

Pakefield Monthly Monitoring Report

Date & Time of survey: December 3, 2024 14:13

Time of Low Tide: 16:20

Height of Low Tide (m ODN): -0.6

Reason for Inspection: Scheduled



Comment on weather or water level events that may have impacted coastal change:

The beginning of November saw relatively dry and settled conditions. Spring high tide levels around the middle of the month were increased, most notably over the period 16 – 17th. The Environment Agency issued flood alerts for the Lowestoft area due to the increased water levels, across a period of three days from 16 – 18th. As seen in October, cliff bases near the rock, and some areas of the more exposed northern dune face, were reached by seas, although impacts were once again not as significant as in the past. Winds at the time were not onshore. Later, over the weekend of 23rd and 24th, a deep area of low pressure (named Storm Bert) brought unsettled conditions. Large waves were generated but winds were mainly from the southwest quarter, and predicted neap high tide levels were not increased. The strongest winds and heaviest precipitation were across northern and western areas of the UK.

A further area of low-pressure, named Storm Conall by the Dutch Meteorological Service, brought rainfall to the region over the 26th and 27th. Neap high tide levels were not increased significantly but large waves were generated. With sleet and snow falling around the middle of November, the month overall, saw appreciable amounts of precipitation.

On inspection winds were falling light, westerly in direction, and seas were moderate.

The beach north of Arbor Lane

Extension of beach cliffing alongshore: Slight northward extension

Landward recession of beach cliff: Slight landward recession

Change in gradient of beach cliff face: Steepened by seas over the past month, with recent trampling

Maximum height of beach cliff (m): 2

Beach photos looking north





Beach photos looking South:



Change in beach level relative to exposed timber groyne opposite Grand Avenue: Moderately lower

Image of exposed timber groyne:



General impression of beach volume: Slightly reduced

Images of beach north of Arbor Lane: As photos above

Comments on change in beach geomorphology: There has been cliffing of the dune face (and subsequent trampling), from around Grand Avenue and to the north. Most recent sea conditions have deposited shingle rich material above the mean high water mark MHW. The foreshore retains its characteristic relatively steep gradient.

Cliff Top Property

Changes to soft unconsolidated sand cliffs north of rock: Slumped material on cliff face; denuding and loss of vegetation; cliff-face steepening and overhanging; scree at base of cliff; fallen vegetation at base of cliff.

Changes to soft unconsolidated sand cliffs south of rock armour: Slumped material on cliff face; denuding and loss of vegetation; evident cliff top recession; cliff-face steepening and overhanging; scree at base of cliff; fallen vegetation at base of cliff.

Comments: The one remaining northern caravan, seaward of The Cliffs access road, has been removed. Three remaining concrete slab bases in this location have been broken up and are awaiting removal from site. The caravan park building demolition was almost complete. To the south of this, it appears there has been some removal of fencing and concrete slabs (some remain near to, or overhanging, the cliff edge). There were still reasonably healthy beach levels on the north and south sides of the rock however, the bases of the cliffs had been reached by seas during the past month, causing some disturbance.

Photos of soft unconsolidated sand cliffs:





Rock Armour

Displacement of rock from structure: Negligible change

Beach levels surrounding rock armour: Improved beach level around most of the rock toe (particularly at the north end) and also behind the concrete walling, which is consistent with beach characteristics to the north.

Beach access around the rock armour: Dry access available past rock armour around times of low tide

Settlement, movement, undermining of structure: Negligible change

Exposure of geotextile: Negligible change

Hazards/debris within structure: Negligible change

Stability of cliff behind rock armour: As previous, no obvious or significant change apparent behind the main body of the rock structure, as viewed from the beach (vegetation growth obscures part of the cliff face).

Asset condition grade: 2 Good; rock armour condition satisfactory; no change in protection

Photos of rock armour:



Comments on condition of, or risk posed by rock armour:

Signage

Provision of tidal information: Up to date & legible - Monitor

Photos of signage and any issues:



Southern Pakefield beach & cliffs

General impression of beach volume: No clearly discernible change

Photos of southern beach:





Comments on change to southern beach: There appeared to have been an increase in foreshore level to south.

Changes to southern cliffs: Slumped material on cliff face; denuding and loss of vegetation; cliff-face steepening and overhanging; scree at base of cliff; fallen vegetation at base of cliff.

Photos of southern cliffs:



Comments on cliff change and any risk posed: See final report. Overnight increased HT and wave action neared southern cliff base as wrack mark.

Benacre Ness

Changes to beach geomorphology: Processes described previously continuing.

Comments on change at Benacre Ness: Considerable surface water outflow from near the Pontins beach access due to recent increased amounts of precipitation. Much of this surface water is now being retained on The Ness feature as it continues to migrate northward.

Photos of Pontins frontage and Benacre Ness:



Hazards and Debris







Comments on hazard/debris: ESC works to groyne hazards and signage have been programmed for December, subject to weather and sea conditions.

Kessingland Cliff top structure

Comments on cliff top structure: Unable to inspect.