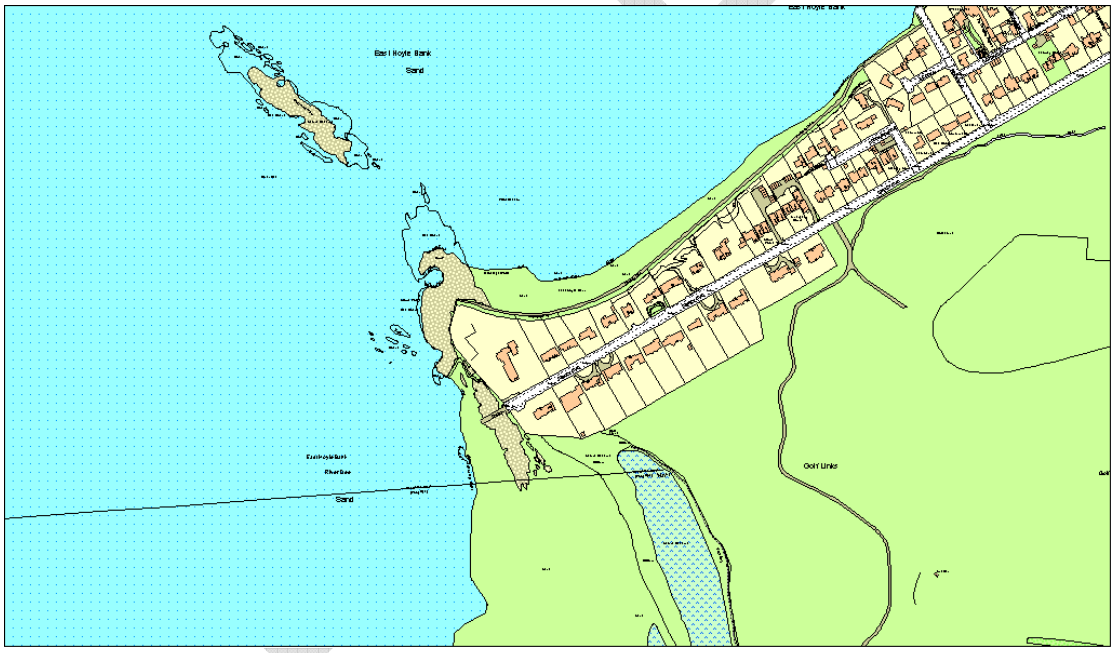
Meols Beach



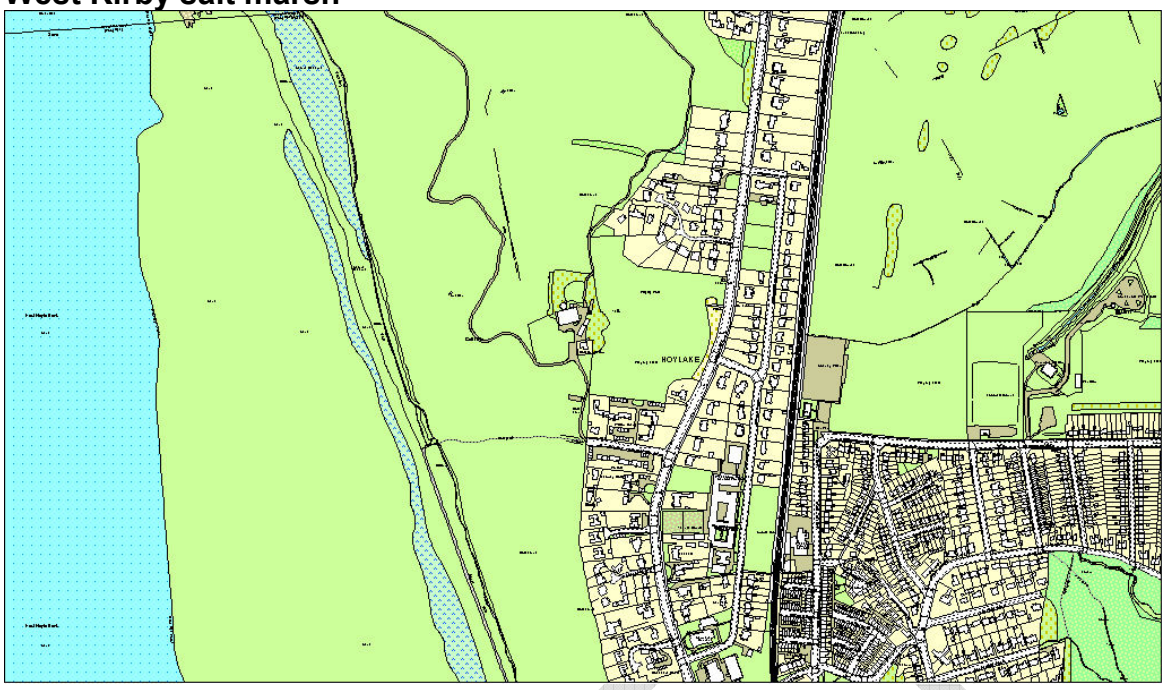
Hoylake Beach



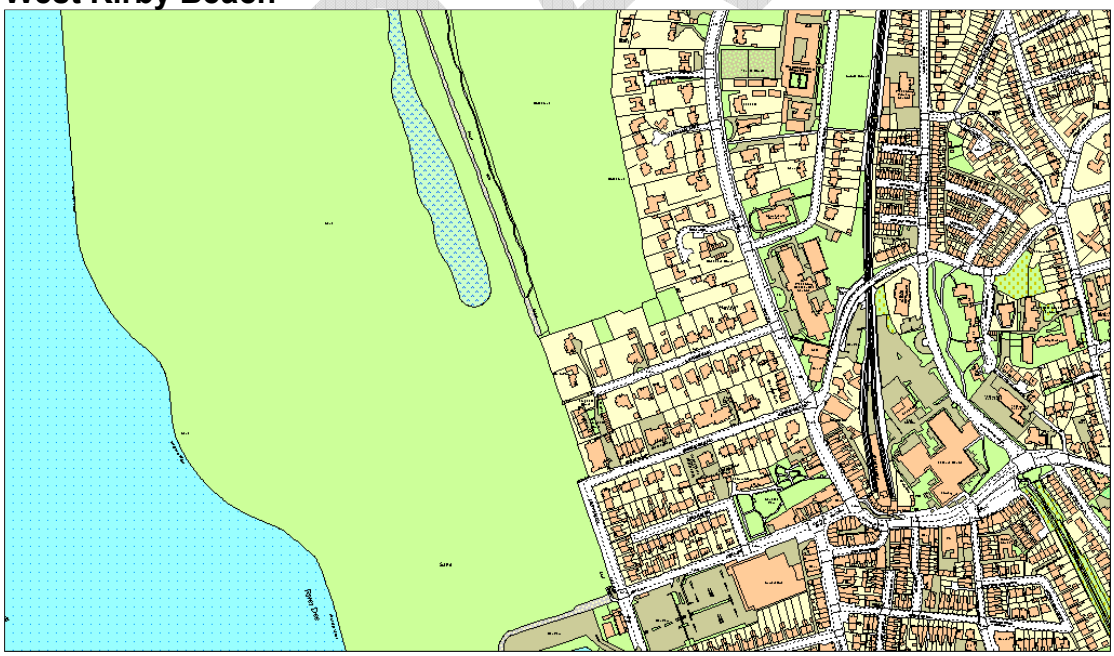
Red Rocks



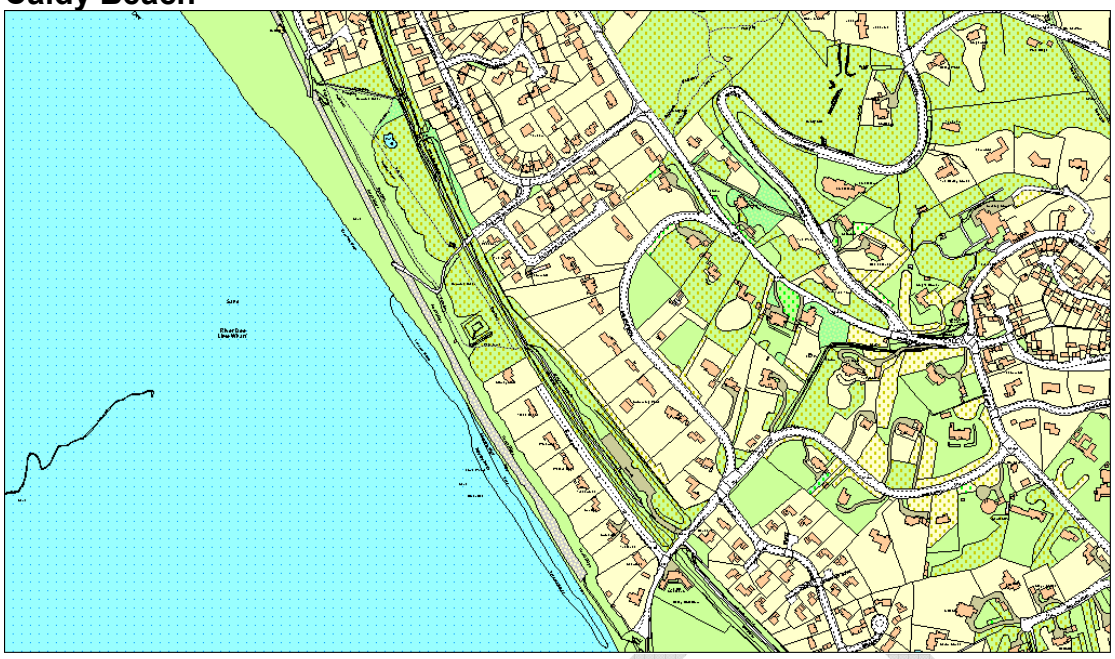
West Kirby salt marsh



West Kirby Beach

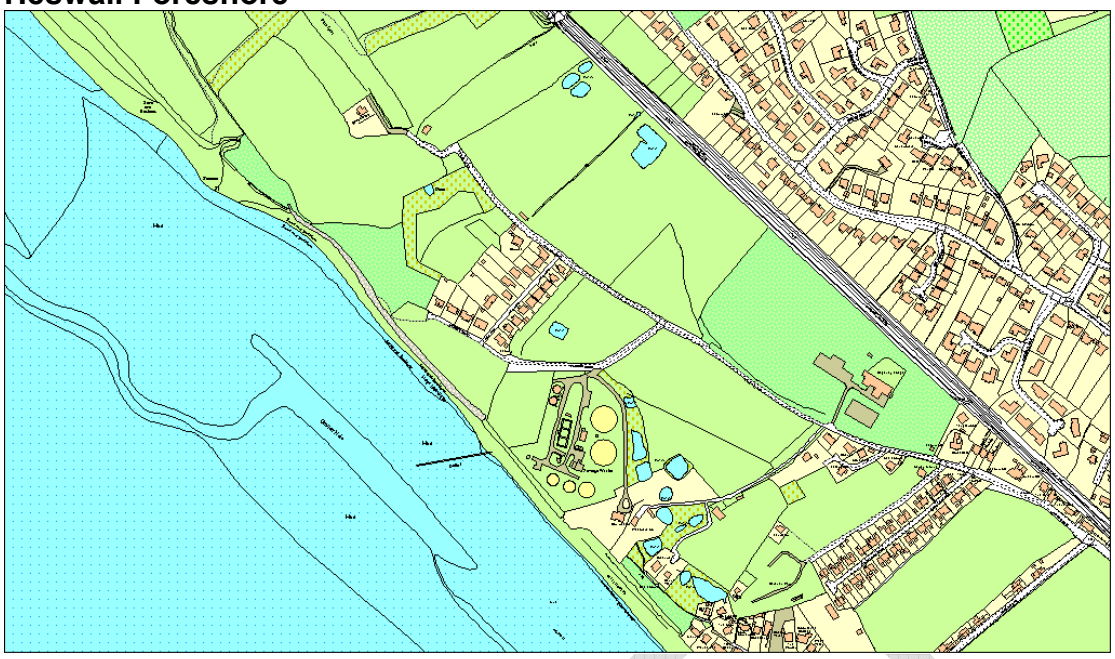


Caldy Beach



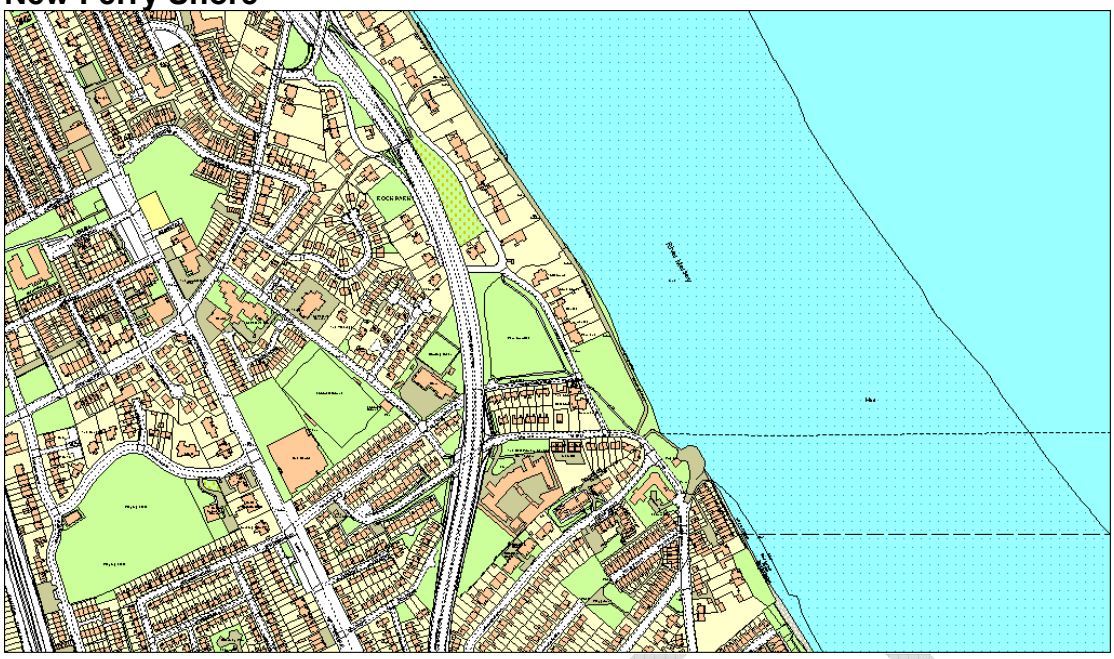
Thurstaston Beach

Heswall Foreshore



Gayton Saltmarsh

New Ferry Shore



Shorefields

Appendix 3.Site History

Not Applicable

Appendix 4.Current Facilities and Features

- Bathing beaches
- Amenity Beaches
- Natural habitats
- Coastal defence structures inc. rock armour and slipways
- Information signage
- Notice boards

Appendix 5. Citations and agreements

North Wirral Foreshore

File ref: SJ 29/4

County: Merseyside **Site Name: North Wirral Foreshore**

District: Wirral

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981.

Local Planning Authority: Wirral Metropolitan Borough Council

National Grid Reference: SJ 250920 **Area:** 2,109.9 (ha) 5.213.6 (ac)

