



## Eighty Mile Beach (north) WA12.02.02

### Regional Setting

The dominant regional processes are the sub-tropical arid climate (Trade winds), El Nino Southern Oscillation (driving sea-level variability), mega to meso semi-diurnal tides, waves dominantly seas, episodic high river sediment discharges, mixed carbonate-terrigenous sediments, and tidal sediment transport.

This coastline is susceptible to regional hazards, including tropical cyclones, storm surges and river flooding.

This sandy coast compartment extends from the Eight Mile Beach Caravan Park (NE) to Cape Jaubert.

### Justification of sensitivity

The sensitivity rating is a 3 as the shoreline is stable and likely to remain stable. The stability of the beach is a function of sediment supply from offshore, longshore drift from the De Grey River and reworking of the foredunes during extreme storm events.

### Other comments

Common landform assemblages:

Landforms in the compartment indicate a transition from the low coastal plains of Eighty Mile Beach to an irregular coast dominated by rock outcrops and Pindan soils. Water depth is < 5 m for approximately 8km from shore. There is < 25% reef or pavement apparent on the inshore seabed. Tidal flats are approximately 2km wide. They merge with a gently sloping beach, which may be backed by an extensive supratidal zone (94%). Coastal dunes overlie a sandstone ridge to landward.



Geomorphological features include offshore parallel reefs, tidal terrace, sandy beach and spits.

This compartment has a NW aspect.

### **Confidence in sources**

Moderate confidence: Limited or no information specifically describing landforms or coastal landform change is available for the historical period. However, multiple photographic runs and other regional investigations of landforms have been published.

Interpretation of landform assemblages comes from satellite imagery 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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