



Lagrange Bay WA12.03.01

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 coastal lowlands compartment extends from Cape Jaubert to Cape Villaret.

Justification of sensitivity

The sensitivity rating is a 3 as the shoreline is stable and likely to remain stable. Much of the coast is rocky, such as the cliffed coast around Gourdon Bay. Tidal creeks maintain the onshore-offshore sediment exchange in discrete cells between rocky headlands.

Other comments

Common landform assemblages:

Around 44% of the compartment features tidal creek channels and flats, some with complex relict sandy beaches; tidal flat development between headlands and may back onto low cliffs and sand ridges. Also common (38%) are complex exposed resistant low cliffs, beachrock and adjacent barrier reeflines; beaches may be formed between headlands due to high tidal range. Broad gently-sloping beach with an extensive intertidal zone, which may be backed by an extensive supratidal zone (12%) also occur.



Geomorphological features include sandstone headlands, embayed coast and mangroves.

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 from satellite imagery, aerial photography and site visits to Cape Latouche Treville and False Cape Bossut.

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 (also see Surf Life Saving site)

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