Ordnance Survey Sheet 1:50 000 108 **1:10 000** SJ 29 SW, SE, NE
SJ 28 NW
SJ 18 NE
SJ 19 SE

Date Notified (Under 1949 Act): 1979 **Date of Last Revision:** –

Date Notified (Under 1981 Act): 1983 **Date of Last Revision:** 1986

Other Information:
1. Adjoins the Dee Estuary SSSI.
2. The site has been extended at the last revision.
3. The seaward boundary of this site follows Mean Low Water Mark.

Description and Reasons for Notification:

North Wirral Foreshore is located between the outer Dee and Mersey Estuaries. This site is an area of intertidal sand and mudflats and embryonic saltmarsh which is of considerable importance as a feeding and roosting site for passage and wintering flocks of waders, wildfowl, terns and gulls. The embryonic mixed saltmarsh is formed principally from common saltmarsh-grass *Puccinellia maritima* and glasswort *Salicornia europaea*, together with some common cord-grass *Spartina anglica*.

Whilst North Wirral Foreshore is not comparable with either the Dee Estuary or the Mersey Estuary in terms of the numbers and diversity of passage and wintering birds, it is still of great value for the populations of knot, dunlin and bar-tailed godwit it supports.

The wintering populations of knot (20,000+), bar-tailed godwit (2,000+) and dunlin (10,000+) are the most significant because their numbers regularly exceed 1% of their total British and Iris wintering populations. Redshank (1,000+), turnstone (500+) which feed on the rocky shore at Perch Rock and on the rocky sea walls, oystercatcher (500+), curlew, grey plover and black-tailed godwit are other waders which regularly roost here in relatively high numbers.
Small populations of wildfowl, including common scoter, scaup and goldeneye, red-throated diver and great crested grebe also frequently winter on this site.

Mersey Narrows

County: Merseyside **Site name Mersey Narrows**

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 (as amended).

Local Planning Authority: Wirral Metropolitan Borough Council Sefton Metropolitan Borough Council

National grid reference: SJ 315 949 **Area:** 117.84 ha 291.06 ac
Ordnance survey sheet: 1:50,000 108 1:10,000 SJ 39 SW SJ 39 NW

Date notified (under 1981 Act): 9 August 2000

Reasons for notification:

The site is notified for its large areas of intertidal sand and mudflats, which support internationally important populations of turnstone *Arenaria interpres*, redshank *Tringa tetanus* and nationally important populations of cormorant *Phalacrocorax carbo*.

General Description:
The Mersey Narrows is located at the mouth of the Mersey Estuary and comprises Seaforth on the north bank and Egremont Foreshore on the south. The two areas are separated by approximately 2 km, but considered to be an integral site on the basis of the constant interchange of bird populations. Whilst Egremont Foreshore is particularly important as a feeding site a low tide, Seaforth is particularly important as a high tide roost site, particularly during high spring tides when rocky shores and man-made structures closer to the feeding areas are submerged and not available as roosting sites.

