



## Dongara WA07.02.05

### 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 Leander Point to Nine Mile Beach.

### Justification of sensitivity

The sensitivity rating is a 3 as the shoreline is currently stable and likely to remain stable. Inshore reefs, rock platforms, and perched beaches or dunes are common features in the compartment and comprise approximately 76% of the coast. Other sandy beaches occur in association with gaps in the platforms and inshore reefs. These are likely to retreat and have a higher susceptibility rank (4).

### Other comments

Common landform assemblages:

Broad sandy beach with well vegetated primary dune, often backed by parallel beach ridges or stabilised parabolic dunes (76%). Arcuate sandy beach, which may be cusped or crenulate, formed between or in association with resistant headlands (24%).



Geomorphological features include offshore limestone platforms, narrow beaches, foredune plain and the Irwin River.

This compartment has a WSW aspect.

### **Confidence in sources**

Moderate confidence: Coastal landforms are well described in available management literature. However, neither the volume of sediment moved along the rocky coast, or intermittently supplied by flood discharge from the Irwin River, nor the sediment budget for the coast, is well known. More detail is available for the embayment between Port Denison and the mouth of the Irwin River. Interpretation of landform assemblages comes from satellite 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](http://www.ozcoasts.gov.au/coastal/beach_intro.jsp) (also see Surf Life Saving site)

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[http://www.transport.wa.gov.au/mediaFiles/marine/MAC\\_R\\_ShiresOfGinginAndDandaraganFullReport.pdf](http://www.transport.wa.gov.au/mediaFiles/marine/MAC_R_ShiresOfGinginAndDandaraganFullReport.pdf)

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