



## Wedge Island WA07.01.03

### 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 Wedge Island Point to Thirsty Point.

### Justification of sensitivity

The sensitivity rating is a 4 as the shoreline is currently stable but likely to start eroding.

Well-vegetated nested blowouts and sand sheets indicate past phases of erosion in the late Holocene. Accumulation along the shore is concentrated in cusped forelands and tombolos, particularly in the northern part of the compartment. Their shores have been subject to recent erosion, especially where beach access points have been formalised.



### **Other comments**

Common landform assemblages:

Variable width sandy beach formed in areas protected by offshore reefs; may include some beachrock as low cliffs or headlands (40%); Narrow sandy beach without extensive beachrock, backed by continuous, stable, well-vegetated high dunes which may include calcarenite (31%); Gently-sloping sandy beach with well vegetated primary dune, often backed by parallel beach ridges or stabilised parabolic dunes (15%).

Geomorphological features include shore parallel limestone reefs, limestone headlands, forelands, beaches and dunes.

This compartment has a WSW aspect.

### **Confidence in sources**

Moderate confidence: Coastal landforms are well described in available management literature. However, neither sediment movement along the rocky coast and through the reefs, nor the sediment budget for the coast is well known. Interpretation of landform assemblages comes from satellite imagery, 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](http://www.ozcoasts.gov.au/coastal/beach_intro.jsp) (also see Surf Life Saving site)



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