Seaforth is located to the north of the Royal Seaforth Dock on land claimed from the sea during the 1960's. The River Mersey lies to the west. The site now consists of a complex of open water, saltmarsh and grasslands. Specifically it comprises two lagoons, a shallow water lagoon which functions as a settlement lagoon for water pumped from the River Mersey into the Seaforth Docks and a freshwater lagoon separated from the saltwater lagoon by a wide bund. The freshwater lagoon is dominated by the aquatic species, water-milfoil *Myriophyllum spicatum* whilst the fringing vegetation is characterised by sea club-rush *Bolboschoenus maritumus*, red goosefoot *Chenopodium rubrum* and spear-leaved orache *Atriplex prostrate*.
A strip of saltmarsh occurs along the western edge of the saltwater lagoon. Although inundation is constrained due to pumping operations, a number of species are present including glasswort *Salicornia* sp, lesser sand-spurry *Spergularia marina* and annual seablite *Suaeda maritime*. Grasslands dominated by creeping bent *Agrostis stolonifera* and red fescue *Festuca rubra* surround the two lagoons on areas of made ground composed of clay spoil from dock

construction and, to the north of the site, dune-like grasslands formed from blown sand from Crosby Shore.

Throughout the winter, these habitats provide suitable areas for internationally important populations of turnstone and redshank and nationally important populations of cormorant. Other regularly supported waterfowl include teal *Anas crecca* and dunlin *Calidris alpine*. The great majority of both roosting and feeding waterfowl are found on or at the margins of the lagoons. Whilst feeding wildfowl favour the northern end of the saltwater lagoon, the mudflats are the regular feeding grounds for waders. Since exposure of these is asynchronous with that of adjacent estuarine sites, an extended feeding time for wading birds is provided. The birds feed primarily on ragworm *Hediste diversicolor*, spire shell *Hydrobia ulvae* and Baltic telling *Macoma balthica*. Seaforth also supports a number of additional bird species of note. This includes a number of breeding species, two of which are considered to be of regional importance, common term *Sterna hirundo*and ringed plover *Charadrius hiaticula*.

The site is also used regularly by migrating birds on passage, most significantly by common tern and little gull *Larus minutes*. Additional interest is provided by a large number of migrant passerines. Egremont is located on the western bank of the River Mersey to the north of Birkenhead. Whilst Perch Rock, New Brighton forms the northern boundary, the site extends just to the south of Seacombe Ferry. Large areas of sand and mudflats occur throughout most of the length of the site though in the northern most section around Perch Rock, sandflats become dominant. A number of naturally shelfing sandstone outcrops also occur within this area. In contrast, the central and southern sections of shore are composed of boulder clay debris and rubble which supports high densitities of mussels *Mytilis edulis,* barnacles *Balanus, Elminius, Chthamalus*, ragworm and other invertebrates. This community is unusual in the NorthWest. A number of shingle banks located towards Seacombe Ferry also occur. The site also contains a number of man-made structures including groynes, jetties and breakwaters; this includes three newly constructed 200 metre long groynes resulting from a recent beach wall stabilisation project. The combination of varied intertidal habitats provide suitable areas for internationally important populations of turnstone. The species rich rocky areas are the outstanding feature of the shore, contributing the main feeding area for this species. The site also supports a number of other waders including most significantly, redshank and oystercatcher *Haematopus ostralegus* which occur in locally and regionally important numbers. Populations of ringed plover, dunlin and curlew *Numenius arquata*, are also of note. In addition, the sandstone outcrops, shingle banks and man-made structures provide roosting sites for a number of waders, primarily functioning as sub-roosts on the rising tide. These are well used by turnstone. The sandstone outcrops are also favoured by a further species of local interest, purple sandpiper *Calidris maritime*.

Note - For information:

The site designation includes Seaforth Nature Reserve, two sites of Local Biological Interest and (part) Conservation Area which are not within the Wirral boundary.


CROSBY
Sefton Coast (SSSI)
Great Burbo Bank
Crosby
Ford
LITHERLAND
Aintree
KIRKBY
Knowsley Industrial
A506
Seaforth
A5
Knows
BOOTLE
M57
Hall
Knowsley Hall
North Wirral Foreshore (SSSI)
Mersey Narrows (SSSI)
West Derby
A57
HUYTON-WITH-ROBY
P&R
Toll
Seacombe
Moreton
LIVERPOOL
Childwall
Upton
Toll
BIRKENHEAD
A562
Rock Ferry
Woolton
A561
New Ferry (SSSI)
Prenton
Allerton
Halewood
A551
Storeton
Grassendale
Mersey Estuary (SSSI)
Hunt's Cross
0
10km

Dee Estuary

CITATION SHEET Date notified in England: 23 September 1998
Date notified in Wales: 23 September 1998
File ref: SJ 28/2 Unitary: Flintshire/Denbighshire/Wirral
Site Name: Dee Estuary/Aber Afon Dyfrdwy
County: Cheshire County Council
District: Ellesmere Port & Neston
Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 (as amended)

Local Planning Authority: Cheshire County Council, Denbighshire County Council,Ellesmere Port & Neston Borough Council, Flintshire County Council, Wirral Metropolitan Borough Council

