



Sea Level Rise Policy

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1 Policy Objectives

1.1 Our Commitment

The City of Botany Bay Council is committed to working with its community to identify and respond to emerging hazards and risks associated with sea level rise (SLR). We are committed to preparedness and adaptation responses informed by environmental, social and economic sustainability.

1.2 Our Goal

To provide a framework to assist Council and the community to respond to emerging sea level rise hazards and risks.

2 Background

2.1 Sea Level Rise Predicted Levels

Due to climate change global average sea levels are projected to increase, however, as sea levels vary across the globe, regional changes along the eastern Australian coastline are expected to be larger. Sea level rise is expected to expose low-lying coastal areas to increasing inundation over the next Century.

The NSW Government benchmarked the expected sea level rise, relative to a 1980-1999 reference period, to be:

- 0.4m above the Australian Height Datum (AHD) by 2050; and
- 0.9m above AHD by 2100.

This was contained within the 2009 NSW Sea Level Rise Policy. However, in 2012 the NSW Government withdrew this advice to allow councils the flexibility to consider local conditions when determining local future hazards.

In 2012 the Government stated that it would provide information on available sea level rise projections to assist councils to develop projections relevant to their local area, however, to date this has not occurred.

2.2 Sydney Coastal Councils Group Inundation Mapping for City of Botany Bay

A study has also been undertaken by CSIRO and Sydney Coastal Council Group (SCCG) (of which City of Botany Bay is a member) which focused on the evaluation of sea level inundation along the Sydney coastal and estuarine regions under current and future sea level rise conditions for the councils who are members of the SCCG.

This used the projected sea level rise benchmarks specified in the New South Wales Government Sea Level Rise Policy mentioned above.

An assessment of inundation due to the sea level rise utilising tides and storm surge was undertaken using elevated sea levels encountered during storm events. The focus of this study was the development of maps showing the inundation that arises from the contribution of storm surges and astronomical tides to extreme sea levels, which are referred to as storm tides.

Two maps show the scenarios in the City of Botany Bay Council local government area. These are:

- Map 1 (Attachment 1) - the 1 in 1 year storm event with a 40cm sea level rise (estimated to be encountered in year 2050) and a 90cm sea level rise (estimated to be encountered in year 2100); and
- Map 2 (Attachment 2) - the 1 in 100 year storm event with a 40cm sea level rise (estimated to be encountered in year 2050) and a 90cm sea level rise (estimated to be encountered in year 2100).

It is appropriate for Council to use the SCCG inundation mapping in its planning assessments and policies and in flooding studies given that it is based in the 2009 Policy benchmarks and is a serious scientific study undertaken by a reputable and credible scientific organisation in the form of the CSIRO. There is likely to be some delay in the government completing Stage 2 of its sea level rise policy work and until the promised standardised methodology for mapping predicted sea level rise is available, the SCCG CSIRO inundation mapping represents the best tool currently available.

As the proposed sea level rise benchmarks originated with the Intergovernmental Panel on Climate Change (IPCC), appear to have been accepted by the CSIRO, and were stated government policy for three years until 8 September 2012 when abandoned by the present government without a specific replacement, it seems that those benchmarks could be considered to be widely accepted by competent scientific opinion.

3 Policy Statement

The following policy is adopted by Council:

