



Margaret River WA05.01.01

Regional Setting

The dominant regional processes are the Mediterranean to arid climate; the El Nino Southern Oscillation (driving sea-level variability); Southern Annular Mode (driving south-westerly swells and storms); strong sea breezes; micro to meso tidal, mainly diurnal; south-westerly swells; southerly seas; and carbonate sediments with moderate northerly longshore transport.

This coastline is susceptible to regional hazards, including extra-tropical cyclones, mid-latitude cyclones (depressions), storm surges, and river flooding (sub-regions only).

This mixed sand and rock coast compartment extends from Cape Leeuwin to Cape Naturaliste.

Justification of sensitivity

Sensitivity rating is a 3 overall as the shoreline is currently stable and likely to remain stable.

The compartment mainly consists of rocky coast with small sandy beaches in embayments. The supply of sediment is limited and locally derived from reworking of coastal limestone, bioproduction on rock platforms. A limited amount may be provided by small, barred streams in the compartment.

Other comments

This compartment has a W aspect.

Geomorphological features include offshore platform reefs, rock platforms, rocky headlands and cliffs, sandy beaches and dunes.



The majority of the compartment (77%) consists of exposed high energy shorelines with eroded igneous or metamorphic rocks associated with overlying beachrock or eolian limestone. To a lesser extent, the coastline also features broad, gently-sloping, coarse-grained sandy beaches with some active dunes and unstable blowout areas (9%). There are also some narrow sandy beaches without extensive beachrock, backed by continuous stable well vegetated high dunes which may include calcarenite (9%).

Confidence in sources

High confidence. Detailed information is available from multiple sources, including recurrent mapping of the shoreline movement. Interpretation of landform assemblages comes from site visits, published information, satellite imagery and aerial photography.

Additional information

Australian Beach Safety & Management Program (ABSAMP) database of over 12,000 beaches can be accessed at http://www.ozcoasts.gov.au/coastal/beach_intro.jsp (also see Surf Life Saving site)

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