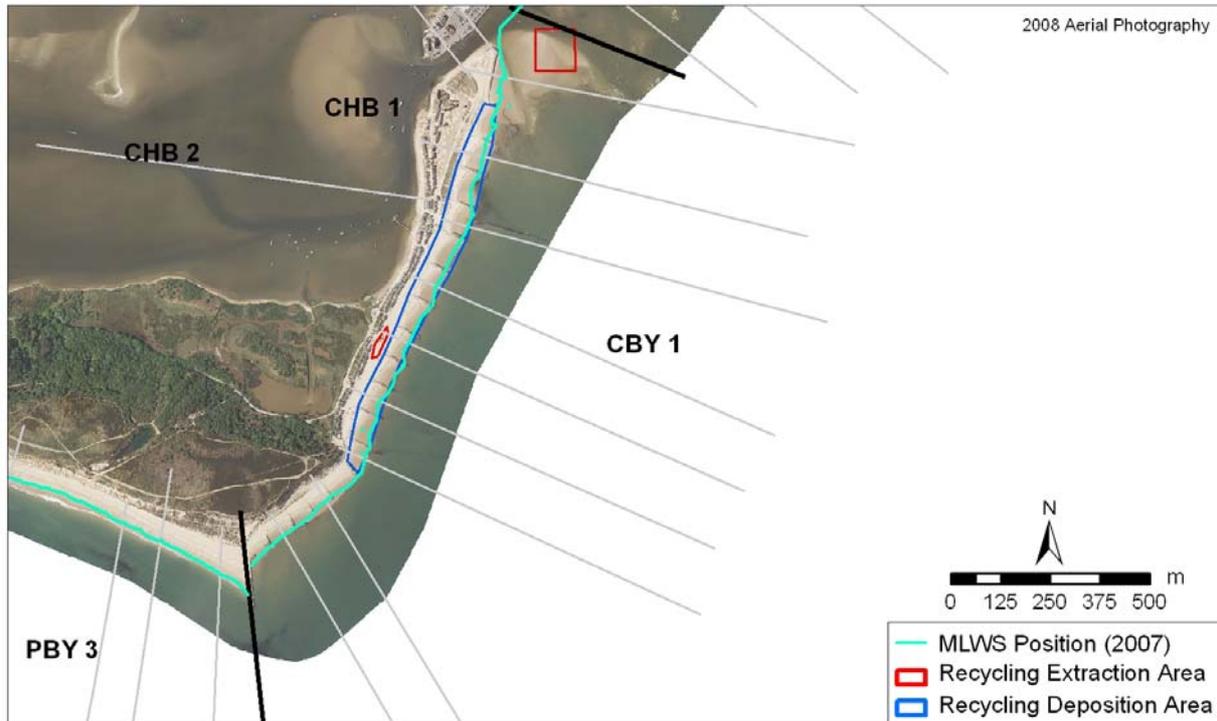


Policy Unit: 5f CBY1

Mundeford Sandbank

Topographic Beach Profiles: 5f00369 – 5f00324



Summary

Mundeford Sandbank is primarily composed of marine gravelly sand and is largely a natural feature formed off the headland at Hengistbury from the eroding cliffs. Previously, the sandbank extended much further north towards Highcliffe but is now relatively stable due to annual beach recycling schemes and the construction of rock groynes during the late 1980's and early 1990's. The rock groynes act to trap sediment which is naturally transported northwards towards the entrance to Christchurch harbour, forming large sandflats around the entrance. There are a large number of beach huts and amenities along the sandbank which require protection from flooding and coastal erosion.

The sandbank receives annual recycling operations in order to maintain beach levels to a sufficient standard that will afford protection to the backing sand dunes and ultimately prevent a breach of the sandbank. Material is extracted from the natural sediment sink to the north, around the entrance to Christchurch Harbour, which also aids navigation of the entrance by maintaining the channel depth. Recycling events (if required) usually take place in spring or early summer, once an assessment of any winter storm damage has been made. The volumes that are recycled each year depend on the net volume of material that has been transported naturally along the frontage during the year. In some cases, such as in 2007, beach levels are sufficient that no recycling operations are necessary.

Survey Regime

Survey type	Frequency	Profile spacing/survey extent
<i>Topographic baseline</i>	Annual	10-60m to MLWS
<i>Topographic interim profile</i>	Spring and autumn	135-205m to MLWS
<i>Bathymetry</i>	Annual	50m profiles to 1km offshore
<i>Ortho-photography</i>	5 years	MLWN
<i>Non-rectified aerial photography</i>	Annual	MLWN
<i>Lidar</i>	Years 1, 2, 3, 5	MLWN
<i>Habitat mapping</i>	5 Years	Extent of ortho-photography

Summary of beach operations

Date	Operation	Quantity (m ³)	Location/Notes
2009			
No beach works this year			
2008			
07/04/08	Extraction	2,516	Extraction of material from natural sink approx 300m off the eastern spit
21/04/08	Annual Beach Nourishment	2,516	Deposited between profiles S8S9C to S2S3A
2007			
Poole Bay Recharge – no beach works required			
2006			
08/05/06	Extraction	1,530	Material taken from large dune at back of beach
19/05/06	Annual Beach Nourishment	1,530	Deposited between profiles S10S11C to S1S2A
2005			
07/03/05	Extraction	3,620	Extraction from 150m east of the distal end of the spit
14/03/05	Annual Beach Nourishment	3,620	Deposited between profiles S12S13C and S1S2A
2004			
08/03/04	Extraction	3,160	Extraction from 150m east of the distal end of the spit
12/03/04	Annual Beach Nourishment	3,160	Deposited between profiles S10S11C and S1S2A

Full details of beach operations can be obtained from Christchurch Borough Council