



Bermagui NSW02.06.05

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 Cape Dromedary to Goalen Head.

Justification of sensitivity

Sensitivity rating is a 3 overall. However, observed erosion and narrow Holocene sand deposits imply that several beaches may be rated higher at 4, or perhaps 5.

Other comments

The embayed coast of the Lachlan fold belt consists of many coastal lakes. Tilba Tilba Lake is impounded by Tilba Tilba Beach with well-developed foredune. Wallaga Lake has an entrance that occurs at the southern end of Wallaga Beach. Haywards Beach has a history of erosion; following the 1978 storms, it was necessary to relocate the road that ran long the back of it, separating it from Long Swamp (this is moderately sensitive, Chapman et al., 1982). South of Bermagui, the coast is rocky with small pocket beaches. Baragoot Beach appears relatively stable, but Cuttagee Beach has experienced erosion, with the road endangered, and is moderately sensitive. South of here, the coast becomes rocky again and the pocket beaches are



stable. Murrah Beach has a well-developed foredune that impounds two coastal lakes - it generally closes Bunga Lake, but Murrah Lagoon is usually open. Pleistocene undifferentiated sediments back several of these beaches, implying a very limited Holocene accumulation and available sand to maintain or naturally nourish these beaches as sea level rises.

Confidence in sources

Medium confidence; There is little research to support inferences.

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.