

Hi Paul

As discussed earlier today, NSW Government guidance on coastal hazard definition and risk assessment is the NSW Coastal Management Manual. The Manual recommends a 100 year planning horizon (and beyond) be applied when developing Coastal Management Programs, also noting that the scenarios considered depend on what is proposed to be located in that area and other factors. The Manual does not specify a year 2100 scenario at the maximum projection.

However, I do note the Manual may not have any statutory weight with respect to State-led rezonings, and in the case of North Tuncurry the Manual would be along the lines of current NSW Government best practice advice.

Choosing the most appropriate risk scenario depends on the assets to be located there and the design life of exposed assets etc. It is best practice to be conservative in greenfield areas because of the opportunity to design the proposed development to avoid long-term exposure to risk, and to minimise the risk of future Governments having to manage legacy issues. The other consideration is when these assets will be built and what the future scenario would be projecting out from that time, taking into account the design life of the assets. In the proposed layout, essential services such as roads, the local village and medium density housing may be affected by coastal erosion risk by 2125 (we would need the GIS file of the hazard maps to work this out). I am not sure when these sites are proposed to be built, but perhaps we can assume they are intended to be there 100 years from now, so projecting out from when the development will begin is reasonable, although this is also a consideration at the DA stage.

Below is some guidance in the <u>Coastal Management Manual</u> Part B, Stage 2 (determine risks, vulnerabilities and opportunities), which may assist you in considering this issue further.



Landcom can identify what the 100-year hazard lines will be, in consultation with Worley Parsons. It's a matter of extending out the same calculations based on the methodology in their report.

We have asked a coastal expert from DPE – Environment and Heritage Group to provide us with a rough calculation of the 100-year scenario as this team does not have technical expertise in coastal process studies. The EHG advice is the 2125 coastal hazard lines may be 27.5 - 40m landward of the 2100 lines (see below), but we suggest Landcom could seek that advice from Worley Parsons to be sure of accuracy.

Estimated additional erosion setback to 2125 timeframe from the Worley Parsons (WP) 2100 erosion hazard line ¹

Beach	WP	Additional	Additional	WP	Additional	Total	WP	Additional	Additional
	Adopted	Time (yrs)	Historical	Adopted	Time (yrs)	Additional	Adopted	Brunn	estimated
	Long	(i.e. 2100	Recession	Rate of	(i.e. 2100	SLR (m) ³	Nearshore	Recession	erosion
	Term	to 2125)	Setback	SLR at	to 2125)	,	Slope	from	setback
	Recession		from	~2100			(1:X)	mapped	from WP

	Rate (m/yr) ²		mapped 2100 line (m)	(m/yr) ³				2100 hazard line (m)	2100 hazard line to 2120 timeframe (m)
Tuncurry	0.75	25	18.75	0.01	25	0.2	60	15	33.75
/ Nine	(0.5 - 1)		(12.5 - 25)						(27.5 – 40)
Mile									
Beach									

Additional erosion setback distances estimated to the 2125 timeframe based on methodology and coastal hazard parameters in Worley Parsons (2019) Landcom North Tuncurry Coastal Processes, Hazard and Planning Study

² Long term annual recession rates are estimated by Worley Parsons to be between 0.5m and 1m per year at the proposed Site. An annual recession rate of 0.75m has been adopted.

³ Future sea level rise estimate of 0.01m per year have been projected forward from the benchmarks adopted by Worley Parsons, being 0.4m by 2050 and 0.9m by 2100 (which equals a rate of 0.1m per decade).

I hope this assists you and let me know if you would like to discuss further.

Kind regards

From: Paul Maher <<u>Paul.Maher@planning.nsw.gov.au</u>> Sent: Wednesday, 24 August 2022 1:03 PM

To:

Cc: Ben Holmes <<u>Ben.Holmes@planning.nsw.gov.au</u>> Subject: North Tuncurry - Coastal hazards and planning horizons

Hi

Further to our conversation the other day, could you refer North Tuncurry State-led rezoning onto DPE's SME in coastal hazard planning as discussed please? I have attached the relevant documents except for Appendix I1 NTURA Coastal Process Hazards and Planning Study which is 25MB. All technical studies are accessible on the NSW Planning Portal here.

I note in your previous advice dated 25 May 2020, you indicate regarding Coastal hazard planning horizons, that Government policy requires development to avoid exposing life, public assets and the environment to future coastal hazards. You suggest the developer consider going beyond 2100 to a 100-year time horizon, which will also be more compatible with the likely engineering life of the housing, other development, and public and private infrastructure including roads and stormwater drainage. Is the planning horizon 'beyond 2100' defined and if so, how would that effect the development?

Also MidCoast Council raises a couple of issues in its submission (attached). I would appreciate feedback in relation to the issues raised please.

- 1. The Biodiversity Certification Report & Strategy notes that the coastal land between Nine Mile Beach and the proposed development area, may be affected by coastal hazards and erosion in the future. Council maintains, therefore this land cannot provide for the permanent protection of ecological and species credits within this area.
- 2. Landcom's Master Plan also promotes the concentration of "denser urban forms in the vicinity of the B2 Local Centre Zone, and in proximity to higher amenity (e.g. adjacent to local open space and the water management basins)" without acknowledging the proximity of the commercial centre and majority of medium density residential development to the area of coastal hazard identified within the gazetted Great Lakes CZMP.

This proximity and the delayed stages of development (Stages 21 & 22) create uncertainty as to the viability of this high-value investment in approximately 2040-2050, in a location that is likely to be directly impacted by coastal hazards in or shortly after, 2100.

Advice on these coastal hazard matters would be appreciate to inform my assessment and to influence the development outcome if required. I would appreciate a response by **7 September 2022** to enable any issues to be addressed prior to finalisation.

Regards

Paul Maher Senior Planning Officer

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