

I'm at Hornsea Beach looking at coastal transportation and deposition. Watch these waves rolling in. Notice they're coming in at an angle, not straight. That angle is caused by the prevailing wind direction.

You can see this clearly. The waves hit the coast at an angle carrying material along. This is called longshore drift. So, the waves rush up the beach at an angle, that's the swash, and gravity pulls the water straight back down. That's the backwash.

So, the swash moves the sand and pebbles up at an angle and the backwash pulls them straight back down and up again and down again. This creates a zigzag movement along the coast. That's longshore drift. The process which transports sediment along the shoreline.

Now let's look at deposition. This happens when waves lose energy and can no longer carry material and it's dropped off.

Over time, this builds beaches. Along this coastline the waves have less energy, so sand and shingle are deposited to form a beach. So, remember the swash moves material up and the backwash pulls it straight back down.

Over time this zigzag motion transports sediment along the coast and that is longshore drift.

Waves deposit sediment when they lose energy.

So, if you're at the beach, have a look and see if you can spot longshore drift and deposition in action.