



Urunga NSW01.02.04

Regional Setting

The dominant regional processes influencing coastal geomorphology in this region are the humid warm to cool temperate climate, micro-tides, south-easterly Tasman Sea swells, easterly seas, dominantly quartz (terrigenous) sediments with northerly longshore transport in the northern part, and the El Nino Southern Oscillation (driving beach erosion/accretion cycles, cyclone frequency).

Regional hazards or processes driving large scale rapid coastal changes include: East Coast Lows (extra-tropical cyclones), mid-latitude cyclones (depressions), and storm surges (<1m).

This compartment extends from Coffs Harbour to Nambucca North Head.

Justification of sensitivity

Sensitivity rating is a 3, but is likely to become a 4 for some localities. Chapman et al. (1982) considered erosion likely for some beaches in this compartment; there appears to be little sediment available offshore.

Other comments

South of Coffs Harbour, there are several tertiary compartments that have trapped sand as beach ridge barriers. Boambee and Bonville Beaches are backed by a relatively wide barrier, whereas Sawtell Beach is more east-facing, anchored by headlands and rocks, and the barrier is narrower. South of Bungaden Head, the barriers are narrower. The Bellinger River is diverted south by a narrow dune ridge less than 200 m wide at its narrowest. Barriers south of Urunga get still narrower with abundant rock outcrops and headlands towards Nambucca Heads. There is little



reported evidence of erosion along this section. Seabed mapping offshore indicates extensive rocky reefs and little sediment (Jordan et al., 2010).

Confidence in sources

Low confidence: Little research has been done since the synthesis by Chapman et al. (1982).

Additional information (links and references)

Chapman, D.M., Geary, M., Roy, P.S., Thom, B.G., 1982. Coastal Evolution and Coastal Erosion in New South Wales. Coastal Council of New South Wales, Sydney.

Jordan, A., Davies, P., Ingleton, T., Foulsham, E., Nielson, J., Pritchard, T., 2010. Seabed habitat mapping of the continental shelf of NSW. Department of Environment, Climate Change and Water NSW, Sydney, p. 206.