National Grid Reference: SJ 220 800 Area: 13, 679.7 ha 33,788.9 ac
Area in England :5,237.1 ha, 12,935.6 ac Area in Wales: 8,442.6 ha, 20,853.2 ac
Ordnance Survey Sheet: 1: 50;000 1: 10,000
108,116,117 SJ08SE, SJ17NE, SJ18NW,
SJ18SW, SJ18SE, SJ18NE,
SJ26NE, SJ27SE, SJ27SW,
SJ27NE, SJ27NNW, SJ28NW,
SJ28SW, SJ28SE, SJ36NW, SJ37SW

The Dee Estuary/Aber Afon Dyfrdwy is of special interest for its total populations of internationally important wintering waterfowl; its populations of individual waterfowl and tern species whose numbers reach national and in some cases, internationally important levels; its intertidal mud and sandflats, saltmarsh and transitional habitats; the hard rocky sandstone cliffs of Hilbre Island and Middle Eye with their cliff vegetation and maritime heathland and grassland; its assemblage of nationally scarce plants; and its populations of sandhill rustic moth Luperina nickerlii gueneei, Red Data Book species.

The Dee is a large funnel shaped estuary which lies between the Wirral Peninsula, England and Flintshire, North East Wales. It was formerly much more extensive but large scale reclamation of intertidal land has occurred, principally at the head of the estuary. This followed the canalisation of the River Dee in the eighteenth century when an attempt was made to secure the continuation of Chester as a port. The estuary contains extensive areas of intertidal sand and mudflats, which support a variable but characteristic benthic fauna depending on the nature of the substrate. Large areas of saltmarsh also occur at its head and along part of its north-eastern shore. The estuary continues to accrete and further saltmarshes are developing, particularly on the English shoreline. Locally, on the Welsh shoreline, saltmarsh continues to erode, particularly between Greenfield and Flint. Within the estuary, the three small sandstone islands of Hilbre, Middle and Little Eye provide the only hard natural rock coast habitat along this section of coastline.

A largely unvegetated shingle ridge occurs at the Point of Ayr. Although yellow embryo dunes occur at its western end, these are susceptible to erosion from wave action.

The Dee Estuary is one of the most important estuaries in Britain and amongst the most important in Europe for its populations of waders and wildfowl. The estuary is particularly important for its wintering bird populations and both waders and wildfowl achieve numbers of international importance. The estuary supports internationally important populations of a number of wader species, namely, oystercatcher Haematopus ostralegus, knot Calidris canutus, curlew Numenius arquata, redshank Tringa totanus, bar-tailed godwit Limosa lapponica black-tailed godwit Limosa limosa, grey plover Pluvialis squatarola and dunlin Calidris alpina. The waders utilise the abundant invertebrate populations principally on the extensive intertidal flats, particularly the mudflats. Several wading bird species also make extensive use of the coastal grazing marshes and fields adjoining the estuary for feeding and roosting. Around the estuary are a number of high tide roost sites; principal sites include the Hilbre islands, the foreshore at West Kirby, the shingle spit at Point of Ayr and the saltmarshes at Oakenholt. Wildfowl present in internationally important numbers include pintail Anas acuta, for which the Dee and Mersey have been the principal British wintering estuaries for many years, teal Anas crecca and shelduck Tadorna tadorna, whilst wigeon Anas penelope occur in nationally important numbers.

The Dee Estuary is also an important staging post for migrating birds during both spring and autumn. Nationally important numbers of ringed plover Charadrius hiaticula are regularly seen on passage. In addition, the summering flock of non-breeding black-tailed godwit, one of the largest in the United Kingdom, is regarded as of national importance.

The Dee Estuary also supports nationally important numbers of feeding common tern Sterna hirundo These birds historically nested on the Burton Marshes where they were frequently inundated by spring tides. They now nest on specially developed habitats on lagoons within the Shotton Steelworks complex outside the site. The large breeding population of redshank, which utilise the ungrazed and lightly grazed saltmarshes for nesting, is regarded as of national significance.
The Dee Estuary also supports nationally important flocks of cormorant Phalacrocorax carbo, which occur throughout the year and great crested grebe Podiceps cristatus, peak numbers of which occur in the autumn during the moult.

