Peedamulla Coast (Robe River) WA11.02.02

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 coastal lowlands compartment extends from Coolgra Point (W) to Peter Creek Coast (E).

Justification of sensitivity

The sensitivity rating is a 5 as the shoreline is receding and likely to continue eroding in future. The residual mounds on the salt flats indicate erosion of the salt flats by terrestrial overwash from the hinterland. This may be exacerbated by future tidal creek incursion as indicated by the dissected tidal flats.

Other comments

Common landform assemblages:

A highly irregular shoreline forms a shallowly-indented, NW facing embayment between the floodplain of the Cane River and the active delta of the Robe River. There are approximately five tidal creeks per 10km of shore, with the longest extending over 9km landward. The creeks support mangrove vegetation. Landward, the creeks are separated by older dune remnants, some of which may be partially lithified. The broad complex system of tidal channels and flats covers 61% of the

shore. Tidal flat development is variable, with some sandy and or fine grained beach material and is controlled by protection from offshore and onshore reef systems (35%).

Geomorphological features include islands, pro delta, active Robe River delta, eroded delta, cheniers and mudflats.

This compartment has a NW aspect.

Confidence in sources

Low confidence: Limited or no information describing landforms or coastal landform change is available for the historical period. Interpretation of landform assemblages comes from satellite imagery, aerial photography and available literature.

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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