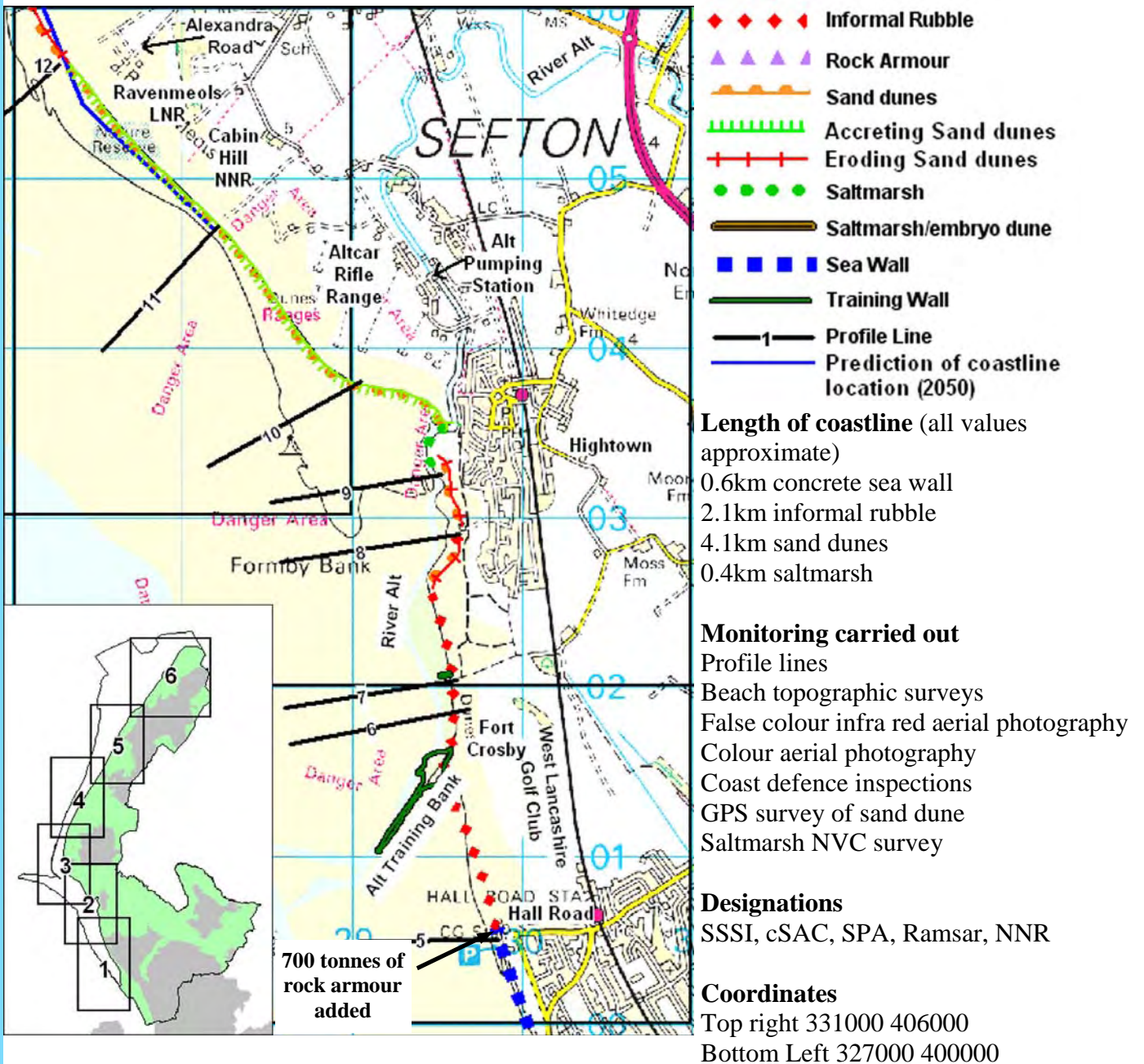


Area 2 - Hightown Summary



Introduction

This report summarises the coastal process monitoring and coastal defence work carried out by Sefton Council 2000-2004 and provides relevant background and historic information for Area 2—Hightown.

History

In 1579 the mouth of the River Alt was approximately 1km further north than at present. Since then the Alt mouth has moved steadily south, driven by sand-drift from Formby Point.

Sand-drift continually impeded the drainage of the River Alt and in the years following 1797 gorse faggots

were laid down on the shore to trap the drifting sand. A range of sand dunes grew over the artificial bank enclosing the land on which the Altcar Rifle Range was developed.

