



Vansittart Bay WA13.03.03

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 rocky coast compartment extends from Cape Bougainville to Anjo.

Justification of sensitivity

The sensitivity rating is a 3 as the shoreline is stable and likely to remain stable. The low susceptibility is attributed to the rocky cliffed coast. A higher susceptibility rank (4) is attributable to the depositional landforms, which are stable but likely to start eroding in future, due to lack of a substantial sediment supply other than bioproduction and local reworking by tidal currents.

Other comments

The eastern shore of Vansittart Bay has two main components: [1] Highly irregular coast with cliffs, bluffs, boulder ramps, some perched beaches and inshore platforms on Bougainville Peninsula. [2] Low bluffs, rock platforms, perched beaches, foredunes, fringing coral reef, small barred basins and tidal creeks in the southern reaches of the bay and along Anjo Peninsula.



Geomorphological features include coral reefs, broad embayment and mangroves.

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, aerial photography and site visits to Anjo Peninsula and Vansittart Bay.

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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