Pakefield Monthly Monitoring Report



Date & Time of survey: October 29, 2024 12:18 Time of Low Tide: 13:45 Height of Low Tide (m ODN): -0.7 Reason for Inspection: Scheduled

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

There was an elevated high tide level on the 10^{th} October and mid-month high tide levels were also increased, but by smaller values. Conditions around the $20 - 21^{st}$ were associated with Storm Ashley, the first named storm of the 2024/25 season. It brought wet and windy weather to the UK, although the strongest winds were across north-western areas. These two periods saw flood alerts issued by the Environment Agency for some Suffolk areas, but not for Lowestoft. It is likely that the bases of the cliffs near the rock, and some areas of the more exposed northern dune face, were reached by seas however, impacts do not appear to have been as significant as in the past (wave action during the latter period of $20 - 21^{st}$ was relatively modest). Rainfall in the unsettled periods was not as heavy as experienced in other parts of the UK. During the inspection, winds were light, mainly south-westerly, and seas were slight.

The beach north of Arbor Lane

Extension of beach cliffing alongshore: Negligible change

Landward recession of beach cliff: Negligible change

Change in gradient of beach cliff face: In places gradient steepened where there has been wave action at toe 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: Negligible change

Image of exposed timber groyne:



General impression of beach volume: Moderately decreased

Images of beach north of Arbor Lane:



Comments on change in beach geomorphology: High tides noted above reached landward of the Mean High-Water Mark MHWM and reprofiled the beach. A shingle berm remains but is much less substantial. In places the base of the dune face appears to have been reached, which has not caused significant erosion but has increased the face gradient, and relative height. The foreshore overall retains a typical relatively steep gradient although there has been some recent improvement in its lower levels.

<u>Cliffs</u>

Changes to soft unconsolidated sand cliffs north of rock armour: 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: Seas probably reached the cliff bases to the north and south side of rock, and caused some disturbance. The upper beach level, near the base of the cliffs remains relatively healthy, particularly on the south side of the rock. The ongoing processes of gradual cliff loss have continued where faces are steepened. The fencing above the south end of the rock is becoming undermined.

Changes to soft unconsolidated sand cliffs north of rock armour:





Rock Armour

Packing of rock: Overall satisfactory

Beach levels surrounding rock armour: Average

Beach access around the rock armour: Dry access available past rock armour around times of low tide **Exposure of geotextile:** Being monitored

Hazards/debris within structure: Being monitored

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:







<u>Signage</u> Adequacy of signage: Adequate Provision of tidal information: Up to date & legible - Monitor

Photos of signage:







Southern Pakefield beach & cliffs General impression of beach volume: Moderately decreased

Photos of southern beach:





Comments on change to southern beach: As noted to the north, seas have on occasion reached above the MHWM and reprofiled the beach. A shingle berm of reduced prominence is consistent with that described to the north.

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: Overall, the wider southern beaches have meant that the October sea conditions have been less significant in most areas than seen previously. Some of the cliffs however, have steepened faces and continue to realign through processes described previously. Rainfall amounts have not been extreme and the impacts on the cliffs have been relatively modest.

Benacre Ness

Changes to beach geomorphology: Impression is that The Ness northward migration and gradual beach widening are continuing.

Comments on change at Benacre Ness: Noticeable volumes of wind-blown sand below the Pontins frontage and establishment of vegetation on the widened beaches. There was evidence of recent surface water discharge near the Pontins access but the flow was greatly reduced at the time of inspection. It has become less likely that subsequent outflow will reach the sea due to the increasing beach width.

Photos of Pontins frontage and Benacre Ness:



<u>Hazards and Debris</u> Photos of hazard/debris:













Comments on hazard/debris: Improvement works carried out at the base of the Arbor Lane beach access steps. CPE will be addressing the hazard posed by the wooden groynes through the repairs and maintenance programme and monitoring general debris.

Kessingland Cliff

Changes in cliff stability: No obvious change viewing from beach. **Photo of cliff top structure:**

