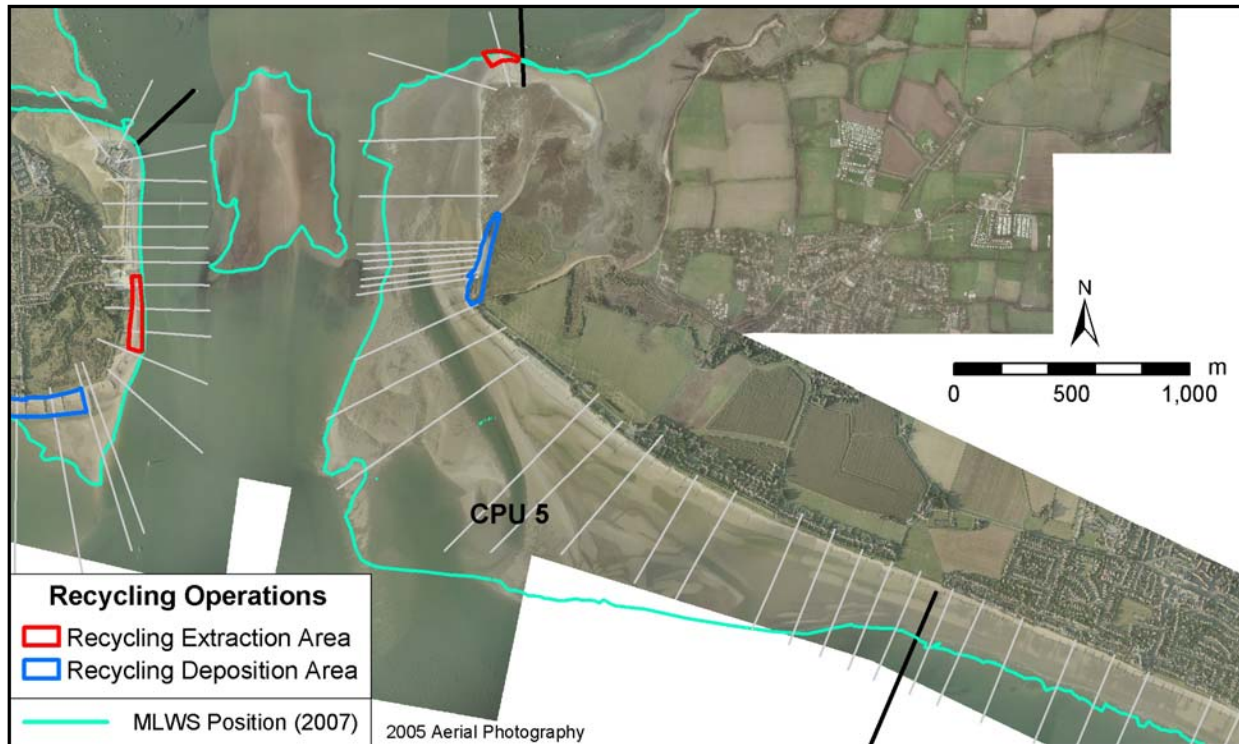


## Policy Unit: 5a CPU5

### Cakeham Estate to East Head

Topographic Beach Profiles 5a00166 – 5a00239



#### Summary

This unit is characterised by complex processes of sediment transport, resulting from the combination of offshore waves and ebb dominated tidal currents, leading to the formation of an ebb tidal delta - a large sandbank adjacent to East Head spit, known as the Winner and, to the south, East Pole sands. The upper beach comprises a relatively narrow, mixed sand and gravel beach fronted by a sandy foreshore that is over 800m wide in places with a series of ridges and runnels.

Sea defences to the east, in recent years, have acted to interrupt littoral drift and starve the spit hinge and neck of sediment, resulting in concerns over more frequent breaching events here. As a consequence, there have been a series of replenishments in this area, once in 2005 and again in 2009.

#### Survey Regime

Survey type	Frequency	Profile spacing/survey extent
<i>Topographic baseline</i>	Annual	50m to MLWS
<i>Topographic interim profile</i>	Spring & Autumn	100 - 300m to MLWS
<i>Bathymetry</i>	5 years	50m profiles, MLWN to 1km offshore
<i>Ortho-photography</i>	5 years	MLWN
<i>Non-rectified aerial photography</i>	Annual	MLWN
<i>Lidar</i>	Annual	MLWN
<i>Habitat mapping</i>	5 years	Extent of aerial photography

## Summary of beach operations

Date	Operation	Quantity (m <sup>3</sup> )	Location/Notes
<b>2009</b>			
March	Extraction	10,200	From the distal end of the spit
March	Deposition	10,200	Placed along spit hinge and neck
<b>2005</b>			
June	Extraction	13,000	From the distal end of the spit
June	Deposition	13,000	Placed along spit hinge and neck

*Full details of beach operations can be obtained from the Channel Coastal Observatory  
([www.channelcoast.org](http://www.channelcoast.org))*