



Perth Metro (north) WA06.02.02

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 compartment extends from Challenger Beach to Pinnaroo Point.

Justification of sensitivity

The sensitivity rating is a 3 as the shoreline is currently stable and likely to remain stable.

A limited alongshore supply of sediment may occur along the shore-parallel reefs, with irregular pulsatory transport through reef gaps to the shore.

Other comments

Two landform assemblages are common: Broad gently-sloping sandy beach with well vegetated primary dune, often backed by parallel beach ridges or stabilized parabolic dunes (79%); Broad smooth gently sloping coarse-grained sandy beach with some active dunes and unstable blowout areas (15%).

Geomorphological features include shore-parallel offshore limestone reefs, limestone headlands, forelands, beaches, dunes and the Swan River.

This compartment has a W aspect.



Confidence in sources

High Confidence: Detailed information is available from multiple sources. Interpretation of landform assemblages comes from satellite imagery, marine LiDAR imagery and aerial photography, as well as site visits and published information.

Additional information (links and references)

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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