Adjacent to Altcar is Cabin Hill National Nature Reserve, which had sand extracted from 1945 to 1975. This lowered the level of the dunes and an artificial embankment was built as a secondary defence in 1971.

Hightown developed alongside the Liverpool to Southport railway, built in 1848. Between Hightown and Hall Road the coast has seen many uses. Fort Crosby was a naval gun battery protecting the Mersey approaches during WW2, it

was demolished in about 1960 and the site was then used as a source of industrial sand. Further south, the West Lancashire Golf Club occupied the dunes and former rabbit warrens.

In the early 20th century the River Alt was causing erosion at Blundellsands. The Alt training bank was constructed in 1937 to deflect the river across the foreshore to the sea. After 1945, slag and rubble were tipped to reinforce the coastline south of the bank.

In 1972 the Alt pumping station was constructed creating a steady river outflow that maintains the current river channel.

Coastal Defence Policy

This length of coast is currently undergoing a strategy study assessing future coastal defence options. The policy for the section from Hall Road to the River Alt Pumping Station will be refined by the strategy study. From the River Alt Pumping Station north to Formby Point the policy is to allow the coastline to evolve naturally.

Site Description

In the south are Hall Road Car Park and Coastguard Station which are fronted by a concrete seawall and promenade. Running north from the car park for 2km is a bank of informal rubble defence.

This section is centred on the River Alt, which reaches the coastline on the south side of Altcar Rifle Range and then meanders along the beach before being deflected seawards, 2km further south, by the Alt training bank. The landward side of the river is mainly flat and muddy. This area also sees some development of saltmarsh. On the seaward side of the River Alt there is a wide sandy bank (2km) known as the Formby Bank.

North of the Alt mouth, on the Rifle Range frontage, the backshore rises to a system of well preserved high sand dunes behind the sandy foreshore. These sand dunes extend up to Southport.

The foreshore is protected by several nature conservation designations; a candidate Special Area of Conservation (cSAC), Site of Special Scientific Interest (SSSI), RAMSAR site and Special Protection Area (SPA).

Summary of Coastal Processes

- Sand drifts south from Formby Point accumulating on Formby Bank due to being interrupted by the Alt Channel before progressing further south to the Crosby foreshore.
- Beach volumes across this area south of the Alt have decreased by about 3% over the past two years but behaviour has been cyclical with a small gain between 2001 and 2002 followed by a significant reduction between 2002 and 2003. These changes are the most significant along the Sefton frontage accounting for about 50% of the whole frontage change between 2002 and 2003.
- Beach volumes north of the Alt to Alexandra Road have consistently increased by about 0.5% per year over the past two years with similar gains between 2001-2002 and 2002-2003.
- The shoreline is subject to erosion from the end of Crosby seawall at Hall Road to the mouth of the River Alt at Hightown. The scale of this erosion is typical about 1 to 1.5 metres per year.

- The sand dunes north of the Alt to Alexandra Road are slowly accreting. The future evolution of the sand dune coast has been predicted for 2050 based on past trends. This shows a change from accretion to erosion just south of Alexandra Road
- A 1 in 10 year storm occurred on the 1st February 2002. This eroded several metres of the dunes. These have since recovered.
- The position of the River Alt channel has not noticeably varied during the period 1999-2003.

Summary of Coastal Defence Works

- Damage to the wooden revetment adjacent to the coastguard station at Hall Road in 2002 required 700 tonnes of rock armour to be put in place.

Other Projects of Interest

- Crosby to Formby Point Strategy – the council is currently developing a strategy for this length of coastline that will identify requirements for future coastal defence works and the appropriate timescale for their implementation. This will form the basis of grant applications to fund future works in this area.
- Wind farm – In August 2001 a proposal to construct a wind farm in Liverpool Bay was submitted by Seascope Energy. This proposal was followed up in 2002 with an extensive consultation programme. An Environmental Statement was prepared following various studies concerning the impacts on wildlife, sediment flows, shipping etc. In September 2002 a bid for consent to build Burbo Offshore was submitted.

Future Coastal Developments

Its anticipated that following the completion of the Strategy Study there will be some coastal defence works undertaken to control the erosion and at some point in the future the existing defences will be refurbished. The Government's understanding of climate change is constantly being improved and the latest predictions will be incorporated into any design work or policy development on the Sefton Coast.

Further Information

The full coastal process monitoring report and all the reports in this series as well as other relevant information and a list of references can be found at:

www.sefton.gov.uk

www.seftoncoast.org.uk

These reports will be updated every three years and any interim reporting will be made available online. If information over and above this is required contact Graham Lymbery on 0151 934 2960 or email graham.lymbery@technical.sefton.gov.uk

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