

Byron Shire Council: coastal hazard planning provisions

Summary

Since 1988, Byron Shire Council has applied coastal hazard planning provisions to development in the coastal zone. These provisions permit certain development in defined coastal hazard precincts until coastal hazards present a significant risk, when the development is 'triggered' for relocation or removal.

Other councils in New South Wales have adopted similar planning approaches as part of their response to projected sea-level rise in combination with coastal hazards.

An overview of the Byron Shire Council provisions and the results of an audit of development at Belongil Beach in Byron Bay provide insights for practitioners considering planning controls as a tool for adapting to climate change.

Belongil Beach (Figure 1) in Byron Bay has been identified as a coastal erosion hotspot by the New South Wales Government. Infrastructure, private property and residential development are located within the coastal erosion 'immediate hazard zone', which is the area of shoreline predicted to erode as the result of a 100-year Average Recurrence Interval (ARI) design storm. Studies have also found that Belongil Beach is subject to ongoing recession, which will be exacerbated by sea-level rise (WBM Oceanics 2000, BMT WBM 2013).

Current planning controls on and provisions for development within coastal hazard areas at Belongil Beach are implemented through the *Byron Local Environment Plan (LEP) 1988*, *Byron Local Environment Plan 2014*, *Byron Shire Development Control Plan (DCP) 2010* and *Byron Shire Development Control Plan 2014*. The LEPs regulate land use and development and guide planning decisions; the DCPs set out detailed planning, design guidelines and controls to support the LEP. DCPs provide for a measure of flexibility in applying provisions.

The coastal hazard provisions in Part J of the 2010 DCP (herein referred to as Part J provisions) are tailored to three defined coastal hazard planning precincts: immediate coastal hazard, 50-year coastal hazard and 100-year coastal hazard. The precincts are based on a 1978 technical study by the state government Public Works Department (Gordon et al. 1978). The planning

Keywords

Planning controls, provisions, development, coastal hazards



Figure 1: Oblique aerial view of northern part of Belongil Beach development, 16 September 2015. Photo: © Daryl Jones, www.ozaerial.com.au.

precincts for Byron Bay are depicted at Figure 2, noting that Erosion Precincts 1, 2 and 3 relate to the immediate, 50-year and 100-year hazard precincts respectively. The Part J provisions are applied to new development, through the development application and approval process.

In summary, the Part J provisions are:

- Immediate coastal hazard precinct: buildings are to be entirely modular and relocatable (by 4WD vehicle); trigger distance for relocation of development is 20 m from the coastal erosion escarpment; no building is to be within 20 m of the erosion escarpment.
- 50-year precinct: all residential housing is to be relocatable (by 4WD vehicle); trigger distance for relocation and/or demolition of development is 50 m from the erosion escarpment.
- 100-year precinct: trigger distance for relocation and/or demolition of development is 50 m from the erosion escarpment.

An audit of properties and the application of the Part J provisions was undertaken in 2011 for the beachfront area of Belongil Beach. This included a survey of the position of the coastal erosion escarpment and measurement of the distance of development to the erosion escarpment. The results of the 2011 audit were reported to Council on 30 June 2011 (Byron Shire Council 2011).

The audit yielded the following results about beachfront property on Belongil Beach for the period 1988 to May 2011:

- There were 28 Belongil Beach residential beachfront properties (where 'properties' are defined as contiguous land parcels under the same owner).
- Nine properties were developed with approved new residential structures, and Part J provisions had been placed on the entirety or the whole of this new development. An example of approved modular and relocatable development is shown at Figure 3.
- Seven properties had been partially developed, that is, through an approved alteration or addition to an existing structure such as a games room or verandah, with Part J provisions placed on this new part of the development.
- Sixteen of 28 properties had some form of modular and relocatable development located on them (whole dwelling or alteration/addition to existing dwelling).

As at the audit date, May 2011:

- Five properties may have triggered whole development consent restrictions in relation to proximity of the development to the mapped coastal erosion escarpment line. To Council's knowledge, this development had not been relocated.
- Three properties may have triggered partial development consent conditions in relation to proximity to the erosion escarpment line. To Council's knowledge, this development had not been relocated.
- Seventeen structures were located within 20 m of the erosion escarpment, and 13 structures were located within 10 m of the erosion escarpment.
- Twelve properties had not been formally redeveloped since 1988 (the legal status of development on these properties is unknown).

