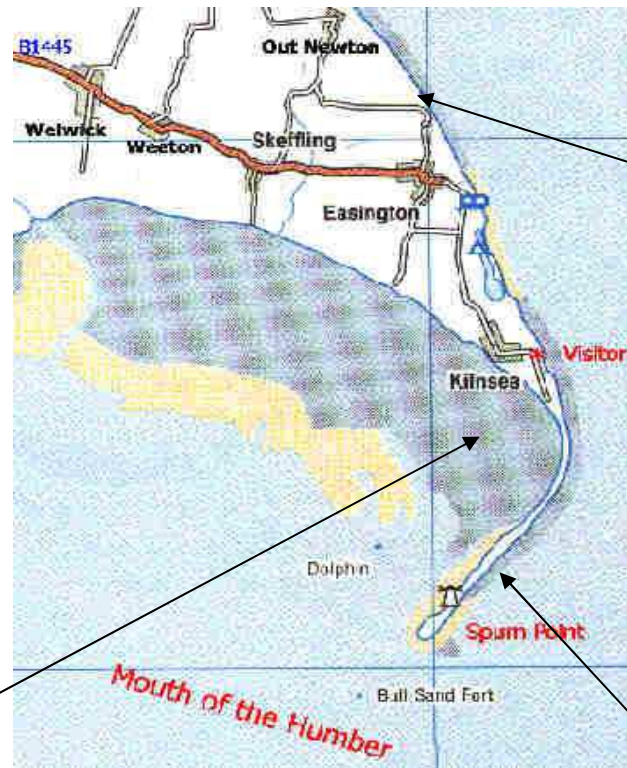


TRANSPORT AND DEPOSITION AT SPURN POINT



Silt and clay carried around the spit in suspension combines with material brought down the river Humber from the west to accumulate in the sheltered water to the rear of the spit.

Accumulation is aided by the process of flocculation where the brackish water (salty) causes an electrical charge that sticks fine clay particles together making them heavier and more likely to settle.

Salt 'loving' or Halophytic plants also grow on the mudflats to form a salt marsh. The growth of plants itself aids sedimentation, as the plants slow down the flow of water and the roots of plants hold sediment in place.



Rapid erosion of the Holderness coast supplies a large amount of material that is transported from north to south by longshore drift.

The soft boulder clay (glacial till) is eroded to supply sand, silt and clay.

The dominant waves are from the north east which moves all this material in suspension and along the beach by longshore drift towards the south.

Longshore drift has built Spurn Point out into the Humber Estuary to form a spit.

Tidal scour in the Humber Estuary prevents the spit from growing further south.

The spit appears to undergo a 250 year cycle of growth, destruction and re-growth. This is caused by erosion of the Holderness coast and the thin neck that connects the spit to the mainland.

At low tide the wind blows sand from the lower beach to the upper beach to accumulate as sand dunes

Wave refraction around the end of the spit carries silt and clay to the salt marsh and thickens the southern extremity.