



Derby (King Sound - south) WA12.04.03

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 estuary-dominated compartment extends from Jangerie to Point Torment.

Justification of sensitivity

The sensitivity rating is a 1 as the shoreline is accreting at present and likely to continue accreting. The compartment comprises a substantial part of the Fitzroy River delta, an extensive progradational sand body. The sediments are largely supplied by rivers during flooding and reworked by tidal currents.

Other comments

Common landform assemblages:

The delta has a gently-sloping beach with an extensive intertidal and supratidal zone (97%). Its supratidal zone is fringed with mangroves and cut by tidal creeks as well as the main abraided river channel. Backshore basins are apparent.



Geomorphological features include the Fitzroy River delta, river channels, tidal creeks and flats, salt flats, backshore basins and cheniers.

This compartment has a NNW 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 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 (also see Surf Life Saving site)

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