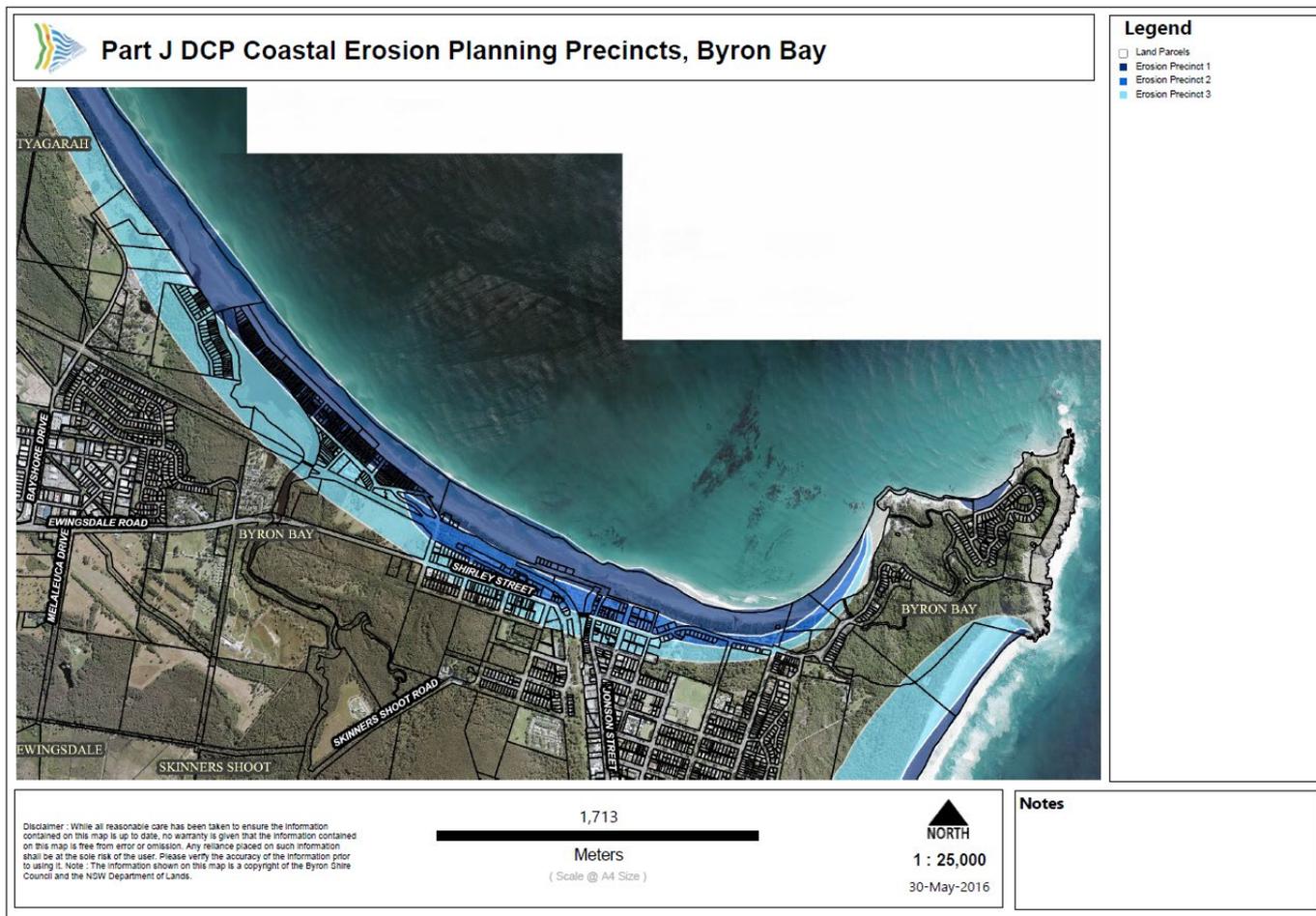


Figure 2: Part J coastal hazard planning precincts relevant to Belongil Beach, Byron Bay. Source: © Byron Shire Council.

Key insights from the audit are:

- Landowners/developers and planners have worked within the Part J DCP controls to the extent that modular and relocatable buildings, alterations and additions have been designed and constructed for 16 properties.
- Following the 2011 audit, Council notified property owners of the distance of their development to the erosion escarpment.
- At 2011, 12 of 28 beachfront properties, or 42%, did not have Part J controls on development located on that property (the legal status of development on these properties was not researched or verified as part of the audit).

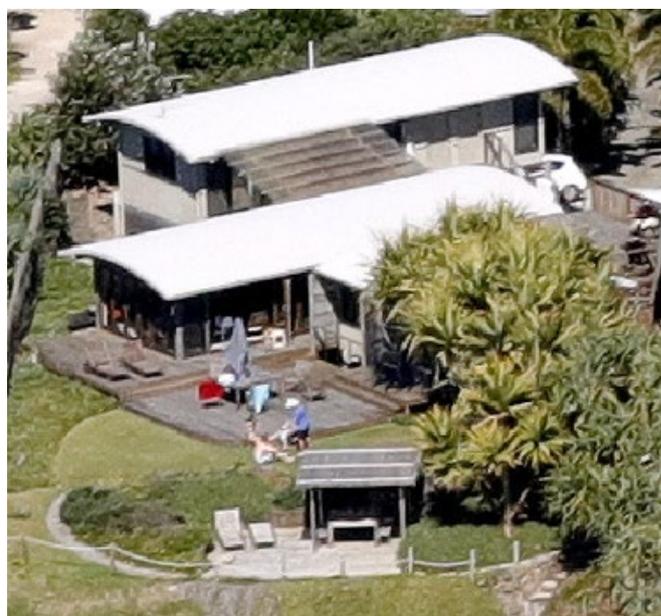


Figure 3: An image of modular and relocatable development in the beachfront precinct of Belongil Beach, 16 September 2015. © Daryl Jones, www.ozaerial.com.au.

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Further reading

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