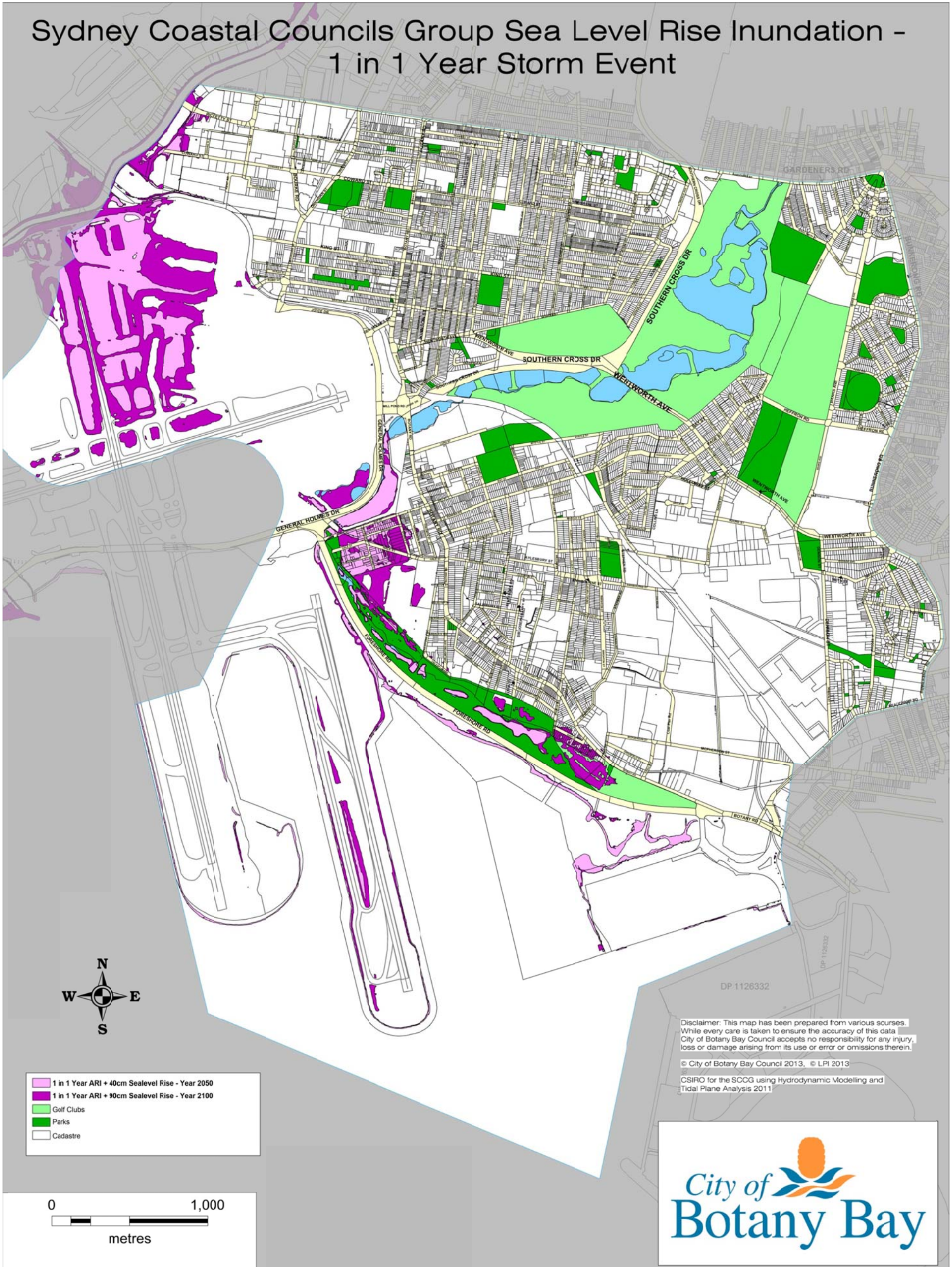
- Council will consider the effect of climate change when determining development applications.
- Council will consider climate change in preparation of planning instruments, policies and flood studies.
- Council will apply the 2009 Sea Level Rise Policy benchmarks of 0.4m above Australian Height Datum (AHD) by 2050 and 0.9m above AHD by 2100 relative to a 1980-1999 reference period in preparation of planning instruments, policies and flood studies. In

implementation of this policy position Council will utilise the Sydney Coastal Councils Sea Level Rise Maps that have been prepared for the Botany Bay Local Government Area.

- Council will continue to monitor, review and manage the risks associated with sea level rise relating to local government functions.
- Council will review the above benchmarks if and when the NSW Government recommends a new level under its planning policies, guidelines, or manuals, and/or in the light of new scientific evidence.

Attachment 1

Sydney Coastal Councils Group Sea Level Rise Inundation - 1 in 1 Year Storm Event



Attachment 2

Sydney Coastal Councils Group Sea Level Rise Inundation - 1 in 100 Year Storm Event

