Storm Babet caused five years worth of erosion at Musselburgh

A devastating storm that hit the east of Scotland last year caused five years' worth of erosion damage to Musselburgh's beaches in just a couple of days, a new report has disclosed.

The impact of Storm Babet, during which 30,000 homes lost power and flooding occurred further north around Brechin last October, on East Lothian's biggest town has been revealed by independent consultants Dynamic Coast.

It says around 4,000 cubic metres of sediment was removed from the beaches during the storm.

The report, which has been published in East Lothian Council's Members Library states: "Storm Babet caused beach sediment loss and erosion of the vegetation edge at the upper beach, with longshore redistribution of beach sediment to the west.

"In places, this storm caused the equivalent of five years' worth of erosion over a couple of days and removed around 4,000 m3 of sediment from the Musselburgh beaches."

The report says that despite the damage East Lothian's coastline was fortunate the storm did not hit during spring tides which would have made the impact far more severe'.

And it warns: "Whilst Storm Babet has not significantly compromised the existing flood management structures or natural defences (dunes etc), the natural resilience of the beach has been reduced, particularly adjacent to the existing defences in the west.

"For this reason, the evidence suggests that council officers have little time to waste in planning short term coastal resilience measures, including nature-based enhancements."

The local authority has been pushing ahead with its Musselburgh Flood Protection Scheme despite protests from some parts of the town.

The scheme has sparked controversy in the town after costs soared from the original £8.9million in 2016 to a current estimate of £53.9million.

The report from Dynamic Coast, which has been produced to support the council's work to update coastal change analysis warns that a proposed future flood protection scheme using artificial flood barriers without including 'beach nourishment' will not work as they are not designed to deal with coastal erosion.

It states: "Under this scenario, anticipated beach erosion and lowering is expected to negatively impact the existing and proposed flood management structures, initially within limited sections by 2040 but across the majority of the shore front in later decades."

However it also says options to be considered include creating a 'more resilient' structure which could withstand erosion but would risk the town losing its beaches altogether.

The report recommends the council introduce a beach monitoring system and recommends that more resilience is introduced at its most vulnerable areas, including nature-based approaches, as well as beach feeding.

It says: "We suggest that the evidence means that the council consider this as an urgent task, and we recommend that no time should be wasted in developing these resilience and adaptation actions."

It also recommends the council carry out a Coastal Change Adaption Plan for the entire East Lothian shore but make Musselburgh its priority.

The report has been lodged in the members library for noting.

by Marie Sharp Local Democracy Reporter

