



Do you know? About the Deben Bar



The Deben Estuary meets the sea at Bawdsey

Powerful longshore drift and ebb tide actions come together to form extended stretches of shingle that project out to sea from Bawdsey and Felixstowe Ferry. These shingle banks are almost entirely flint pebbles from eroding cliffs along the Suffolk Coast and change shape constantly accumulating in a series of heaps or knolls.

Historically, sailors have always known the area as the **Deben Bar** that limits their use of the river by the depth of water.

Navigating across the shallow, shifting Deben Bar is a challenge for sailors. This is an example of a coastal spit landform, called

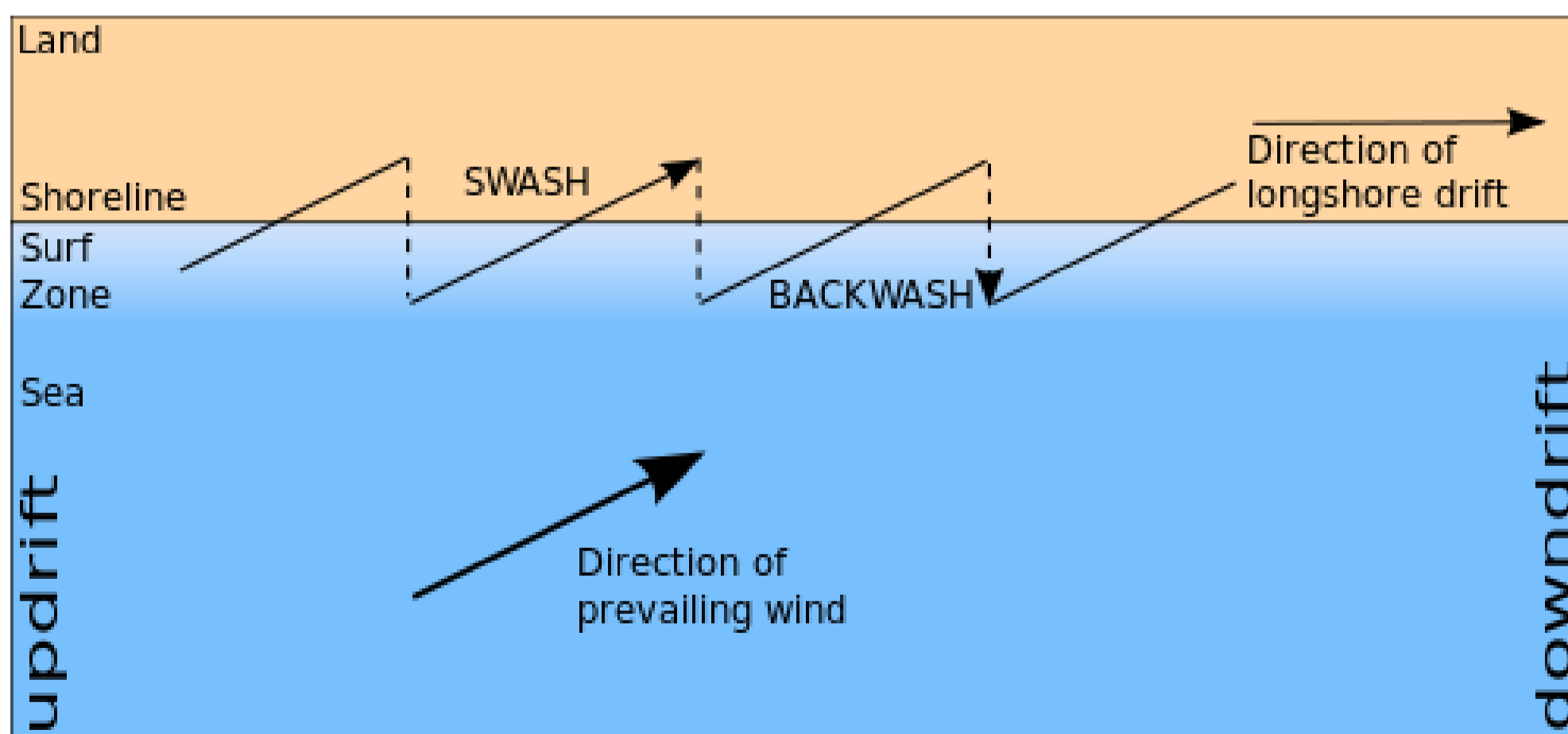
the **Bawdsey Bar** by geologists.



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Longshore Drift

Drift is the movement (transport) of material along the shore by wave action. Waves approach the shore at an angle - usually from the direction of the most common, or prevailing wind.



The swash moves material up the beach in this direction. Backwash pulls material straight down the beach at right angles. The result is that material is slowly moved in a zig-zag fashion along the beach.

In the past, longshore drift on the Suffolk Coast has tended to push sand and shingle southwards, but more recent research has shown drift patterns are not so predictable and can change from season to season making planning for coastal change very complicated.