

Western Australian Planning Commission – Position Statement

Position Statement - State Planning Policy No. 2.6 State Coastal Planning Policy Schedule 1 Sea Level Rise

A review of the Western Australian Planning Commission's (WAPC) State Planning Policy No. 2.6 State Coastal Planning Policy is underway. A full package of draft amendments will be considered by the WAPC in late 2010. In recognition of nationally accepted and adopted increases in sea level rise projections, the WAPC considers it necessary to amend the sea level rise value in SPP2.6.

Schedule One of SPP2.6 sets out guidance on how to calculate a physical processes setback comprising 4 elements:

Determining the baseline - horizontal setback datum (HSD) - 4 coastal types are identified - sandy, rocky, mangrove, cyclonic

S1 - allowance for the impact of severe storms

S2 - allowance for the historic trend - erosion or accretion

S3 - sea level rise (0.38 based upon IPCC AR3 scenario A1B).

The following changes to the methodology set out in Schedule One are recommended:

- SLR increase to 0.9m to 2110, based upon IPCC AR4 (scenario A1FI) and CSIRO 2008.
- Cyclone impacts are to be treated as severe storm events, under S1, rather than a coastal type as depicted in C.4 and F.4. Specific methodology will be provided in the full package of draft amendments.
- The impact of cyclonic events are to be used for calculations of S1 - storm event erosion, not as a line of maximum potential storm surge inundation.

Background

As stated in SPP2.6, given the variation of coastal environments in the State and the range of development and use contexts that can be presented, it is important that this Policy, and the setback guidelines in Schedule One, be applied to each case under consideration on its merits using the best available information, common sense and a precautionary approach.

There is a continually growing knowledge of climate change; and sea level rise planning policies nationally are being amended to reflect the latest predictions. An immediate modification to the planning policy requirement under Schedule One of SPP2.6 for sea level rise is required.

The policy currently uses a figure from the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC TAR), published in January 2001. The Fourth Assessment Report (IPCC AR4) was published in November 2007, and considerable further research has been undertaken by technical institutes such as the CSIRO, for example the technical report *Climate Change in Australia* that looked at climate change causes and projections of future changes to Australia's climate (2007) and the briefing paper *A post-IPCC AR4 update on sea level rise* (2008). The first CSIRO report specifically provides a regional variation to the IPCC global climate change projections discussing global and regional rise in mean sea level and possible changes in extreme high sea levels at sites around Australia.

A comprehensive review of existing work by the IPCC, CSIRO and Antarctic Climate Change and Ecosystems Cooperative Research Centre (ACE CRC) on sea level rise was undertaken by the State's Senior Coastal Engineer (in the Department of Transport). The findings contained within the accompanying technical paper "*Sea Level Change in Western Australia: Application to Coastal Planning*" has been independently peer reviewed.

The allowance for sea level rise change within SPP2.6 is currently based on the prediction of the mean model (A1B) of the IPCC TAR between the years 2000 and 2100. SPP2.6 provides guidance regarding factors to be considered when calculating coastal processes setback and states:

"The value given for each factor has been based upon the best available data, a conservative estimate of that factor and includes allowance for uncertainty."

It is no longer considered that the current factor for sea level rise of 0.38m satisfies the policy guidance. As set out in the accompanying technical paper, it is considered that the global sea level projections of the IPCC AR4 and the A1FI scenario provides the best basis for current statutory decision-making. This is also consistent with the scenarios adapted by the Garnaut Report (2008).

A vertical sea level rise of 0.9m is considered appropriate in considering the setback distance to allow for the impact of coastal processes over the next 100 year planning timeframe.

For new development on a sandy coast the impact of this increase in vertical sea level rise value from 0.38 to 0.9 m will result in an increased horizontal setback of 52m, increasing the total setback for the general guide from 100m to 150m.

The WAPC and Department of Planning, together with other key stakeholders, are reviewing SPP2.6 in light of scientific information regarding the impacts of climate change and planning policies nationally being amended to reflect the latest predictions. This position statement for the policy requirement under Schedule 1 for sea level rise, is intended to address the issue whilst the WAPC in consultation with other key stakeholders, continue the review of SPP2.6 to guide planning in the coastal zone. A draft for public consultation is expected to be available by the end of 2010.