



Nanarup WA03.01.06

Regional Setting

This mixed sand and rock coast compartment extends from Cape Vancouver to Herald Point (E).

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 overall as the shoreline is currently stable but erosion is likely to start.

Multiple lines of submerged beachrock parallel the shore along Nannarup Beach. The frontal dunes have a steep seaward face. There is some dune mobilisation, especially near the Mouth of Taylor Inlet.

Other comments

This compartment has a S aspect.

Geomorphological features include granite islands and headlands, arcuate beach, and dunes.



Half of the coastline (50%) consists of exposed high energy shorelines with eroded igneous or metamorphic rocks associated with overlying beachrock or aeolean limestone. In areas protected by offshore reefs, variable width sandy beaches have formed (38%); these may include some beachrock as low cliffs or headlands. The remainder of the coastline can be described as broad, gently-sloping, coarse grained sandy beach with some active dunes and unstable blowout areas (12%).

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)

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