Sharp Point - False Orford Ness QLD03.02.01

Regional Setting

The dominant regional processes influencing coastal geomorphology in this region are the wet tropics to humid sub-tropical climate, south-east trade winds, mega-meso tides, strong tidal currents, low to moderate south-east seas (local wind-waves), the 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 Sharp Point to False Orford Ness.

Justification of Sensitivity

The sensitivity rating is between 3 and 4. The shoreline is stable, with significant sediment supply in wide sand flats and backing transgressive dune fields.

- This sediment compartment contains a total of 56 beaches (Short, 2006), most of which have extensive sand flats up to 2km wide, and backing transgressive dunes extending up to 6km inland.
- There is evidence of migratory intertidal sand ridges, sandy spits, and barrier spits nourishing beaches protected by lateritic promontories.
- Many of the beaches are fronted by fringing coral reefs which afford protection.

Other comments

The impacts of cyclonic events are likely to be more severe, with longer beach recovery times.

Confidence in sources

Medium confidence in sources.

Additional information (links and references)

Short, A D (2006) *Beaches of the Northern Australian Coast: The Kimberley, Northern Territory and Cape York*, Australian Beach Safety and Management Program, University of Sydney Press