



## Geographe Bay (north) WA06.01.02

### 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 compartment extends from Point Casuarina to Robert Point.

### Justification of sensitivity

This compartment has a WSW aspect.

Geomorphological features include offshore shore parallel reefs, limestone platforms, limestone headlands, beaches and dunes, elongate coastal lagoons, Peel Inlet, Harvy Estuary, Leschenault Estuary, Murry River and the Collie River.

Most of the compartment consists of broad, gently-sloping, coarse-grained sandy beaches, distinguished by active dunes and unstable blowout areas (47%), or low, well-vegetated primary dunes and barriers (25%). The barriers may be seaward of marshes, swamps or echelon lake systems in swales. The remainder of the compartment (20%) consists of narrow sandy beach without extensive beachrock, backed by continuous, stable, well-vegetated high dunes which may include calcarenite.

### Confidence in sources

High confidence. Detailed information is available from multiple sources. Interpretation of landform assemblages comes from satellite imagery, marine LiDAR imagery, aerial photography, site visits 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](http://www.ozcoasts.gov.au/coastal/beach_intro.jsp) (also see Surf Life Saving site);

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