The Dee Estuary supports extensive areas of saltmarsh vegetation and exhibits a complete succession from early pioneer vegetation colonising intertidal flats through lower, middle and upper saltmarsh types to brackish and freshwater transitions at the top of the shore. Although land reclamation has led to a loss of many of these natural transitions, there are still a number of areas, particularly on the English shoreline, around Neston and Parkgate, where transitions to swamp vegetation still occur. These are dominated usually by common reed Phragmites australis and sea club-rush Bolboschoenus maritimus. On the Welsh shoreline this habitat feature is limited to areas around Connah's Quay and to the south east of Flint. In North East Wales, swamp vegetation is scarce generally and the more extensive areas adjacent to the estuary, including those at Shotton, are therefore important. The saltmarshes themselves support a variety of vegetation communities characteristic of estuaries in northern and western Britain. The Dee

Estuary supports a large area of marsh dominated by common cord grass Spartina anglica. Its current extent reflects the fact that the estuary continues to accrete following historical land claim. Species such as glasswort Salicomia sp. and annual seablite Suaeda maritima are also present. Much of the saltmarsh remains ungrazed and this has allowed extensive stands of species intolerant of grazing to develop, such as sea purslane Atriplex portulacoides. Where grazing intensity has declined in locations at the top of the shore, rank strandline vegetation dominated by common couch Elytrigia repens and sea couch, Elytrigia atherica has developed.

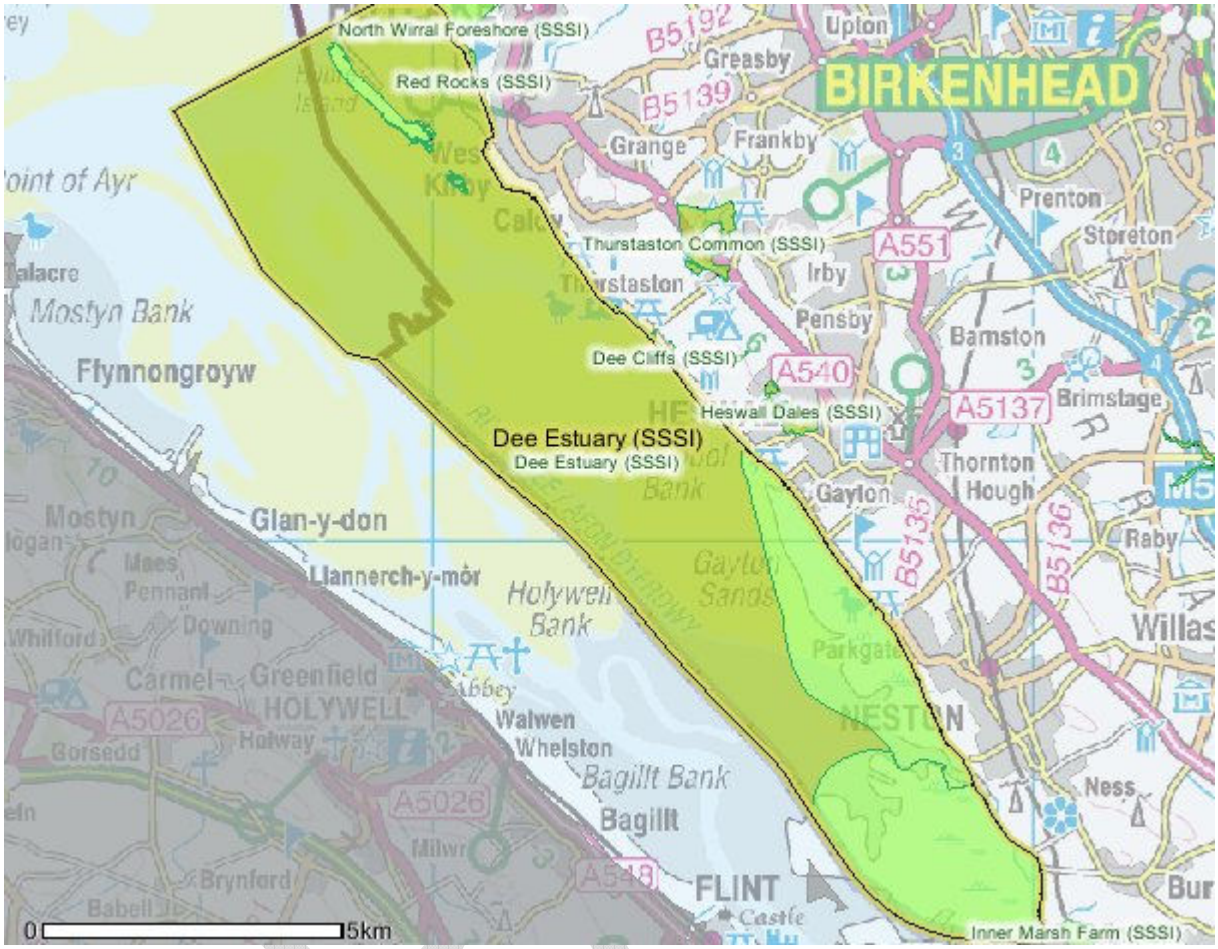
Of particular note within the reclaimed land on the Ministry of Defence ranges adjacent to the estuary, is saltmarsh characterised by saltmarsh flat-sedge Blysmus rufus, a species close to its southern limit in North Wales. Although the saltmarshes are generally species poor, the nationally scarce species, slender hare's-ear Bupleurum tenuissimum is found at Connah's Quay, at its northern British limit of occurrence.
The three sandstone islands which comprise the Hilbre Island complex represent the only natural hard rock coast within the estuary and are the only examples of this habitat between the limestone cliffs of the Creuddyn Peninsula and the sandstone cliffs of St Bee's Head in Cumbria. Consequently, the coastal cliffs and the maritime heathland and grassland on the plateau areas above the cliffs represent the only regional examples of these vegetation types. Although the western Hilbre cliffs are too exposed to support vegetation, the sheltered eastern cliffs support common scurvy grass Cochlearia officinalis and sea campion Silene uniflora. The nationally scarce rock sea lavender Limonium britannicum occurs together with the regionally scarce sea spleenwort Asplenium marinum.

