Topographic Survey Profiles: 4a00058 - 4a00099



Figure 1: Management Unit 1B (Grain Village)



Blue: Recycling Extraction Point Red: Recycling Deposition Area

Shingle beaches which front Grain Village vary in their ability to defend. The southern section of this management unit is characterised by a seawall. Towards the centre of the unit the defence changes to a derelict anti-landing site left over from WW2, which acts as a dissipative barrier between the cliff face and approaching waves. Areas in front of the embankments act as an effective defence, however further along the beach shingle is sparse. The main defence for the northern section of this management unit is the beach face itself, backed by a raised bund. The beach has several timber groynes to add to the protection of the beach as this section is prone to erosion. The approximate beach gradient is 1:9 for this section of coastline. Mud dominates the lower foreshore with small areas of salt marsh interspersed across the foreshore.

In the short term the plan is to continue protecting the low lying assets, which include properties, roads, agricultural land and coastal grazing marsh. However, in the medium and long term the plan is to realign the defences to realise potential environmental, engineering and coastal process benefits. Under rising sea levels it is anticipated that it will become increasingly difficult to defend the shoreline and maintain a beach on this frontage, due to coastal squeeze and a general lack of natural sediment inputs. This would result in a need for very substantial hard defences, if the current alignment were to be held in the long-term (Isle of Grain to South Foreland SMP, 2007).

There have been no recycling or replenishment schemes within this management unit since monitoring began in 2003.

Survey Regime

| Survey type | Frequency | Profile spacing/survey extent | |
|-----------------------------------|-----------------------|-------------------------------|--|
| Topographic baseline | 1 per phase | 50m to MLWS | |
| Topographic interim profile | Spring and Autumn | 150m to MLWS | |
| Bathymetry | 5 years | 50m profiles to 1km offshore | |
| Ortho-photography | 3-5 years | MLW | |
| Aerial photography None from 2008 | | MLW | |
| Lidar | Rolling Programme MLW | | |
| Habitat Mapping | 5 Years | As Required | |

Full details of data availability and extents can be found on the Channel Coast Observatory Website (www.channelcoast.org)

Summary of Beach Operations

| Date | Operation | Quantity (m ³) | Location/Notes | | |
|--|-----------|----------------------------|----------------|--|--|
| No beach material has been recycled since 2007 | | | | | |
| | | | | | |

Full details of beach operations can be obtained from Canterbury City Council (<u>strategic.monitoring@canterbury.gov.uk</u>)