



Valentine Island (King Sound - west) WA12.04.02

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 mixed sand and rock coast compartment extends from Cornambie Point to Jangerie.

Justification of sensitivity

The sensitivity rating is a 2 as the shoreline is stable but likely to start accreting. Sediment along the shore is derived from the Fitzroy River and, to a lesser extent, the Fraser River. Sands and muddy sands are reworked by tidal currents and by wave activity during extreme storm events.

Other comments

Common landform assemblages:

This compartment contains two main landform assemblages: [1] Variable-width, gently-sloping sandy beach with an extensive intertidal and supratidal zone is common. The tidal and salt flats flank beach ridges or low cliffs (53%). [2] Tidal creeks and flats occur in small embayments along the shore. The embayments are partially closed by cheniers and mangroves across the bay mouths. The tidal flats may back onto coastal lowlands, sand ridges or low cliffs (43%).



Geomorphological features include tidal terraces, tidal creeks, lagoonal mud flats and mangroves.

This compartment has a NE 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 assemblage comes from satellite imagery, aerial photography and limited site visitation.

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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