



## Coral Bay WA10.02.01

### 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 Alison Point to Point Maud.

### Justification of sensitivity

The sensitivity rating is a 4 as the shoreline is currently stable but likely to start eroding. Cuspate forelands in the lee of coral reefs are susceptible to changing metocean conditions as well as sediment supply from the reefs and inshore lagoons.

### Other comments

Common landform assemblages:

Inshore lagoons landward of fringing reef are bordered by sandy or fine grained beaches. The shoreline plan form is determined by cuspate forelands in the lee of offshore and inshore reefs (63%). Major tidal channels with complex relict sandy beaches occur between rocky headlands (37%).



Geomorphological features include fringing coral reefs, beaches and dunes.

This compartment has a W aspect.

### **Confidence in sources**

Low confidence: Limited or no information describing landforms or coastal landform change over the historical period is available. Interpretation of landform assemblages comes from satellite imagery, site visits and aerial photography.

### **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](http://www.ozcoasts.gov.au/coastal/beach_intro.jsp) (also see Surf Life Saving site)

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