



## Jervis Bay NSW02.05.02

### Regional Setting

The dominant regional processes influencing coastal geomorphology in this region are the humid warm to cool temperate climate, micro-tides, south-easterly Tasman Sea swells, easterly seas, dominantly quartz (terrigenous) sediments with northerly longshore transport in the northern part, and the El Nino Southern Oscillation (driving beach erosion/accretion cycles, cyclone frequency).

Regional hazards or processes driving large scale rapid coastal changes include: East Coast Lows (extra-tropical cyclones), mid-latitude cyclones (depressions), and storm surges (<1m).

This compartment extends from Point Perpendicular to Bowen Island.

### Justification of sensitivity

Sensitivity rating is a 3 overall, although the western beaches (Callala and Collingwood Beaches) earn a higher local rating of 4.

### Other comments

Jervis Bay is a large, relatively low-energy embayment. Much is rock bound, but several extremely white beaches occur around the margin. Swell from the southeast can penetrate the Bay, and the Callala and Collingwood Beaches have been severely eroded in the past, particularly in 1974; they remain moderately sensitive. There is little evidence of recent onshore sediment supply or sand entering the Bay from offshore; beaches show recovery post storm. The Bay has been well surveyed by numerous organisations including fisheries and navy. Thom et al. (1986) summarise many of the geological and geomorphological characteristics of the Bay observed by students and others (see also Thom, 1987).



### **Confidence in sources**

Medium confidence.

### **Additional information (links and references)**

Thom, B.G., 1987. Coastal geomorphology of the Jervis Bay area. *Wetlands* 6, 19-21.

Thom, B.G., Roy, P.S., Short, A.D., Hudson, J., Davis, R.A., 1986. Modern coastal and estuarine environments of deposition in southeastern Australia. Department of Geography, University of Sydney, 12th International Sedimentology Conference. Guide to Excursion 4A, p. 279.