Summary Report: Coastal Cell 4c - MU08

Topographic Survey Profiles: 4c00147 - 4c00264

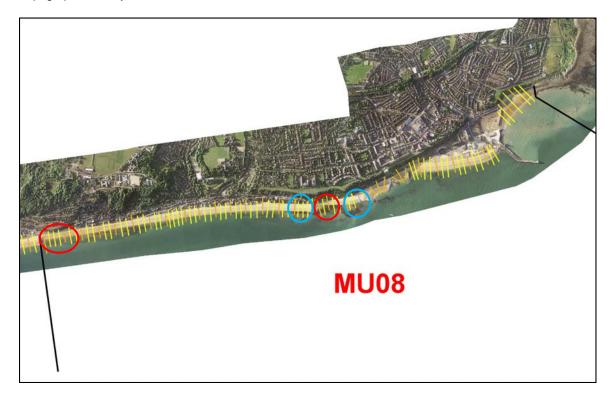


Figure 1: Management Unit 08 (Folkestone)



Blue: Recycling Extraction Point Red: Recycling Deposition Area

Shingle beaches at Folkestone provide the essential protection against flood and coastal erosion along the Hythe and Folkestone frontage. With the completion of the two major coast protection schemes in 1996 and 2004, the frontage is now entirely dependant on the successful implementation of beach management through a sediment recycling programme. These works are essential to maintain protection along this frontage and ensure the level of risk is maintained at an acceptably low level. Since the start of the scheme implemented in 2004, rock groynes have been constructed and shingle recycling now takes place twice each year, in the spring and autumn.

The ongoing recycling operations to counter the natural transport of sediment along the frontage ensure that the beach provides the protection required. Generally, the majority of recycling takes place in September, although a small amount is also undertaken in March following the winter storms. The principle behind the open managed beach approach is simply to maintain sufficient beach volume in front of the seawall to protect it from failure and to reduce wave overtopping. The volumes that are recycled each year greatly depend on the net volume of material that has been transported naturally along the frontage during the year.

Survey Regime

Survey type	Frequency	Profile spacing/survey extent
Topographic baseline	Annual	50m to MLWS
Topographic interim profile	Spring and Autumn	150m to MLWS
Bathymetry	5 years	50m profiles to 1km offshore
Ortho-photography	5 years	MLW
Aerial photography	Ceased in 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
2010			
March	Recycling Event	8600	Deposition between Profiles 4c00196 & 4c00198
March	Recycling Event	8600	Extraction between Profiles 4c00190 & 4c00193
March	Recycling Event	10,640	Deposition between Profiles 4c00262 & 4c00264
March	Recycling Event	10,640	Extraction between Profiles 4c00201 & 4c00203
March	Recycling Event	4,930	Deposition between Profiles 4c00178A & 4c00175A
March	Recycling Event	4,930	Extraction between Profiles 4c00174 & 4c00173
2008			
Oct	Recycling Event	16,411	Extraction between Profiles 4c00190 & 4c00193
Oct	Recycling Event	16,411	Deposition between Profiles 4c00196 & 4c00198
2007			
Jan	Recycling Event	970	Deposition between Profiles 4c00262 & 4c00264
Jan	Recycling Event	2,520	Extraction between Profiles 4c00190 & 4c00193
Jan	Recycling Event	2,520	Deposition between Profiles 4c00194 & 4c00196
April	Recycling Event	3,880	Deposition between Profiles 4c00196 & 4c00198
April	Recycling Event	3,880	Extraction between Profiles 4c00190 & 4c00193
March	Recycling Event	3,360	Extraction between Profiles 4c00201 & 4c00203
March	Recycling Event	3,360	Deposition between Profiles 4c00196 & 4c00198
March	Recycling Event	1,890	Deposition between Profiles 4c00262 & 4c00264
March	Recycling Event	3,140	Deposition between Profiles 4c00240 & 4c00232

Date	Operation	Quantity (m ³)	Location/Notes		
2006					
Oct	Programmed Maintenance	4,490	Deposition between Profiles 4c00199 & 4c00197		
Oct	Programmed Maintenance	4,490	Extraction between Profiles 4c00199 & 4c00197		
Oct	Programmed Maintenance	3,650	Extraction between 4c00193 & 4c00190		
Oct	Recycling Event	890	Extraction between Profiles 4c00186A & 4c00181A		
Oct	Recycling Event	890	Deposition between Profiles 4c00201 & 4c00202		
2005					
Oct	Recycling Event	3060	Deposition between Profiles 4c00198 & 4c00197		
Oct	Recycling Event	3060	Extraction between Profiles 4c00180 & 4c00191		
Oct	Recycling Event	3515	Deposition between Profiles 4c00218 & 4c00228		
Oct	Recycling Event	3515	Extraction between profiles 4c00201 & 4c00202		
Oct	Recycling Event	560	Deposition between Profiles 4c00236 & 4c00232		
Oct	Recycling Event	4090	Deposition between Profiles 4c00264 & 4c00261		
Oct	Recycling Event	4090	Extraction between Profiles 4c00201 & 4c00202		
March	Programmed Maintenance	3,958	Extraction between Profiles 4c00203 & 4c00199		
March	Programmed Maintenance	3,958	Deposition between Profiles 4c00199 & 4c00195		
2004					
Dec	Programmed Maintenance	460	Extraction between Profiles 4c00203 & 4c00199		
Dec	Programmed Maintenance	460	Deposition between Profiles 4c00190 & 4c00186A		
2003					
Sept	Programmed Maintenance	4,830	Deposition between Profiles 4c00264 & 4c00259		

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