

Beach Processes Terminology:

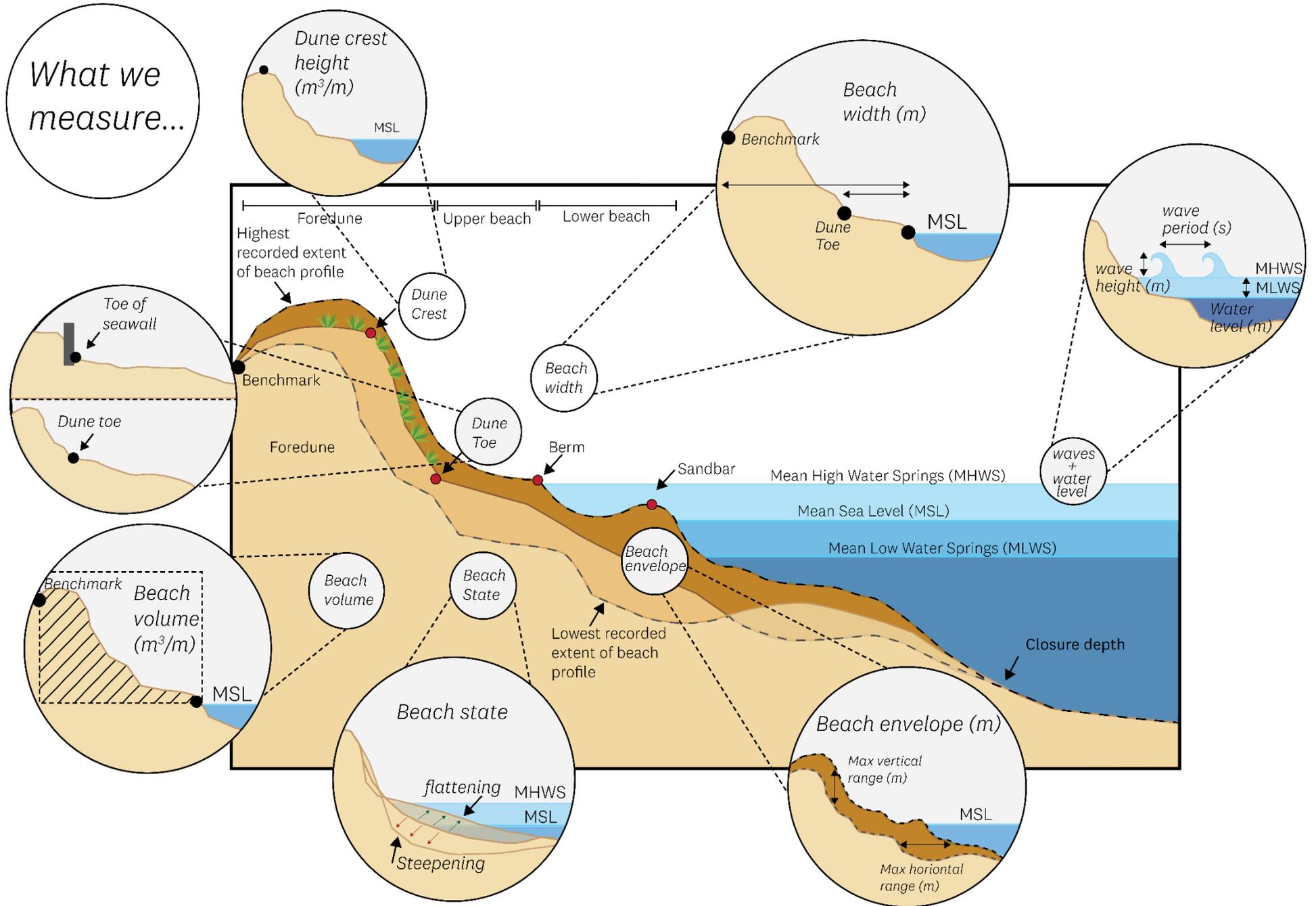


Table 1: Glossary of coastal terminology

Coastal term	Definition
Accommodation space	The area available for the deposition of sediment on the coast. It forms the boundaries within which a beach forms and fluctuates.
Accretion	Gains of sediment to the beach when compared with previous beach measurements.
Beach envelope	The maximum and minimum limits of the beach profile recorded across the entire monitoring period.
Beach profile	Horizontal cross-section of a beach starting from a fixed landward position, usually a benchmark, and extending seaward past mean sea level.
Beach state	Indicates whether the beach profile is undergoing accretion or erosion, and/or flattening or steepening throughout the monitoring record.
Beach width	A horizontal measurement usually taken from the bench mark (the start of the beach survey or dune toe), seaward to a specific contour, usually Mean Sea Level.
Benchmark	The benchmark is used as a reference point from which to measure beach width or beach volume. This is usually the start of the beach survey or dune toe.
Berm	A nearly horizontal feature that forms in the backshore (landward of the beach face). It is an accretionary feature formed by the deposition of the coarsest beach sediment. The shape of the berm is a key predictor of dune growth.
Closure depth	Closure depth describes the depth at which no significant changes in the profile occur, e.g. the limits of significant sand exchange within the beach system that drive profile change. Ideally beach profiles would extend to closure depth but it is not practical.
Dune crest	The highest elevation peak of the dune.
Dune toe	The boundary of the beach-dune interface and the most seaward extension of the aeoline (wind) processes and deposits.
Erosion	Losses of sand from the beach when compared to previous beach measurements.

Flattening	Loss of sediment to the upper part of the beach, and gains of sediment in the lower part of the beach when compared with previous beach measurements. The lower beach advances while the upper beach retreats. This usually occurs when the dune erodes, and the sediment is deposited in the lower part of the beach.
Foredune	The dune immediately landward of the active beach, which is built up by sand deposited by wind and trapped in vegetation.
Littoral drift	Transport of sand along the beach system, also known as 'longshore drift'.
Lower beach	Section of the beach that is uncovered during low/very low tides but covered during mid-high tides.
Mean Sea Level (MSL)	The average sea level usually taken over a rolling 19-year block, measuring the average of all high and low tides. Also serves as a vertical datum from which heights such as elevations are measured.
Mean High Water Springs (MHWS)	The MHWS elevation is defined as MHWS-10, which is the level equalled or exceeded by the largest 10% of all high tides (Stephens, 2012).
Significant wave height (H _s)	The average height of the highest 1/3 of the waves in a wave record.
Sand bar	A submerged or partially exposed ridge of sand built up by waves and currents.
Steepening	Loss of sediment to the lower part of the beach, and gains of sediment in the upper part of the beach when compared with previous beach measurements. The lower beach retreats while the upper beach advances.
Upper beach	Section of the beach near the bottom of the dune, usually where there is constantly dry sand above high tide.
Wave height (h _s)	The height of a wave measured between the elevation of the crest and the neighbouring trough.
Wave period (s)	The average time between the crest (or trough) between one wave and the next. Wave period tells us how close together the waves are and gives an indication of wave energy. Waves with longer periods indicate a greater interval between waves and more energy for geomorphic work at the shoreline.