



## Curtis Island (east) QLD04.03.07

### Regional setting

The regional processes dominating this region include the wet tropics to humid sub-tropical climate, south-east trade winds, meso-macro tides (2.9m), strong tidal currents, low to moderate south-east seas (south-east wind-waves), dominantly terrigenous sediments with interrupted northerly longshore sediment transport (low-moderate), the El Nino Southern Oscillation (driving sea-level variability, tropical cyclone frequency, beach erosion/accretion cycles); and the Madden-Julian Oscillation (driving weather patterns including monsoons and tropical cyclones).

Regional hazards or processes driving large scale rapid coastal changes include: tropical cyclones, storm surges, river flooding, and variable longshore sand transport.

This compartment extends from Cape Capricorn to Gatcombe Head.

### Justification of sensitivity

Overall sensitivity rating of 3.5. The compartment is predominately comprised of resilient bedrock with a sensitivity rating of 3, and beaches with a rating of 4.

### Other comments

The exposed eastern coast of Curtis-Facing Island extends for 60 km from Cape Capricorn to Gatcombe Head on Facing Island. It is a bedrock-dominated shoreline with 33 generally small beaches making up 33% of the coast, most located north of Black Head and on Facing Island. The northern beaches are backed by 12 km of stable transgressive dune that extends on average 1-2 km inland. The bedrock coast is resilient to erosion, while the beaches can be expected to undergo minor erosion as many are backed by bedrock, apart from the northern dune coast which is more



susceptible to erosion. The only development on the coast is the small community at Southend, which is on high ground.

**Additional information (links and references)**

Short, A D, 2000, Beaches of the Queensland Coast: Cooktown to Coolangatta. Sydney University Press, Sydney, 360 pp.

<https://www.ehp.qld.gov.au/coastalplan/coastal hazards.html>



*Curtis Island (E) – Cape Capricorn to Gatcombe Head.*