



Drummond Cove WA08.01.01

Regional Setting

The dominant regional processes are the Mediterranean to arid climate; the El Nino Southern Oscillation (driving sea-level variability); Southern Annular Mode (driving south-westerly swells and storms); strong sea breezes; micro to meso tidal, mainly diurnal; south-westerly swells; southerly seas; and carbonate sediments with moderate northerly longshore transport.

This coastline is susceptible to regional hazards, including extra-tropical cyclones, mid-latitude cyclones (depressions), storm surges, and river flooding (sub-regions only).

This mixed sand and rock coast compartment extends from Glenfield Beach to Bowes River.

Justification of sensitivity

The sensitivity rating is a 4 as much of the coast is stable but likely to start eroding. Much of the coast is sheltered by shore-parallel reefs close to the shore, in some cases forming inshore lagoons. Sediment movement in the compartment is complicated by the distribution of reefs, shore platforms and the mouths of barred streams. It is not known in detail.

Other comments

Common landform assemblages:

Narrow sandy beach without extensive beachrock, backed by continuous, stable, well vegetated high dunes which may include calcarenite (67%). Variable width sandy beach formed in areas protected by offshore reefs; may include some beachrock as low cliffs or headlands (12%). Beachrock dominates beach with occasional sandy sections; may have



a low undercut beachrock cliff face (11%). Broad sandy beach, which may be cusped or crenulate, formed between or in association with resistant headlands (10%)

Geomorphological features include rock platforms, limestone cliffs, beaches, dunes and coastal streams.

This compartment has a SW aspect.

Confidence in sources

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

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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Richardson L, Mathews E & Heap A. (2005) Geomorphology and Sedimentology of the South Western Planning Area of Australia: Review and synthesis of relevant literature in support of Regional Marine Planning. Geoscience Australia Report Record 2005/17

Sharples C, Mount R, Pedersen T, Lacey M, Newton J, Jaskierniak D & Wallace L. (2009) The Australian Coastal Smartline Geomorphic and Stability Map. Version 1: Project Report. Geoscience Australia & Department of Climate Change, www.ozcoasts.gov.au/pdf/SmartlineProjectReport_2009_v1.pdf

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