The Dee Estuary supports a number of other nationally scarce higher plants in addition to those previously mentioned including Portland spurge Euphorbia portlandica at Point of Ayr, white horehound Marrubium vulgare in coastal grazing fields at Point of Ayr and white mullein Verbascum lychinitis on basic slag waste at Flint.

The Red Data Book species, sandhill rustic moth Luperina nickerhi gueneei occurs within the estuary towards its mouth on both the English and Welsh shorelines. The presence of a large herd of grey seal Halichoerus grypus, is considered to be of regional interest. These haul out on West Hoyle Bank, though breed elsewhere. The presence of breeding reed warblers Acrocephalus scirpaceus, a scarce species in North Wales, in reedbeds in and adjacent to the estuary, is of interest. The presence of the uncommon anadromous fish, smelt Osmerus eperlanus is also of note.

Other information

The Dee Estuary has been designated as a Ramsar Site under the Ramsar Convention of Wetlands of International Importance and as a Special Protection Area (SPA) under the EC Birds Directive (79/409) in July 1985.
ii The site is nationally important and is listed in ‘A Nature Conservation Review' edited by D A Ratcliffe (1977), Cambridge University Press.
iii. This site is contiguous with the following four SSSI: North Wirral Foreshore; Red Rocks; Dee Cliffs; Gronant Dunes and Talacre Warren; and is close to Inner Marsh Farm SSSI.


North Wirral Foreshore (SSSI)
Red Rocks (SSSI)
Thurstaston Common (SSSI)
Dee Cliffs (SSSI)
Heswall Dales (SSSI)
Dee Estuary (SSSI)
Dee Estuary (SSSI)
Inner Marsh Farm (SSSI)
BIRKENHEAD
Upton
Greasby
Frankby
Grange
Prenton
Storeton
Irby
Pensby
Barnston
Brimstage
Thornton Hough
Gayton
Raby
Willas
Ness
NESTON
Parkgate
Gayton Sands
Holywell Bank
Bagillt Bank
Bagillt
FLINT
Castle
Walwen
Whelston
HOLYWELL
Greenfield
Carmel
Downing
Pennant
Mostyn
Glan-y-don
Llannerch-y-môr
Ffynnongroyw
Mostyn Bank
Point of Ayr
Talacre
Gorsedd
Brynford
Milwr
Whitford
Holway
Abbey
A551
A540
A5137
A5026
A548
B5192
B5139
B5135
B5136
M53
M56
0
5km

Appendix 6. Site quantities and operations

- The majority of maintenance actions i.e. beach raking is undertaken up to 100 metres from the land formation.

- Litter picking to take place up to 100 metres from the land formation

- Litter picking to take place on accessible coastal defence structures including rock armour groynes and slipways that form part of the beach amenity or backdrop.

- The removal of dead animals or other unwanted items will take place regardless of the location on the beach

- Litter is collected daily during the summer months. The frequency of service is reduced during the winter months.

- Beach grooming is performed on a regular basis during the summer months, and as needed during the winter months particularly after storm activity or very high tides.

Actions to be included within the service requirement documentation

- Beach grooming / Conveyor Rake approx 300,000 Sq. metres
- Litter removal
- Strandline cleansing
- Removal of dead animals
- Accessible coastal defence structures – Litter -debris
- Removal of invasive plant species
- Windblown sand removal to facilitate access when required and to maintain beach levels

Beach grooming and litter removal at the following locations

- New Brighton Beach
- Wallasey Beach
- Leasowe Bay
- Hoylake Beach
- West Kirby Beach
- Heswall Foreshore
- Red Rocks (limited area due to Natterjack Toad habitat)

Litter debris removal at the following locations

- Red Rocks
- Caldy Beach
- Egremont Shore
- Gayton Saltmarsh
- Meols Beach
- Moreton Beach
- New Ferry Shore (above high water)
- Thurstaston Beach
- West Kirby Saltmarsh

Appendix 7. Beach Improvements Plan

Action	Target date	Who?	Finance