



Young River WA02.01.07

Regional Setting

This mixed sand and rock coast compartment extends from Observatory Point to Shoal Cape.

The dominant regional processes are the Mediterranean to humid cool-temperate climate; southern annular mode (driving dominant south-westerly swells and storms); micro-tidal; high energy south-westerly swells; westerly seas; carbonate sediments; and interrupted swell-driven longshore transport.

This coastline is susceptible to regional hazards, including mid-latitude cyclones (depressions), storm surges and shelf waves.

Justification of sensitivity

Sensitivity rating is a 4 as the shoreline is currently stable but likely to start eroding.

Small zeta-form bays are separated by granite headlands, around which limited sediment transfer may occur. Some bays are closed by rock platforms and inshore lagoons with perched beaches to landward.

Other comments

This compartment has a S aspect.

Geomorphological features include granite islands, rocky headlands and coast, zeta formed bays, and the Recherche Archipelago.

A sizeable proportion (40%) of the coastline features dominantly metamorphosed granitoids. Exposed high energy shorelines are also common (26%), with eroded igneous or metamorphic rocks associated with overlying beachrock or eolean



limestone. To a lesser extent (14%), beaches are dominated by beachrock, and have only occasional sandy sections; they may also have a low undercut beachrock cliff face. Least common in this compartment are the broad, gently-sloping, coarse grained sandy beaches (12%); these contain some active dunes and unstable blowout areas.

Confidence in sources

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

Additional information

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)

Australian Maritime Safety Authority (AMSA). (2006) Oil Spills Response Atlas. Australian Government Canberra. Available at <https://www.amsa.gov.au/environment/maritime-environmental-emergencies/national-plan/general-information/OSRA/index.asp>

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Short AD. (2005) Beaches of the Western Australian Coast: Eucla to Roebuck Bay: A guide to their nature, characteristics, surf and safety. Australian Beach Safety and Management Program. University of Sydney Coastal Studies Unit and Surf Life Saving Australia. Sydney University Press. Sydney, New South Wales.