



Peaceful Bay WA04.01.04

Regional Setting

This mixed sand and rock coast compartment extends from Stanley Island/Point Hillier to Point Irwin.

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 and likely to start eroding.

Much of the shore is rocky, especially along Williams Bay, but is more susceptible to change in Peaceful Bay and along Quarrum Beach where foredunes are backed by limestone bluffs.

Other comments

This compartment has a S aspect.

Geomorphological features include granite islands, rocky headlands, arcuate embayments, beaches, dunes, and the Irwin Inlet.

Most of the coastline consists of exposed high energy shorelines with eroded igneous or metamorphic rocks associated with overlying beachrock or eolian limestone (79%). The remainder features broad arcuate sandy beaches, which may be cusped or crenulate, formed between or in association with resistant headlands (21%).



Confidence in sources

Low confidence. Apart from Parry Beach and Parry Inlet, there is little information available describing landforms or coastal landform change over the historical period. Interpretation of landform assemblages comes from site visits, satellite imagery and aerial photography.

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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