



## Cambridge Gulf (Wyndham) WA13.04.03

### Regional Setting

The dominant regional processes are the wet-dry tropical climate (trade winds, monsoons); El Niño Southern Oscillation (driving high sea-level variability); Madden-Julian Oscillation (driving weather patterns including monsoons and tropical cyclones); mega to meso (limited) semi-diurnal tides; waves dominantly seas; episodic high river sediment discharges; mixed carbonate-terrigenous sediments; tidal sediment transport, and limited longshore transport.

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

This estuary-dominated compartment extends from Thurburn Bluff to East Cape Domett.

### Justification of sensitivity

The sensitivity rating is a 4 as the shoreline is stable but likely to start eroding. The tidal flats are dynamic coastal lowlands and are likely to undergo some erosion or reorganisation of the patterns of tidal creeks in response to damming of the Ord River.

### Other comments

The estuarine and deltaic landforms of the Pentecost and Ord Rivers, together with those associated with local streams discharging into Cambridge Gulf comprise the main components of this compartment. Tidal channels and flats are the most common landforms (87%).

Geomorphological features include Bonaparte Gulf and Ord River delta.

This compartment has a NNE 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 from satellite imagery, available literature 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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